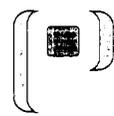


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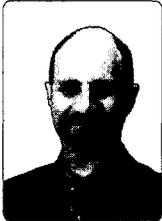
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INC



To our Shareholders,

Fiscal 2004 marked a period of tremendous growth for our industry, the active matrix liquid crystal display (AM-LCD) market, and our company.

For calendar year 2004, capital equipment expenditures for our industry increased approximately 80%. Our disciplined focus enabled us to exceed industry growth rates and gain market share. In addition, we achieved the following goals in fiscal 2004:

- Returned to profitability.
- Successfully acquired two key suppliers which integrated core technologies and lowered product costs within the company.
- Moved into a new facility that enabled us to more than double our manufacturing capacity.
- Established market share leadership in Generation 6 array test.
- Gained market share in Generation 6 array repair.
- Introduced our new automated cell and module inspection systems.
- Expanded and strengthened our customer support group, which resulted in significantly improved customer satisfaction.
- Implemented our continuous product improvement program.

We achieved and exceeded many of the objectives that we had set for fiscal 2004. The significant ramp in our business did cause us to delay two objectives - our Asia localization program and the full implementation of our quality program, which had a negative impact on our gross margins. We are emphasizing the achievement of these objectives in fiscal 2005.

The emphasis for fiscal 2005 will be to strengthen our market position, our product focus, our operations and our fiscal performance.

FY2004 PERFORMANCE

Revenue for fiscal year 2004 was \$143.3 million, an increase of 113% when compared with \$67.2 million for fiscal year 2003. The increase reflected substantial growth of the flat panel display market and our market share gains, a result of our focused product strategy.

Gross margin during fiscal 2004 was 41.4% which was a 7% improvement over fiscal 2003 gross margin of 34.4%. Factors such as the delay in implementing our Asia localization program, manufacturing inefficiencies caused by the Generation 6 product ramp and a change in product mix between higher margin array test systems versus lower margin array repair systems prevented the gross margin from being even higher than the 41.4%. We will continue to emphasize programs in fiscal 2005 that focus on improving our gross margins. These programs include the following:

- Continue to look for vertical integration opportunities. In fiscal 2004, we acquired the assets of the pellicle business from Tucson Optical Research Corporation, a key component of our ArrayChecker modulator, and we acquired the assets of the laser system business from Quantum Composer for our ArraySaver product. In fiscal 2003, we acquired the assets from Summit Technologies for high resolution, high speed digital cameras for our ArrayChecker product.
- Manufacturing cost reductions by sourcing of certain raw materials and integration of certain systems in Asia.
- Sales and marketing of service product offerings.
- Implementing our total quality systems.

We anticipate that these programs will begin to produce positive gross margin benefits in the second half of fiscal year 2005 or early fiscal 2006. Competitive pricing pressures, however, may pose continued risk to our gross margin improvement programs.

As a percentage of revenue R&D spending decreased to 20.7% in fiscal 2004 compared to 33.9% in fiscal 2003. In terms of absolute dollars, we increased our R&D spending during fiscal 2004 compared to fiscal 2003. Increased spending allowed us to expand our leadership position in Generation 6 array test and repair products, while simultaneously developing Generation 7 array test and repair products. We also introduced a new product line, the automated cell and module inspection systems. Additionally, our R&D investment included resources to strengthen our core technology and improve product quality and reliability.

Net income after discontinued operations for fiscal year 2004 was \$11.1 million, or \$0.73 per diluted share, compared to a net loss of \$72.4 million, or \$1.73 per share, for fiscal year 2003. We are pleased with the year-to-year



improvement in our financial results; however we clearly understand that we have additional work in order to achieve our desired business model. The management team is committed to operational excellence and has put in place clear imperatives to improve our financial performance.

FLAT PANEL DISPLAY MARKET

The flat panel market growth during the first half of calendar 2004 was evidenced by the 80% increase in FPD capital equipment spending between calendar 2003 and 2004. As was forecasted earlier in the year, supply exceeded demand in the third quarter of calendar 2004. Over-supply was primarily driven by decreasing demand due to record high panel prices and numerous generation 5 factories coming on line in Korea and Taiwan. Over-supply has been moderated by longer factory ramp times due to yield issues, and a shortage of key components such as glass substrates and color filters.

Demand is forecasted to exceed supply some time in the latter half of calendar 2005. Current market indicators show that demand is rising as a result of significantly reduced panel prices in the later half of calendar 2004. While TV demand lagged during the first half of the year, it picked up momentum during the second half of the year and finished slightly above market analyst expectations of 8% market share. TV demand is essentially on track due to successful generation 6 factories at Sharp and LG Philips LCD and the resultant pricing efficiencies offered from these factories. This represents an encouraging indicator of the future as generation 7 factories are scheduled to come on line during 2005. Market analysts continue to forecast the calendar 2006 LCD TV market share at 12%.

The result of moderated over-supply and clear signals that demand is increasing has led FPD manufacturers to move cautiously forward with investment plans for next generation factories in Korea and expansion of generation 5 and 6 factories in Taiwan. New FPD manufacturers are continuing to surface in China as the Chinese government has emphasized the LCD market as a strategic investment segment of the electronics manufacturing industry.

FISCAL 2005 GOALS

Product Focus

To meet our customers' needs, we must improve our product performance in defect detection, repair success, cost of ownership, ease of use and throughput for each of our product generations. We have established a track record and leadership position in our ability to drive continuous improvement into each generation of our products. Maintaining our ArrayChecker leadership position of our generation 6 and 7 product offerings will be a key goal for fiscal 2005. Improved system performance will be coupled with our expert applications engineering services to provide a superior solution to our customers. Continuation of our ArraySaver growth by focusing on advanced automatic classification and repair technology will be a goal. We intend to improve the profitability of our repair system by localizing design and manufacturing. The other product goal will be to expand PanelMaster business by completing our cell and module production beta and focusing on additional customer penetration.

Focus on Quality

The rapid flat panel display market expansion puts increasing pressure on reducing product design cycles, reducing factory ramp time and increasing factory utilization. Product quality is a must to meet such requirements. Our goal in fiscal 2005 will be to build on the success of our continuous improvement program. We are working to finalize the implementation of our quality measurement and analysis processes and tools. We intend to utilize this quality data to implement corrective action and to expand our best known methods for engineering and manufacturing.

Continue Technology Leadership

We will emphasize R&D to maintain technology leadership in our products. We have formed an advanced technology organization to focus on our ArrayTest product, camera development for all of our products, and repair and defect classification algorithms for the ArraySaver and PanelMaster products. Technology leadership will be the key for us to continue to meet our customers' needs.

Fiscal improvement

We will continue to emphasize our commitment to improving our fiscal performance. We will continue our efforts begun in fiscal 2004 to reduce product costs and improve manufacturing efficiency designed to help us achieve our gross margin target, which are:

- Continue to look for vertical integration opportunities.
- Achieve manufacturing cost reductions by sourcing of certain raw materials and integration of certain systems in Asia.
- Expand sales and marketing of service product offerings.

We are working to expand and improve our financial and operational controls in preparation for Sarbanes-Oxley 404 certification.

The emphasis for fiscal 2005 will be to strengthen our market position, product focus, operations and fiscal performance. This emphasis will allow us to better serve the needs of our customers and maintain our leadership position in the high-growth flat panel display market.

We would like to thank our customers, investors, employees and suppliers for their support during the past year and look forward to working with you in fiscal 2005.

Sincerely,

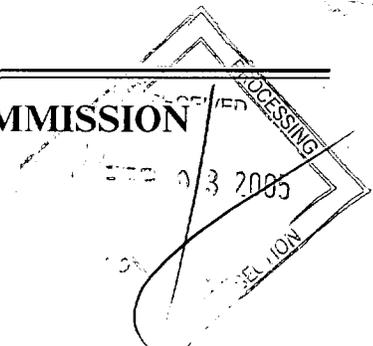


Jeffrey Hawthorne
President and Chief Executive Officer



This Annual Report contains forward-looking statements. The words "should," "will," "anticipate," "expect," "forecast," "intend" and "believe" and other comparable terminology identify these statements as forward-looking statements. Our actual results could differ materially from those projected in the forward-looking statements as a result of a number of factors, risks and uncertainties, including the risk factors set forth under the caption "Factors Affecting Operating Results" in Part II, Item 7 of our Annual Report on Form 10-K included in this Annual Report.

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



Form 10-K

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

For the fiscal year ended September 30, 2004

or

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

For the transition period from to

Commission File Number 0-27234

Photon Dynamics, Inc.

(Exact name of registrant as specified in its charter)

California

*(State or other jurisdiction of
incorporation or organization)*

94-3007502

*(I.R.S. Employer
Identification No.)*

**5970 Optical Court
San Jose, CA 95138**

(Address of principal executive offices, including zip code)

(408) 226-9900

(Registrant's telephone number, including area code)

**Securities registered pursuant to Section 12(b) of the Act:
None**

**Securities registered pursuant to Section 12(g) of the Act:
Common Stock, no par value per share
(Title of class)**

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

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

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

As of March 31, 2004, the aggregate market value of the voting stock held by non-affiliates of the registrant, computed by reference to the last sale price of such stock as of such date on the NASDAQ National Market, was approximately \$475,679,585. Excludes an aggregate of 2,057,546 shares of common stock held by officers and directors and by each person known by the registrant to own 5% or more of the outstanding common stock as of March 31, 2004. Exclusion of shares held by any of these persons should not be construed to indicate that such person possesses the power, direct or indirect, to direct or cause the direction of the management or policies of the registrant, or that such person is controlled by or under common control with the registrant.

As of November 30, 2004, there were 16,873,772 shares of the registrant's Common Stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement for the 2005 Annual Meeting of Shareholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year covered by this Form 10-K, are incorporated by reference in Part III, Items 10-14 of this Form 10-K.

PHOTON DYNAMICS, INC.
ANNUAL REPORT ON FORM 10-K
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2004
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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. All statements included or incorporated by reference in this Annual Report on Form 10-K other than statements of historical fact, are forward-looking statements. You can identify these and other forward-looking statements by the use of words such as "may," "will," "could," "anticipate," "expect," "intend," "believe," "continue" or the negative of such terms, or other comparable terminology. Forward-looking statements also include the assumptions underlying or relating to such statements.

Our actual results could differ materially from those projected in the forward-looking statements included herein as a result of a number of factors, risks and uncertainties, including the risk factors set forth under the caption "Factors Affecting Operating Results" in Part II Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this Annual Report on Form 10-K and elsewhere in this Annual Report on Form 10-K. The information included in this Annual Report on Form 10-K is as of the filing date with the Securities and Exchange Commission and future events or circumstances could differ significantly from the forward-looking statements included herein. Accordingly, we caution readers not to place undue reliance on such statements and we expressly assume no obligation to update the forward-looking statements included in this report after the date hereof except as required by law.

PART I

Item 1. *Business*

Introduction

Photon Dynamics, Inc. (“Photon Dynamics”) is a California corporation incorporated on May 12, 1986. We are a leading provider of yield management solutions to the flat panel display industry. Manufacturers in this industry use our solutions to collect data, analyze product quality and identify and repair product defects at critical steps in their manufacturing processes. Our customers use our test, repair and inspection systems to increase manufacturing yields of high performance flat panel displays used in a number of products, including notebook and desktop computers, televisions and advanced mobile electronic devices such as cellular phones, personal digital assistants and portable video games.

During fiscal 2004, we acquired all of the assets relating to the design and manufacture of laser assembly products used in our array repair products from Quantum Composers, Inc. We also acquired all of the assets relating to the design and manufacture of pellicle products used in our array checker modulators from Tucson Optical Research Corporation. For further details of these and our fiscal 2003 and 2002 acquisitions relating to our current business, see “Business Combinations,” below.

Prior to fiscal 2003, we also were engaged in the printed circuit board assembly inspection business and the cathode ray tube display and high quality glass inspection businesses. During fiscal 2003, we implemented a plan to exit these businesses and consequently, we now operate in one reportable business segment — the flat panel display industry. Accordingly, the operating results of both the printed circuit board assembly inspection business and the cathode ray tube display and high quality glass inspection business segments have been presented as discontinued operations in our statements of operations. As a result, revenue from our flat panel display products represent 100% of our revenues in all fiscal years presented. For further details of our discontinued operations, see Note 3 of our “Notes to Consolidated Financial Statements” included under Part II Item 8. “Financial Statements and Supplementary Data.”

Additional information about Photon Dynamics, Inc. is available on our website at www.photondynamics.com. We make available free of charge, on or through our website, our Annual Report on Form 10-K, our Quarterly Reports on Form 10-Q, our Current Reports on Form 8-K, and any amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, as soon as reasonably practicable after electronically filing such reports with, or furnishing such reports to, the Securities and Exchange Commission. Information contained on our website is not incorporated by reference in, or made part of this Annual Report on Form 10-K or our other filings with or reports furnished to the SEC.

Industry

Flat Panel Display Industry Background

Continuous innovations in microelectronics and materials science have enabled flat panel displays with sharper resolution, brighter pixels and faster imaging to be produced in varying sizes for differing applications. Similar innovations have led to the introduction of a broad array of electronic devices with increasing performance and decreasing size characteristics. Manufacturing these highly engineered products requires complex, multi-stage production processes, increasing the potential for defects and errors associated with equipment failures, contamination of materials, drift in process parameters, human error and other related factors. Manufacturing complexity also increases investment in work-in-progress inventories and lengthens production cycles. To better manage and enhance their yields and reduce product costs, manufacturers are increasing their emphasis on automated testing, inspection and repair at various points in the manufacturing process. As production processes become more complex and reducing material and labor costs becomes increasingly important, we believe that ongoing yield management solutions provides manufacturers with an important competitive advantage.

Growth in the mobile electronic devices market, the desktop computer market and the television market have driven the demand for flat panel displays, which offer reduced footprint, weight, power consumption and

heat emission and better picture quality as compared to cathode ray tube displays, the current standard technology for stationary display devices.

Active matrix liquid crystal display ("AMLCD"), the most prevalent and one of the highest performance flat panel displays available today, produces full color images and operates at much faster refresh rates than earlier passive monochrome liquid crystal displays. The color capability, resolution, speed and picture quality of active matrix liquid crystal displays currently make these displays the preferred choice for high-performance mobile applications, such as portable computers, multimedia, televisions and other applications requiring the display of video and graphics.

Manufacture of Active Matrix Liquid Crystal Displays. The manufacture of active matrix liquid crystal displays is an extremely complex process, which has been developed and refined for different panel sizes and resolutions through research and development, pre-production prototyping and commercial production.

An AMLCD uses liquid crystal to control the passage of light. The basic structure of an AMLCD panel may be thought of as two glass substrates sandwiching a layer of liquid crystal. The front glass substrate is fitted with a color filter, while the back glass substrate has transistors fabricated on it. When voltage is applied to a transistor, the liquid crystal is bent, allowing light to pass through to form a pixel. A light source is located at the back of the panel and is called a backlight unit. The front glass substrate is fitted with a color filter, which gives each pixel its own color. The combination of these pixels in different colors forms the image on the panel.

Substrate glass panels are initially manufactured in large glass panels which are subsequently cut down to the size of the needed application. Each progressive increase in panel size is referred to by its "generation." Generation 5 panels are approximately 1,200 × 1,300 mm in size, Generation 6 panels are approximately 1,500 × 1,800 mm in size and Generation 7 panels are approximately 1,870 × 2,200 mm in size. Manufacturing an active matrix liquid crystal display involves a series of three principal phases:

Array Phase. The first phase of the process involves the production of both the array plate and color filter plate. This phase of the process is the fabrication of an array of thin-film transistors ("TFT"), each of which is connected to a transparent sub-pixel, the smallest addressable unit in the display. Three or more sub-pixels are combined to produce a pixel, millions of which are fabricated, using semiconductor processes, on a large glass substrate. A similar process is used to fabricate an array of color filter sub-pixels on a large glass substrate. The array fabrication process is the most capital-intensive process and is housed in cleanrooms in order to minimize particles that can cause pixel defects.

Cell Phase. The second phase, cell assembly, is the joining of the TFT array plate and the color filter plate with liquid crystal material.

Module Assembly Phase. The third phase, module assembly, involves packaging the display and attaching the electronics and illumination, or backlight, which will allow the device to display text, graphics and video images.

The AMLCD market is both price sensitive and cost competitive, making it critical for manufacturers to constantly strive for the highest possible yields to decrease costs. Unlike semiconductor fabs, where productivity can be increased by shrinking features and die size, AMLCD fab productivity is driven by yield and substrate size, the latter being because the processing equipment cost increases are less than the plate area increases with each new generation.

At various points in the manufacturing process, the flat panel display manufacturer uses test and inspection equipment to identify defects to permit repair and to avoid wasting costly materials on continued manufacturing of a defective product. In addition, test and inspection systems can provide qualitative feedback to the flat panel display manufacturer and enable the manufacturer to address yield problems and to optimize the manufacturing process.

Challenges Faced by Flat Panel Display Manufacturers. The ability of flat panel display manufacturers to improve yields of active matrix liquid crystal displays and other flat panel displays depends, in large part, on their ability to test, repair and inspect displays during the manufacturing process and to use the resulting data

collection to refine the manufacturing process. The ability to test, repair and inspect helps manufacturers address a number of challenges, including:

- *Demand for Higher Quality.* Increased competition among flat panel display manufacturers, improvements in the manufacturing process and higher consumer expectations are moving the flat panel display industry towards a zero defect standard. The manufacturing challenges presented by the goal of zero defect products have been compounded by the increasing demand for higher resolution and larger displays.
- *Increasing Display Resolutions.* Resolutions of advanced flat panel displays now involve several million pixels, presenting a challenge when test and inspection equipment must exercise each pixel. Traditional methods of physically contacting each row and column of pixels with probe cards have difficulty handling current advanced displays. Manufacturers require new techniques, such as non-contact pixel-addressing mechanisms, to more effectively handle these displays.
- *High Cost of Materials.* Materials costs comprise approximately 50% of flat panel display costs, in contrast to only approximately 10% for semiconductors, according to industry sources. Higher material costs expose the flat panel display manufacturer to higher costs due to yield loss throughout the manufacturing process. Therefore, it is important to test, repair and inspect early in the manufacturing process before expensive materials are added to the display in the latter assembly phases.
- *Need for Increased Yield and Greater Throughput.* Greater yields are realized in part through more effective test, repair and inspection. In order to maintain or improve profitability, flat panel display manufacturers need test, repair and inspection equipment that will allow them to increase process speed while using larger panels.
- *Need for Flexibility.* The flat panel display industry is producing a larger number of different panel sizes as the variety of applications incorporating flat panel displays has increased. Manufacturers are seeking test, repair and inspection equipment that can be reconfigured quickly and accurately for different panel sizes, with minimal production downtime.

Products

Today's market dynamics demand that flat panel display manufacturers leverage the latest yield management and process tools. We focus specifically on delivering yield management solutions that enable manufacturers to collect data from the production line, analyze it, and quickly diagnose and repair process-related defects. We focus specifically on delivering solutions that help manufacturers decrease material costs and improve throughput to gain that incremental yield edge so critical to success. Our offerings can be broadly classified into two categories: Yield Management Products and Customer Service and Support.

Yield Management Products

Our flat panel display yield management products include test and repair equipment that are used primarily in the Array phase of production, and inspection equipment that is used primarily in Cell and Module Assembly phases of production. Our test equipment can identify and characterize defects at early stages of the manufacturing process so that the panels may be repaired before the next stage or, if necessary, discarded, minimizing the loss of time and materials. Our test and repair systems use similar software-based controls, processing and graphical user interfaces. Products can be networked together with our products as well as complementary vendor products so that defect data can be stored, analyzed and used throughout the manufacturing process. Our systems are also compatible with a variety of material handling automation systems. Our inspection equipment can identify visual defects after cell assembly and also during and after module assembly.

Flat Panel Display Array Test Systems. Our ArrayChecker™ test systems detect, locate, quantify and characterize electrical, contamination and other defects in active matrix liquid crystal displays after array fabrication. These systems use our proprietary non-contact voltage imaging technology to provide a high-resolution voltage map of the entire display and our proprietary image analysis software converts this voltage

map into complete pixel defect data. The ArrayChecker™ test systems determine whether individual pixels or lines of pixels are functional and also find more subtle defects such as variations in individual pixel voltage. These defect data files are then used for repair and statistical process control.

Flat Panel Display Array Repair Systems. Our ArraySaver™ repair systems utilize multiple wavelength laser technology to repair defects in flat panel displays during and after array fabrication. Our systems can use defect data files downloaded from our array test systems or other test and inspection systems to automatically position the panel for repair, thereby eliminating the time spent by operators locating defects.

The ArraySaver™ system includes a high-precision materials handling platform and a user-friendly graphical interface allowing for high throughput. Our high-precision materials handling platform fully automates the precise positioning of the plate for each successive repair, thereby substantially increasing throughput. Our graphical user interface and software supports semi-automated setup of repair programs for common types of defects so that repairs can be executed rapidly and accurately. These programs provide a series of actions that the system automatically executes to repair the particular defect type.

Flat Panel Display Inspection Systems. Our PanelMaster™ inspection systems use our proprietary image analysis and moiré interference canceling algorithms and technology to inspect flat panel displays for visual defects after cell assembly and also during and after module assembly. Our systems use multiple high-resolution cameras and computer workstations to quantitatively measure visual characteristics and to precisely locate and characterize line, cluster, pixel and blemish defects. Inspection data generated by the system is displayed on a video monitor for immediate interpretation and can be stored or sent to a repair system to effect repairs. Our inspection systems offer different levels of resolution, functionality and flexibility to suit customers' needs. The system is available either as a stand-alone unit or as a modular unit that can be integrated with manufacturers' material handling equipment.

Customer Service and Support

We enhance the value of our products through our customer support programs, which provide comprehensive worldwide service and support across all of our product lines. With years of experience helping our customers increase yields across a myriad of production environments, our global yield management support organization is equipped to provide customers with a range of preventative and corrective services. These include design, development, and integration services associated with yield management, as well as comprehensive education, project management, process and applications consulting, product maintenance, and life cycle optimization.

Customers

We sell our products to manufacturers in the flat panel display industries. All of our flat panel display customers are located in Korea, Taiwan and Japan, where flat panel display production is concentrated, and China. We derive most of our revenue from a small number of customers, and we expect this to continue for the foreseeable future. Sales to our top three unaffiliated customers accounted for 63%, 79%, and 70% of revenue in fiscal 2004, 2003, and 2002, respectively. During fiscal 2004, sales to AU Optronics Corp., LG Phillips LCD Co. Ltd., Hannstar Display Corporation and Innolux Display Corporation each accounted for more than 10% of our total revenues. See Note 12 of our "Notes to Consolidated Financial Statements" in Part II, Item 8. "Financial Statements and Supplementary Data" for further information, which is incorporated here by reference, regarding sales to our major customers.

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

Sales and Service

Our sales and marketing strategy is to provide our customers with increased manufacturing yields and throughput, improved quality and greater overall efficiency in their manufacturing process. Our sales, service and marketing efforts are focused on building long-term relationships with our customers. We sell our products for the flat panel display industry directly to our customers in Korea, Taiwan, China and Japan. We also, on a limited basis, have sold in Japan through Ishikawajima-Harima Heavy Industries Co., Ltd. ("IHI"), our value-added distributor in Japan. In February 2004, we terminated this agreement. As part of this termination agreement, IHI assigned to us the right to use all intellectual property rights associated with our products held by IHI, including any patents and patent applications associated with the intellectual property rights. IHI retains the rights to resell our products to one particular customer in Japan through March 2005. We service our products worldwide directly, including primary responsibility for the customer in Japan to which IHI has retained the rights.

Revenue from our flat panel display products represented 100% of our revenue in fiscal 2004, 2003 and 2002, and all of this revenue was derived from sales to companies located outside of the United States. International sales expose us to risks that are not experienced with domestic sales, such as export license restrictions, political instability, trade restrictions and currency fluctuations. These and other risks relating to our business are detailed under the caption "Factors Affecting Operating Results" in Part II, Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations." See Note 12 of our "Notes to Consolidated Financial Statements" included under Part II, Item 8. "Financial Statements and Supplementary Data" for additional geographic information, which is incorporated herein by reference, including long-lived assets by geographic area as well as revenue from external customers attributable to geographic areas during the last three years.

Our sales terms are typically 80% to 90% of the sales price due upon shipment with the remaining amount due after installation and upon final customer acceptance. We typically provide a limited warranty on our products for a period of 12 months from final acceptance. Our field service personnel provide customers with repair and maintenance services, primarily warranty related. As of September 30, 2004, we had 102 sales and service personnel, 74 of whom were located in Asia-Pacific region and 28 of whom were located in North America.

Research and Development

The market for integrated yield management systems is characterized by rapid and continuous technological development and product innovation. We believe that it is necessary to maintain our competitive position through continued and timely development of new products and enhancements to existing products. Accordingly, we devote a significant portion of our human and financial resources to research and development and seek to maintain close relationships with customers to remain responsive to their needs. For information regarding our research and development expenses during the last three years, see Part II, Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this Annual Report on Form 10-K, which is incorporated here by reference.

We are focusing our current research and development on increasing the performance of our array test, array repair and cell and module inspection systems, enabling manufacturers to minimize the loss of time and materials in production.

Manufacturing

Our flat panel display products are primarily manufactured in San Jose, California. Our manufacturing activities consist primarily of final assembly and test of components and subassemblies, which are purchased from third party vendors.

We have utilized suppliers of fully or partially assembled and tested subsystems for many years. In December 2001, we entered into a three-year manufacturing outsourcing agreement with Sanmina-SCI Corporation. Under this and related agreements, Sanmina-SCI was to provide a significant portion of the

procurement of raw materials, manufacturing, assembly and test operations for our yield management products. We continued to purchase from other vendors and manufacture some of the proprietary and more complex pieces of our equipment, such as our modulators. Under the terms of this agreement, Sanmina-SCI leased 15,000 square feet of our San Jose facility and leased and operated certain equipment, expanded our San Jose clean room and purchased a substantial portion of our existing raw materials inventory. In the fourth quarter of 2003, we terminated our relationship with Sanmina-SCI, shifted production of components to other vendors, and assumed in-house purchasing activities formerly provided by Sanmina-SCI. See Note 11 of our "Notes to Consolidated Financial Statements" included under Part II, Item 8. "Financial Statements and Supplementary Data" for additional information on the termination of our relationship with Sanmina-SCI.

We schedule production based upon customer purchase orders and anticipated orders during the planning cycle. We generally expect to be able to accept a customer order, build the required machinery and ship to the customer within approximately 26 to 39 weeks. We maintain quality control through inspection of components, in-process inspection during equipment assembly and final inspection and operation of all manufactured equipment prior to shipment. Although we assemble some components and final test our systems under limited clean room conditions, most of our manufacturing occurs in standard manufacturing space.

Because of the long lead time required to manufacture a customer order and the cyclical nature of the business, a significant increase in orders could necessitate a build up in inventory and therefore have a negative impact on cash. During the last half of fiscal 2004, we experienced a major production increase associated with our Generation 6 repair products. This resulted in an increase of inventory from \$9.9 million at the end of fiscal 2003 to \$31.7 million at the end of fiscal 2004.

Prior to February 2004, under the terms of our relationship with IHI, IHI had the right to manufacture, assemble and sell array test systems. To date, we have manufactured all array test systems sold by IHI. Furthermore, IHI has sold products only in its capacity as our distributor in Japan. In February 2004, these prior existing agreements were terminated. As part of this termination agreement, IHI assigned to us the right to use all intellectual property rights associated with our products held by IHI, including any patents and patent applications associated with the intellectual property rights. IHI has retained the rights to resell our products to one particular customer in Japan through March 2005.

Suppliers

We obtain some equipment for our systems from a single source or a limited group of suppliers. For example, we currently obtain material handling platforms from a single source supplier. Although we seek to reduce dependence on our single source and limited group suppliers, alternative sources of supply for certain pieces of equipment may not be available or may be available on unfavorable terms. The partial or complete loss of a single source or limited group of suppliers or any delay in shipment from a single source or limited group of suppliers could at least temporarily harm our results of operations and damage customer relationships. Further, a significant increase in the price of one or more of these pieces of equipment could harm our results of operations. To date we have not experienced the loss of any single source or limited group of suppliers or any related delays in shipment.

Intellectual Property

We protect our proprietary technology through various methods such as patents and patent applications, trademarks, non-disclosure agreements and trade secrets. We have filed and obtained a number of patents in the United States and abroad and have also jointly filed patent applications in Japan with IHI. As of November 10, 2004, we have been issued 42 patents in the United States that are in force. The normal expiration dates of these patents range from 2006 to 2023. As of November 10, 2004, there are 13 pending patent applications in the United States. As of November 10, 2004, we have been issued 28 non-U.S. patents that are in force, the normal expiration dates beginning in 2011, and there are 34 non-U.S. pending patent applications.

Our patents relate to various aspects of our yield management and rapid thermal processing solutions as set forth in the following table (as of November 10, 2004):

	Patents in Force	
	U.S.	Non-U.S.
Yield Management Products	32	23
Process Products	8	4
Other	<u>2</u>	<u>1</u>
Total	<u>42</u>	<u>28</u>

We intend to continue to pursue the legal protection of our technology through intellectual property laws. However, we cannot be certain that the steps we have taken to protect our intellectual property rights will be adequate or that third parties will not infringe or misappropriate our proprietary rights.

Backlog

Our backlog consists of orders for which we have accepted purchase orders and assigned shipment dates within the next twelve months and which are reasonably expected to be filled within that time frame. All orders are subject to delay or cancellation with limited or no penalty to the customer. Because of possible changes in product delivery schedules and cancellation of product orders, among other factors, our backlog may vary significantly and, at any particular date, is not necessarily indicative of actual sales for any succeeding period. Our backlog as of September 30, 2004 and 2003 was approximately \$81.1 million and \$45.4 million, respectively.

Competition

The worldwide market for integrated yield management systems is highly competitive. We face substantial competition from established companies, many of which have greater financial, engineering and manufacturing resources, larger service organizations and long-standing customer relationships with key existing and potential customers. We may also face future competition from new market entrants from other overseas and domestic sources.

Our competitors primarily are Micronics Japan Co. Ltd., Applied Komatsu Technology, Inc. and Shimadzu Corporation in array testing, NEC Corporation, NTN Corporation, Contrel Limited, Charm Engineering Co., Ltd and Hoya Continuum Corporation in array repair and several competitors in the cell and module inspection market. We may also face future competition from new market entrants from other overseas and domestic sources.

We expect our competitors to continue to improve the design and performance of their products and to introduce new products with competitive price and performance characteristics. In addition, our customers may choose to develop proprietary technology that may obviate or lessen their need to purchase our products. Moreover, increased competitive pressure may necessitate price based competition, which could harm our business, financial condition and results of operations.

We believe that we can compete effectively with our competitors by building on our substantial installed customer base, providing technologically superior, competitively priced products and emphasizing our easy-to-use user interfaces and customer support. However, realizing and maintaining such advantages will require a continued high level of investment by us in engineering, research and development, marketing and customer service and support. We may not have sufficient resources to continue to make such investments. Even if sufficient funds are available, we may not be able to make the technological advances in a timely manner necessary to maintain such competitive advantages.

Significant competitive factors in the market for our yield management systems include system performance, ease of use, reliability, installed base and technical service and support. We believe that, while price and delivery are important competitive factors, the customers' overriding requirement is for systems that

easily and effectively incorporate automated and highly accurate inspection and repair capabilities into their existing manufacturing processes, thereby enhancing productivity.

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

Employees

As of September 30, 2004, we employed 414 persons. No employees are represented by a labor union or covered by a collective bargaining agreement. We consider our relationships with our employees to be good.

Competition is intense in the recruiting of personnel in the flat panel display industry. Our future success may depend in part on our continued ability to hire and retain qualified management and technical employees.

Business Combinations

In August 2004, we acquired from Tucson Optical Research Corporation all of the assets related to the design and manufacture of pellicle products which are used in our modulators. This acquisition has enabled us to reduce product costs of modulators used in our array checker products while improving performance.

In June 2004, we acquired from Quantum Composers, Inc. all of the assets related to the design and manufacture of laser assembly products used in our repair product line. This acquisition has enabled us to reduce product costs while improving performance.

In May 2003, we acquired substantially all of the assets of Summit Imaging, Inc., a privately held designer and manufacturer of cooled cameras for the capital equipment industry. This acquisition has enabled us to reduce the costs of cameras used in our flat panel display yield management products while improving performance.

In October 2002, we purchased certain assets from Intevac, Inc. related to Intevac's Rapid Thermal Processing ("RTP") Division. The rapid thermal processing systems use a patented technology designed to activate low temperature poly-silicon films utilizing a precise heating process critical to the manufacture of advanced active matrix, thin film transistor liquid crystal displays and organic light emitting diodes. This acquisition expanded our flat panel display product offering. Due to deterioration of business conditions and lower than expected demand for low temperature poly-silicon film technology, as of December 31, 2003, we determined that all the goodwill and intangible assets associated with this RTP reporting unit had been impaired and, as a result, their carrying value was reduced to zero. Due to deteriorating business conditions and the emergence of alternative and competing technologies, we continue to support RTP systems in the field but are not pursuing new business for systems upgrades or enhancements.

In September 2002, we acquired Akcron Corporation, LTD., a privately held manufacturer of automated optical inspection equipment, image processing hardware and software algorithms and high-performance liquid crystal display backlight inverters for flat panel displays. The acquisition of Akcron expanded our cell and module inspection capabilities. In the third quarter of fiscal 2004, we sold all assets related to this business.

For further details regarding our business combinations and dispositions, please see Note 4 of "Notes to Consolidated Financial Statements" included under Part II, Item 8. "Financial Statements and Supplementary Data."

Executive Officers of the Registrant

Our executive officers, their ages and their positions as of November 30, 2004, are as follows:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Malcolm J. Thompson	59	Executive Chairman of the Board of Directors
Jeffrey A. Hawthorne	47	Chief Executive Officer, President and Director
Richard Okumoto	52	Chief Financial Officer and Secretary
Steve Song	49	Vice President, Worldwide Sales
Mark Merrill	41	Vice President, Marketing

Malcolm J. Thompson has been a member of our Board of Directors since 1992 and has served as the Executive Chairman of our Board of Directors since October 2003. Since April 2003, Dr. Thompson has served as the interim Chief Executive Officer of Vitex Systems, Inc., a provider of components for flat panel displays. From November 2001 to May 2002, he was a member of the Technical Advisory Board of Novalux, Inc., a laser module provider for optical networks, and from 1998 through November 2001, he was President and Chief Executive Officer of Novalux, Inc., a provider of laser modules for optical networks. From 1996 to 1998, he was President and Chief Executive Officer of dpiX, Inc., a digital image capture and display products company, and from 1981 to 1996, he was the Chief Technologist for Xerox PARC. He also has served as Chairman of the Board of the United States Display Consortium, an industry-government consortium of over 135 member companies. Dr. Thompson received a B.S. and a Ph.D. in Applied Physics from the University of Brighton, Sussex in the United Kingdom.

Jeffrey A. Hawthorne has been our President and Chief Executive Officer since October 2003, and has been a member of our Board of Directors since December 2003. From July 2003 to October 2003, Mr. Hawthorne was our Chief Operating Officer. From November 2001 to July 2003, Mr. Hawthorne was our Vice President and President, Image Processing Systems Division. Mr. Hawthorne joined us in 1991 and has held a series of other management positions including Vice President, Development from September 1994 to November 2001. Mr. Hawthorne received a B.S. degree in Engineering Physics from the University of Colorado and an M.S. degree in Optical Engineering from the University of Rochester.

Richard Okumoto has been our Chief Financial Officer and Secretary since May 2003. From February 2003 until May 2003, he was Vice President of Administration and Chief Financial Officer at ESI, a manufacturer of semiconductor capital equipment. From October 2001 to December 2002, Mr. Okumoto was executive Vice President of The Garrett Group, a technology financial services firm. From May 2000 to May of 2001, Mr. Okumoto was Senior Vice President and General Manager of the I.C.E. division of Credence Systems Corporation, a manufacturer of semiconductor capital equipment. From October 1998 to May 2000, Mr. Okumoto was President and Chief Executive Officer of TMT, Inc., a manufacturer of semiconductor capital equipment. From March 1993 until January 1998, Mr. Okumoto was Executive Vice President and Chief Financial Officer for Credence Systems Corporation. Mr. Okumoto brings over 20 years of financial experience in the semiconductor test industry. Mr. Okumoto received a B.S. degree in Business Administration at San Jose State University.

Steve Song has been our Vice President, Worldwide Sales since November 2003. From August 1998 to November 2003, Mr. Song was our Vice President of Sales. Mr. Song joined us in April 1994 as our Korean sales and support manager. He was promoted to director of Korean operations in August 1995 and established our Korean subsidiary. Mr. Song received a B.S. degree in Electrical Engineering from Korea University in Seoul, Korea.

Mark Merrill has been our Vice President, Marketing since July 2004. Mr. Merrill has over 15 years of experience in the industry and joined Photon Dynamics from KLA-Tencor, Inc., a semiconductor capital equipment company, where he was employed from 1990 to 2004 and assumed increasing levels of responsibility culminating in his appointment as the company's Chief Marketing Officer. In addition to his affiliation with KLA-Tencor, from 2001 to 2002 Mr. Merrill was vice president of Product and Market Development, Inc., a consulting firm, where he consulted with venture capital firms and their start-up

companies in multiple industries. Previously, Mr. Merrill also was an applications and software engineer at Ultratech Stepper, Inc., a semiconductor capital equipment company. He holds a B.S. degree in Electronic Engineering, Summa cum Laude, from Maharishi International University and attended the Stanford/AEA Executive Institute at Stanford University.

Item 2. Properties

Information regarding our principal properties at September 30, 2004 is as follows:

<u>Location</u>	<u>Type</u>	<u>Principal Use</u>	<u>Footage</u>	<u>Ownership</u>
San Jose, California	Office and plant	Vacant	22,000	Owned
San Jose, California	Plant	Headquarters, marketing, sales, administration, manufacturing, research, engineering	128,520	Leased
Austin, Texas	Office and plant	Vacant (1/2 sublet)	35,200	Leased
Markham, Ontario, Canada . .	Office and plant	Research and engineering (1/2 vacant)	50,000	Leased
Hsin Chu, Taiwan	Office and plant	Sales, service, marketing, administration, manufacturing, research	10,255	Leased
Daejeon, Korea	Office and plant	Sales, service, marketing, administration, manufacturing, research	6,049	Leased

We also lease office space for other, smaller research, sales and service offices in Bozeman, Montana, USA; Tucson, Arizona, USA; Colorado Springs, Colorado, USA; Tokyo, Japan; Mie, Japan; Seoul, Korea; Kumi, Korea; Cheonan, Korea; Tainan City, Taiwan; TaiChung, Taiwan; and Beijing, China.

Our operating leases expire at various times through December 2010, with renewal options at the fair market value for additional periods up to five years. Additional information on these leases is incorporated by reference from Note 11 of the "Notes to Consolidated Financial Statements" in Part II, Item 8. "Financial Statements and Supplementary Data." We believe our properties are adequately maintained and suitable for their intended use and that our production facilities have adequate capacity for our current needs.

Item 3. Legal Proceedings

Photon Dynamics and certain of our directors and officers have been named as defendants in a lawsuit captioned Amtower v. Photon Dynamics, Inc., No. CV797876, filed on April 30, 2001 in the Superior Court of the State of California, County of Santa Clara. The plaintiff, who previously served as one of our officers, has asserted several causes of action arising out of alleged misrepresentations made to plaintiff regarding the existence and enforcement of our insider trading policy. The plaintiff is seeking damages of approximately \$17.7 million for our alleged refusal to allow plaintiff to sell shares of our stock in May of 2000, plus unspecified emotional distress and punitive damages. On December 6, 2001, the court granted our motion to dismiss the complaint for failure to allege facts sufficient to state a cause of action, with leave to file an amended complaint. On January 17, 2002, plaintiff filed his amended complaint and we again moved to dismiss the action. On June 27, 2002, the court issued an order granting in part and denying in part the motion, and further granted plaintiff an opportunity to restate certain claims. On October 1, 2002, plaintiff filed his Second Amended Complaint, which was heard on April 8, 2003, and we again moved to dismiss the action. On April 21, 2003, the court granted in part and denied in part our motion. The pleadings have been finalized and certain claims against us and the individual defendants will proceed. The parties currently are engaged in discovery, and a court-mandated mediation session on July 30, 2004 did not resolve the case. Trial is scheduled to commence on March 7, 2005. We believe the plaintiff's case is without merit and intend to defend this action vigorously. Although we cannot predict the outcome of this litigation, we believe that an

adverse judgment in this litigation could have a material adverse effect on our financial condition or results of operations.

We have been named as a defendant in a lawsuit captioned Sanmina SCI Corporation v. Photon Dynamics, Inc., No. CV 013715, filed on February 3, 2004 in the Superior Court of the State of California, County of Santa Clara. The plaintiff in this action, which previously was a third-party manufacturer of Photon Dynamics, has asserted several causes of action arising out of our alleged nonperformance of our manufacturing outsourcing agreement with the plaintiff and is seeking approximately \$3.1 million in compensatory damages and punitive damages in a unknown amount. We responded to the complaint on March 19, 2004, by filing an answer and cross complaint seeking damages of at least \$135,000. We amended our cross complaint on June 26, 2004. The parties attempted to mediate this dispute, which attempt was not successful. The parties are currently engaged in discovery. Although we cannot predict the outcome of this litigation, we believe that an adverse judgment in this litigation would not have a material adverse effect on our financial condition or results of operations.

From time to time we are subject to other legal proceedings and claims, either asserted or unasserted, which arise in the ordinary course of business. While the outcome of these proceedings and claims cannot be predicted with certainty, management does not believe that the outcome of any of these legal matters will have a material adverse effect on our results of operations or financial condition.

Item 4. *Submission of Matters to a Vote of Security Holders*

No matters were submitted to a vote of our security holders during the quarter ended September 30, 2004.

PART II

Item 5. *Market for the Registrant's Common Equity, Related Stockholder Matters and Issuer Purchase of Equity Securities*

Common Stock Market Price

Our common stock commenced trading on the NASDAQ National Market on November 15, 1995 under the symbol "PHTN." The following table sets forth the high and low close prices of our common stock as traded on the NASDAQ National Market for the periods indicated.

<u>Fiscal 2004 Quarter Ended</u>	<u>December 31, 2003</u>	<u>March 31, 2004</u>	<u>June 30, 2004</u>	<u>September 30, 2004</u>
High	\$41.80	\$45.82	\$38.10	\$32.47
Low	\$28.70	\$29.69	\$28.20	\$19.81
<u>Fiscal 2003 Quarter Ended</u>	<u>December 31, 2002</u>	<u>March 31, 2003</u>	<u>June 30, 2003</u>	<u>September 30, 2003</u>
High	\$35.39	\$26.65	\$29.60	\$34.00
Low	\$16.15	\$13.27	\$16.88	\$24.17

The closing price for our common stock as reported by the NASDAQ National Market on December 1, 2004 was \$23.33 per share. As of December 1, 2004, there were approximately 147 shareholders of record of our common stock.

We have never declared or paid any cash dividends to our shareholders and we have agreed not to pay cash dividends under our current bank line of credit. We do not presently plan to pay cash dividends in the foreseeable future and intend to retain any future earnings for reinvestment in our business.

Item 6. Selected Financial Data

The following selected consolidated summary financial data should be read in conjunction with Part II, Item 8. "Financial Statements and Supplementary Data," and with Part I, Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this Annual Report on Form 10-K. The consolidated statements of operations data for the years ended September 30, 2004, 2003 and 2002, and the consolidated balance sheet data as of September 30, 2004 and 2003 are derived from the audited consolidated financial statements included elsewhere in this report. The consolidated statements of operations data for the years ended September 30, 2001 and 2000, and the consolidated balance sheet data as of September 30, 2002, 2001 and 2000 are derived from audited consolidated financial statements not included in this report.

In fiscal 2003, we discontinued operations in two business segments — the printed circuit board assembly inspection business and the cathode ray tube display and high quality glass inspection business. Accordingly, the operating results of these businesses have been reclassified as discontinued operations for all periods presented.

	Year Ended September 30,				
	2004	2003	2002	2001	2000
	(In thousands, except per share data)				
Statements of Operations Data:					
Revenue	\$143,269	\$ 67,196	\$ 49,342	\$ 38,319	\$ 64,221
Income (loss) from operations	8,259	(30,692)	3,402	(7,304)	11,994
Income (loss) from continuing operations before discontinued operations and cumulative effect of a change in accounting principle	12,455 (1)	(27,780) (2)	6,230 (3)	(2,349) (4)	12,952
Income (loss) from discontinued operations	(1,391)	(44,592)	(28,032)	(4,218)	583
Income (loss) before cumulative effect of a change in accounting principle	11,064	(72,372)	(21,802)	(6,567)	13,535
Cumulative effect of change in accounting principle	—	—	—	(6,560) (5)	—
Net income (loss)	\$ 11,064	\$(72,372)	\$(21,802)	\$(13,127)	\$ 13,535
Income (loss) per share from continuing operations before discontinued operations and cumulative effect of a change in accounting principle:					
Basic	\$ 0.75 (1)	\$ (1.73) (2)	\$ 0.39 (3)	\$ (0.18) (4)	\$ 1.08
Diluted	\$ 0.73 (1)	\$ (1.73) (2)	\$ 0.37 (3)	\$ (0.18) (4)	\$ 0.99
Income (loss) per share from discontinued operations:					
Basic	\$ (0.08)	\$ (2.77)	\$ (1.76)	\$ (0.32)	\$ 0.05
Diluted	\$ (0.08)	\$ (2.77)	\$ (1.67)	\$ (0.32)	\$ 0.04
Income (loss) per share before cumulative effect of a change in accounting principle:					
Basic	\$ 0.67	\$ (4.50)	\$ (1.37)	\$ (0.50)	\$ 1.13
Diluted	\$ 0.65	\$ (4.50)	\$ (1.30)	\$ (0.50)	\$ 1.04
Cumulative effect per share of a change in accounting principle, net of tax benefit:					
Basic	\$ —	\$ —	\$ —	\$ (0.50) (5)	\$ —
Diluted	\$ —	\$ —	\$ —	\$ (0.50) (5)	\$ —
Net income (loss) per share:					
Basic	\$ 0.67 (1)	\$ (4.50) (2)	\$ (1.37) (3)	\$ (1.00) (4)	\$ 1.13
Diluted	\$ 0.65 (2)	\$ (4.50) (2)	\$ (1.30) (3)	\$ (1.00) (4)	\$ 1.04

	Year Ended September 30,				
	2004	2003	2002	2001	2000
	(In thousands, except per share data)				
Balance Sheet Data:					
Cash, cash equivalents and short-term investments	\$ 84,155	\$116,469	\$170,143	\$ 84,091	\$102,726
Working capital	133,705	125,624	190,188	99,457	126,042
Total assets	207,900	161,919	249,159	158,635	155,054
Shareholders' equity	161,329	144,143	226,143	143,308	131,800

- (1) Includes a goodwill impairment charge of \$665,000, purchased intangible asset write-off of \$2.1 million, acquired in-process research and development charge of \$210,000 in connection with the acquisition of certain assets from Quantum Composers, Inc., gain on fixed assets of \$427,000 related to the sale of the TFT-LCD Backlight Inverter Business, and amortization of intangibles of \$789,000.
- (2) Includes a goodwill impairment charge of \$10.0 million related to the Akcron and RTP Assets, purchased intangible asset write-off of \$3.5 million related to the Akcron and RTP Assets, and an acquired in-process research and development charge of \$2.5 million related to the acquisition of certain assets from Intevac related to Intevac's Rapid Thermal Processing Division and the acquisition of substantially all the assets of Summit Imaging, and amortization of intangibles of \$1.2 million.
- (3) Includes an acquired in-process research and development charge of \$410,000 in connection with the acquisition of Akcron.
- (4) Includes acquisition related charges of \$1.4 million in connection with the acquisition of Image Processing Systems Inc., as well as restructuring charges of \$976,000.
- (5) We recorded a non-cash charge of \$6.6 million, net of tax, or \$0.50 per diluted share, to reflect the cumulative effect of an accounting change as of October 1, 2000 related to the adoption of SEC Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements."

Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations*

The following discussion of our financial condition and results of operations should be read in conjunction with our Consolidated Financial Statements and the related Notes to Consolidated Financial Statements in Item 8, "Financial Statements and Supplementary Data" in this Annual Report on Form 10-K. This discussion contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Actual results could differ materially from those projected in the forward-looking statements as a result of a number of factors, risks and uncertainties, including the risk factors set forth in this discussion, especially under the caption "Factors Affecting Operating Results," and elsewhere in this Annual Report on Form 10-K. Generally, the use of words such as "may," "will," "could," "anticipate," "expect," "intend," "believe," "continue" or the negative of such terms, or other comparable terminology and similar expressions identify forward-looking statements. The information included in this Form 10-K is as of the filing date with the Securities and Exchange Commission and future events or circumstances could differ significantly from the forward-looking statements included herein. Accordingly, we caution readers not to place undue reliance on such statements.

Overview

Our Company

We are a leading provider of yield management solutions to the flat panel display industry. Our customers use our systems to increase manufacturing yields of high performance flat panel displays used in a number of products, including notebook and desktop computers, televisions and advanced mobile electronic devices such as cellular phones, personal digital assistants and portable video games. Our test and repair systems are used by manufacturers to collect data, analyze product quality and identify and repair product defects at critical steps in the manufacturing process.

We sell our products to manufacturers in the flat panel display industries. Our flat panel display customers are located in Korea, Taiwan and Japan, where flat panel display production is concentrated, and China. We derive most of our revenue from a small number of customers, and we expect this to continue for the foreseeable future.

Our products are primarily manufactured in San Jose, California. Our manufacturing activities consist primarily of final assembly and test of components and subassemblies, which are purchased from third party vendors. We schedule production based upon customer purchase orders and anticipated orders during the planning cycle. We generally expect to be able to accept a customer order, build the required machinery and ship to the customer within 26 to 39 weeks.

The success of our business depends upon numerous factors, including, but not limited to:

- The level of capital expenditures of flat panel display manufacturers, which in turn depends on the current and anticipated market demand for products utilizing flat panel displays, and
- The relative competitiveness of our products and services.

We do not consider our business to be seasonal in nature, but it is cyclical with respect to the capital equipment procurement practices of flat panel display manufacturers and is impacted by the investment patterns of these manufacturers in different global markets. A substantial percentage of our revenue is derived from the sale of a small number of yield management systems ranging in price from approximately \$400,000 to \$2.5 million. Therefore, the timing of the sale of a single system could have a significant impact on our quarterly results.

Focus on Flat Panel Display Industry

We have not always focused solely on the flat panel display industry. Previously we also produced printed circuit board assembly inspection products and cathode ray tube display and high quality glass inspection products. However, we determined to exit these markets as we believed that they did not have the potential to be profitable for us. Consequently, in January 2003 we implemented a plan to exit the printed circuit board assembly inspection business, and in June 2003 we implemented a plan to exit the cathode ray tube display and high quality glass inspection business. Accordingly, the operating results of these former businesses are classified as discontinued operations for all periods presented.

In view of continued deterioration in market opportunities that began in the fourth quarter of fiscal 2003, we have suspended operations in the low temperature poly-silicon ("LTPS") technology and inverter markets. Although we continue to support LTPS systems in the field with parts and service, we currently are not actively pursuing new business for systems, upgrades or enhancements for the foreseeable future. In our third quarter of fiscal 2004, we sold all assets related to the inverter business.

Our transition to the singular focus on our core business of developing yield management solutions for the flat panel display industry has given us a clear focus and direction in fiscal 2004 to strengthen our product and market position. Our fiscal 2004 strategic objectives were to build stronger customer partnerships and to enhance our operating performance. Our management team has been focused on several imperatives to support these objectives:

- **Gross margin improvement:** We have instituted supply chain management programs with all key suppliers to focus on volume purchase agreements. We have developed cost reduction programs focused at vertical integration of some purchased assemblies, building some subassemblies both with lower cost outside providers and lower cost in-house manufacturing. We have also established product quality programs focused at improving product reliability and reducing product warranty costs.
- **Production capacity expansion:** We have moved into a new facility to increase our manufacturing capacity in response to increasing demand for our products. Our new facility provides a larger area to manufacture our larger Generation 6 and 7 products and we have been hiring additional staff to support increased production.

- Asia localization: We continue to build up our Asia local management and customer support resources in order to meet our customers' expectations of local product support and local engineering support.
- Quality improvement: We are continuing to implement processes to drive product quality improvement and ease of use for our customers.
- Vertical Integration: We have consolidated some of our core technology through vertical acquisition of key suppliers to reduce product costs, and continue to explore opportunities to further reduce product costs in this manner.

We moved into our new facility in our second fiscal quarter of 2004. We have increased our manufacturing operations staff in order to meet increased demand for our products. Our total headcount increased from 292 at the end of fiscal 2003 to 414 at the end of fiscal 2004. In the short-term, the incremental capacity of our new facilities has caused our manufacturing operations to be less efficient due to staff training and redundancy. This has caused some delays in executing our cost reduction programs and has impacted our ability to increase our gross margins.

During the last half of fiscal 2004, we experienced a major production ramp up associated with our Generation 6 repair products. In our fourth quarter, in an effort to meet our customer's delivery requirements, we incurred higher overtime costs, warranty costs, rework costs and expedite fees. These higher costs, combined with a higher mix of revenue from repair systems, negatively impacted gross margins.

Acquisitions and Dispositions

Acquisition of TORC Assets. In August 2004, we acquired all of the assets of Tucson Optical Research Corporation related to the design and manufacture of pellicle products used for our modulators. The purchase price was approximately \$1.3 million, which we paid in cash and notes.

Acquisition of Quantum Composers Assets. In June 2004, we acquired from Quantum Composers, Inc. all of the assets related to the design and manufacture of laser assembly products for our repair product line. The purchase price was approximately \$3.0 million, which we paid in cash and notes, and assumed approximately \$156,000 in liabilities.

Acquisition of Summit Imaging Assets. In May 2003, we acquired substantially all of the assets of Summit Imaging, Inc., a privately held designer and manufacturer of cooled cameras for the capital equipment industry. The purchase price was approximately \$1.5 million, which we paid in cash, and assumed approximately \$15,000 in liabilities.

Acquisition of RTP Assets. In November 2002, we from Intevac, Inc. certain assets relating to rapid thermal processing technology (the "RTP Assets"). The purchase price was \$20.0 million of cash.

Acquisition of Akcron. In September 2002, we acquired Akcron Corporation LTD ("Akcron"), a designer and seller of automated optical inspection equipment, image processing hardware and software algorithms and high-performance liquid crystal display backlight inverters for flat panel displays, which has expanded our cell and module inspection capability. The purchase price was approximately \$4.2 million.

Acquisition of ISIS Assets. In July 2002, we purchased certain assets from Advanced Research Technologies, Inc. related to their Infrared Screening and Inspection Solutions ("ISIS") Division. The purchase price was approximately \$5.5 million in cash and we assumed liabilities of approximately \$100,000. All of these assets were written off as part of the discontinuation of the printed circuit board assembly inspection business.

For further details of these acquisitions, see Note 4 of the "Notes to Consolidated Financial Statements" included under Part II, Item 8. "Financial Statements and Supplementary Data."

We also continue to refine our strategic direction and, as a result, no longer have a need for some acquired businesses and technologies. For example, in the first quarter of fiscal 2004 we suspended operations in the LTPS technology and inverter markets. In fiscal 2003, we exited the printed circuit board assembly inspection and cathode ray tube and high quality glass inspection businesses. As a result, some or all of the technologies

acquired in connection with some of our prior acquisitions, including Advanced Research Technologies Inc., Intelligent Reasoning Systems, Inc., Image Processing Systems, Inc. and Infrared Screening and Inspection Solutions have been sold or abandoned.

In the fourth quarter of fiscal 2003, as a result of limited opportunities in the inverter market and uncertainty with regard to flat panel manufacturers' commitment to LTPS technology, we performed an impairment analysis of the goodwill and the purchased intangible assets and certain other long-lived assets associated with the Akron and RTP reporting units. As a result of this analysis, we recorded impairment charges of approximately \$10.0 million related to goodwill and \$3.5 million related to the unamortized portion of the acquired developed technology, core technology and patent intangible assets associated with these reporting units. The remaining \$365,000 of goodwill and \$2.1 million of acquired core technology and acquired developed technology associated with these reporting units were written off in the three months ended December 31, 2003 as additional impairment charges. These additional impairment charges were a result of the continuing deterioration in business conditions that included emergence of alternative and competing technologies, shrinkage of potential total market opportunity due to one of the primary potential customer's decision to pursue an alternative technology and further softness in this particular sector of the market since September 30, 2003. While continuing to support RTP systems in the field with parts and service, we will not pursue new business for systems, upgrades or enhancements for the foreseeable future. In the third quarter of fiscal 2004, we sold all of our assets related to our TFT-LCD Backlight Inverter business and recorded a gain on the transaction of \$419,000 which is included in "Gain on sale of fixed assets" in the Consolidated Statements of Operations. See Note 4 of our "Notes to Consolidated Financial Statements" in Part II, Item 8. "Financial Statements and Supplementary Data" for further information, which is incorporated by reference.

Industry

Continuous innovations in microelectronics and materials science have enabled manufacturers, including our customers, to produce flat panel displays with sharper resolution, brighter pixels and faster imaging in varying sizes for differing applications. Growth in the mobile electronic devices market, the desktop computer market and the television market have driven the demand for flat panel displays, which offer reduced footprint, weight, power consumption and heat emission and better picture quality as compared to cathode ray tube displays, the current standard technology for stationary display devices.

During calendar 2003, demand for computer monitor displays and notebook demand resulted in Korean and Taiwanese flat panel display manufacturers investing heavily in Generation 5 factories to keep pace with the demand for products. In addition, calendar 2003 signaled the start of AMLCD television mass production.

In the last half of our fiscal year 2004, there has been uncertainty in the flat panel display market as supply exceeded demand; however, this over-supply has been significantly moderated given the panel price decreases and a slowdown in capacity increases. Despite this uncertainty, flat panel display manufacturers have continued to press forward with carefully considered new capacity investments in Generation 6 and Generation 7 factories in order to keep their competitive edge in the market.

Growth in the AMLCD television market is expected to continue to fuel the overall growth in the flat panel display market. Lower panel prices, however, are essential to stimulate demand. The next generation factories are being built to help reduce manufacturing cost to allow panel producers to achieve the proper panel pricing. However, there are many factors that will dictate how successful AMLCD manufacturers are in penetrating the television market, including display performance, price reduction and the ability to maintain profitability. The adoption rate of television products is uncertain and will affect demand and overall market growth.

Demand for our Generation 5 and 6 test and repair equipment remains high, as reflected in our bookings and backlog. Our Generation 7 test system installation and acceptance is underway. In addition, we continue to see a growing interest in our automated cell and module inspection systems.

We believe continued growth in demand for AMLCD products will fuel investments in Generation 6 and 7 factories to keep pace and that inspection, test and repair systems will continue to represent a significant percentage of our customers' capital spending, driving increased demand for our products and services.

Backlog

Our backlog for unshipped system orders as of September 30, 2004, was approximately \$81.1 million, a majority of which we expect to ship within the next six to twelve months. We received orders valued at \$42.0 million in the three months ended September 30, 2004, \$46.2 million in the three months ended June 30, 2004, \$47.2 million in the three months ended March 31, 2004, and \$42.1 million in the three months ended December 31, 2003.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of our financial statements and the related disclosures requires our management to make judgments, assumptions and estimates that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosure of contingent assets and liabilities. Note 1 of the "Notes to Consolidated Financial Statements" included under Part II, Item 8. "Financial Statements and Supplementary Data," describes significant accounting policies used in the preparation of our consolidated financial statements. Some of these significant accounting policies are considered to be critical accounting policies.

A critical accounting policy is defined as one that is both material to the presentation of our financial statements and requires management to make difficult, subjective or complex judgments that could have a material effect on our financial condition and results of operations.

Estimates and assumptions about future events and their effects cannot be determined with certainty. We base our estimates on historical experience and on various other assumptions that are believed to be applicable and reasonable under the circumstances. These estimates may change as new events occur, as additional information is obtained and as our operating environment changes. In addition, management is periodically faced with uncertainties, the outcomes of which are not within its control and will not be known for prolonged periods of time. These uncertainties are discussed in the section below entitled "Factors Affecting Operating Results."

We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our consolidated financial statements.

Revenue Recognition

We recognize revenue when persuasive evidence of an arrangement exists, delivery has occurred, the services have been rendered, the selling price is fixed or determinable and collection of the receivable is reasonably assured. For each arrangement, we make judgments as to whether each of these criteria is met. If we determine that any of these criteria are not met, we defer revenue recognition until such time as we determine that all of the criteria are met.

In addition, for arrangements with multiple deliverables, we make additional judgments as to whether each item has value to the customer on a stand-alone basis, the amounts of revenue for each element that are not subject to refund, all defined customer acceptance experience levels have been met, and the fair values of any undelivered items have been reliably determined.

We record a provision for estimated sales returns in the same period as the related revenue is recorded, which is netted against revenue. These estimates are based on historical sales returns and other known factors which have not varied widely in the past and we do not reasonably expect these factors to significantly change in the foreseeable future. If the historical data we use to calculate these estimates does not properly reflect future returns, additional provisions may be required. Historically, we have not experienced the return of any

of our flat panel display systems and do not expect this to change in the foreseeable future. However, due to the relatively high prices of our systems, the actual return of one of these systems would have a material adverse effect on our results of operations.

Note 1 of our "Notes to Consolidated Financial Statements" included under Part II, Item 8. "Financial Statements and Supplementary Data," provides additional information of our revenue recognition policy.

Allowance for Doubtful Accounts

Our trade receivables are derived from sales to flat panel display manufacturers located in Korea, Taiwan, Japan and China. In order to monitor potential credit losses, we perform periodic evaluations of our customer's financial condition. We maintain an allowance for doubtful accounts for the potential inability of our customers to make required payments based upon our assessment of the expected collectibility of all accounts receivable. In estimating the provision, management considers (i) historical experience, (ii) the length of time the receivables are past due, (iii) any circumstances of which we are aware of a customer's inability to meet its financial obligations, and (iv) other known factors. We review this provision periodically to assess the adequacy of the provision.

Our allowance for doubtful accounts was approximately \$497,000 and \$726,000 at September 30, 2004 and 2003, respectively. These balances each represent less than 2% of each year's total revenues. Historically, losses due to customer bad debts in our flat panel display business have been immaterial and we expect that this will not change in the foreseeable future. However, if a single customer returned a product or was unable or unwilling to make payments, additional allowances may be required. Accordingly, the inability of a single customer to make required payments could have a material adverse effect on our results of operations.

Inventories

The valuation of inventory requires us to estimate obsolete or excess inventory and inventory that is not of saleable quality. The determination of obsolete or excess inventory requires us to estimate the future demand for our products within specific time horizons, generally twelve months or less. If our demand forecast for specific products is greater than actual demand and we fail to reduce manufacturing output accordingly, we could be required to record additional inventory write-offs, which would have a negative impact on our gross margin.

We review the adequacy of our inventory valuation on a quarterly basis. For production inventory, our methodology involves matching our on-hand inventory with our build forecast over the next twelve months on a part-by-part basis. We then evaluate the parts found to be in excess of the twelve-month demand and take appropriate write-downs to reflect the risk of obsolescence. This methodology is significantly affected by the usage assumption. Using a longer time period of estimated usage could result in reduced inventory adjustment requirements. Based on our past experience, we believe the twelve-month time period to best reflect the reasonable and relative obsolescence risks. If actual demand or usage were to be substantially lower than estimated, additional inventory adjustments for excess or obsolete inventory may be required.

Warranty

Our warranty policy generally states that we will provide warranty coverage for a period of one year from final acceptance. We record the estimated cost of warranty coverage, primarily material and labor to repair and service the equipment, upon product shipment, when the related revenue is recognized. Our warranty obligation is affected by product failure rates, consumption of field service parts and the efficiency by which the product failure is corrected. We estimate our warranty cost based on historical data related to these factors.

Our liability for warranty coverage was approximately \$6.2 million and \$2.4 million at September 30, 2004 and 2003, respectively, with the increase being attributable to a greater number of systems being under warranty due to our increased sales in the past year and incremental warranty reserves to cover quality

problems identified in the fourth quarter of fiscal 2004. Should actual product failure rates, material usage and labor efficiencies differ from our estimates, revisions to the estimated warranty liability would be required.

Goodwill and Intangible Assets

We have accounted for goodwill and other intangible assets resulting from our acquisitions in accordance with Statement of Financial Accounting Standards No. 142 "Goodwill and Other Intangible Assets" ("FAS 142"). FAS 142 prohibits the amortization of goodwill and intangible assets with indefinite useful lives and requires that these assets be reviewed for impairment at least annually, and more frequently if there are indicators of impairment. The process for evaluating the potential impairment of goodwill is highly subjective and requires significant judgment at many points during the analysis. Should actual results differ from our estimates, revisions to the recorded amount of goodwill could be reported.

We amortize intangible assets with finite lives and other long-lived assets over their estimated useful lives and also subject them to evaluation for impairment. We review long-lived assets including intangible assets with finite lives for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable, such as a significant industry downturn, significant decline in the market value of the company, or significant reductions in projected future cash flows. We would recognize an impairment loss when estimated undiscounted future cash flows expected to result from the use of the asset and its eventual disposition is less than its carrying amount. We determine impairment, if any, using discounted cash flows. In assessing the recoverability of long-lived assets, including intangible assets, we must make assumptions regarding estimated future cash flows and other factors to determine the fair value of the respective assets. If these estimates or their related assumptions change in the future, we may be required to record additional impairment charges for these assets.

As described in "Acquisitions and Dispositions" above, we have recently recorded both goodwill and intangible asset impairment charges as part of our transition to a singular focus on our core business of developing yield management solutions for the flat panel display industry. In the fourth quarter of fiscal 2003, we recorded a goodwill impairment charge of \$10.0 million and an intangible asset impairment charge of \$3.5 million associated with our Akron and RTP reporting units. During fiscal quarter ended December 31, 2003, we recorded a goodwill impairment charge of approximately \$365,000 and an intangible asset impairment charge of \$2.1 million associated with our Akron reporting unit and the remaining intangible assets associated with our RTP and Akron reporting units. These charges were reflected in our results of operations for the three months ended December 31, 2003. In October 2003, \$1.7 million of the \$2.0 million escrow related to the purchase of certain assets relating to the RTP Assets was settled in our favor, and \$300,000 was settled in favor of Intevac, resulting in an additional goodwill impairment charge of \$300,000 in the three months ended December 31, 2003.

Goodwill as of September 30, 2004, was approximately \$153,000, related entirely to our purchase of assets from Summit Imaging. Intangible assets as of September 30, 2004 were approximately \$4.8 million, related to patents and acquired core technology resulting from our purchase of assets from Summit Imaging, the assignment and license agreement signed with IHI in March 2004, the purchase of Quantum Composers in June 2004 and the purchase of Tucson Optical Research Corporation in August 2004.

Contingencies and Litigation

We make an assessment of the probability of an adverse judgment resulting from current and threatened litigation. We accrue the cost of an adverse judgment if, in our estimation and based on the advice of legal counsel, the adverse settlement is probable and we can reasonably estimate the ultimate cost of such a judgment. We are engaged in two significant litigation matters as of September 30, 2004, Amtower v. Photon Dynamics, Inc. in which the plaintiffs are seeking damages of approximately \$17.7 million and Sanmina SCI Corporation v. Photon Dynamics, Inc. in which the plaintiffs are seeking damages of approximately \$3.1 million. These matters are as described in "Item 3 — Legal Proceedings." We have made our requisite assessments and accruals, as warranted, as of September 30, 2004. We believe that an adverse judgment in the Amtower litigation could have a material adverse effect on our financial condition or results of operations. We

believe that an adverse judgment in the Sanmina litigation would not have a material adverse effect on our financial condition or results of operations.

Results of Operations

Fiscal Years Ended September 30, 2004, 2003 and 2002

The following table sets forth, for the periods indicated, the percentage of revenue of certain items in our Consolidated Statements of Operations.

	Year Ended September 30,		
	2004	2003	2002
Revenue	100.0%	100.0%	100.0%
Cost of revenue	58.6	65.6	52.3
Gross margin	41.4	34.4	47.7
Operating expenses:			
Research and development	20.7	33.9	22.0
Selling, general and administrative	12.4	20.5	17.9
Goodwill impairment charge	0.5	14.9	—
Impairment of purchased intangibles	1.5	5.3	—
Impairment of fixed assets	0.2	—	—
Gain on sale of fixed assets	(0.3)	—	—
Acquired in-process research and development	0.1	3.7	0.8
Amortization of intangible assets	0.6	1.8	—
Total operating expenses	35.7	80.1	40.8
Income (loss) from operations	5.7	(45.7)	6.9
Interest income and other, net	3.4	4.4	5.9
Income (loss) from continuing operations before income taxes and discontinued operations	9.1	(41.3)	12.8
Provision for income taxes	0.4	0.1	0.2
Income (loss) from continuing operations before discontinued operations	8.7	(41.4)	12.6
Loss from discontinued operations	(1.0)	(66.4)	(56.8)
Net income (loss)	7.7%	(107.7)%	(44.2)%

Revenue

	Fiscal Year Ended September 30,			Fiscal Year Ended September 30,		
	2004	Change	2003	2003	Change	2002
	(Dollars in thousands)					
Revenue	\$143,269	113%	\$67,196	\$67,196	36%	\$49,342

The increase in revenue in fiscal 2004 from fiscal 2003 was primarily due to the continued customer expansion of manufacturing capacity. Flat panel display manufacturers continue to increase capacity to meet computer notebook and monitor demand. In addition, price elasticity is creating strong demand for 22" — 26" television displays. Generation 5 capacity additions continued in Korea and Taiwan as flat panel display manufacturers continued to invest to keep pace with the AMLCD demand. In addition, Generation 6 factories are now coming on line and several manufacturers have either broken ground or announced their Generation 7 factories.

Total revenue from our Generation 5 and earlier generation products represented approximately 53% and 85% of revenue in fiscal 2004 and 2003, respectively. The decrease in fiscal 2004 was due primarily to revenue from our new Generation 6 products. Revenue from our Generation 6 products represented approximately 42% of revenue in fiscal 2004, with no corresponding revenue in fiscal 2003. Our products in each new generation contain new performance and control features designed specifically to enhance yield improvement and process control. As a result, we have historically experienced increases in our average selling prices (“ASPs”) of between 20% and 50% in each new generation product. As with prior generation products, our Generation 6 ArrayChecker™ products have greater ASPs than previous generations. However, the ASPs of our Generation 6 ArraySaver™ products were relatively flat as compared to the prior generations. There is no assurance that we will be successful at achieving or sustaining ASP increases on our Generation 6 and future generation products.

The increase in fiscal 2004 revenue as compared to fiscal 2003 was due to increased shipments of both our ArrayChecker™ and ArraySaver™ products shipped. Revenue from our ArrayChecker™ products represented approximately 75% and 81% of our total revenue for fiscal 2004 and 2003, respectively. Revenue from our test products increased in absolute dollars primarily due to the continued customer expansion of manufacturing capacity. Revenue from our test products decreased as a percentage of revenue due primarily to the increase in revenue from our repair products. Revenue from our ArraySaver™ products represented approximately 19% and 4% of our total revenue for fiscal 2004 and 2003, respectively. Revenue from our repair products have increased in both absolute dollars and as a percentage of total revenue partly in response to the larger glass size of Generation 6 and to expansion of customer manufacturing facilities. The cost of yield loss associated with large monitor or television panels is driving flat panel display manufacturers to increase the number of repair systems used in the manufacturing process in an effort to maximize yields. Our sales terms are typically 80% to 90% of the sales price due upon shipment with the remaining amount due after installation and upon final customer acceptance. During fiscal 2004, we placed greater emphasis on obtaining final customer acceptances. As a result, fiscal 2004 revenue includes a higher percentage of revenue related to the receipt of final customer acceptances following completed installation of our products compared with our prior fiscal year. Spare part sales represented approximately 5% and 9% of our total revenue for fiscal 2004 and 2003, respectively. This change from prior year represents an increase in absolute dollars due primarily to the increase in total machines in the field in 2004; however, it represents a decrease as a percentage of revenue due to the increase in test and repair machines sold.

Revenue from our rapid thermal processing products, which are based on the technology we acquired in November 2002, represented approximately 0.5% and 6% of our revenue for fiscal 2004 and 2003, respectively. The revenue reported in 2004 reflected sales of upgrades to an existing product and we do not expect sales, if any, of this product line to be a significant portion of revenue in the foreseeable future. While we continue to support systems in the field, we are not pursuing new business for this product offering.

Our international revenue is derived from customers in Korea, Taiwan, Japan and China. International revenue represented 100% of our revenue in both fiscal 2004 and 2003. In fiscal 2004, revenue from customers in Korea increased approximately \$21.5 million, or 46%, revenue from customers in Taiwan increased approximately \$43.0 million, or 225%, revenue from customers in Japan increased approximately \$10.0 million, or 952%, compared to fiscal 2003. The remainder of the revenue in fiscal 2004 of approximately \$1.6, or 1%, was derived from customers based in China. In fiscal 2004, approximately \$4.4 million of our sales were made in currencies other than U.S. dollars.

We experienced a greater growth in revenue from our ArraySaver™ products throughout fiscal 2004, particularly in the fourth quarter, compared to the growth in revenue from our ArrayChecker™ products. This shift in product mix had a negative impact on our gross profit as a percentage of our revenue. We expect our ArraySaver™ revenue to approach 33% of our revenue in our first quarter of fiscal 2005.

The increase in revenue in fiscal 2003 from fiscal 2002 was primarily due to sustained growth in the flat panel display market and in our share of the market as a result of our focused product strategy. The flat panel display market grew due to a strong demand for both monitors and notebooks. Korean and Taiwanese flat panel display manufacturers invested heavily in Generation 5 factories to keep pace with demand.

Total revenue from our Generation 5 and earlier generation products represented approximately 85% and 88% of revenue in fiscal 2003 and 2002, respectively.

The increase in fiscal 2003 revenue as compared to fiscal 2002 was due to increased shipments of both our ArrayChecker™ and rapid thermal processing products shipped. Revenue from our ArrayChecker™ products represented approximately 81% and 72% of our total revenue for fiscal 2003 and 2002, respectively. Revenue from our rapid thermal processing products, which are based on the technology we acquired in November 2002, represented approximately 6% and 0% of our revenue in 2003 and 2002, respectively. Revenue from our ArraySaver™ products represented approximately 4% and 15% of our total revenue for fiscal 2003 and 2002, respectively, due primarily to delayed shipments and acceptance of our generation 5 products. Spare part sales represented approximately 8% and 13% of our total revenue for fiscal 2003 and 2002, respectively.

Our international revenue was derived from customers in Korea, Taiwan, Japan and China. International revenue represented 100% of our revenue in both fiscal 2003 and 2002. In fiscal 2003, revenue from customers in Korea increased approximately \$18.9 million, or 67%, revenue from customers in Taiwan increased approximately \$2.6 million, or 16%, and revenue from customers in Japan decreased approximately \$3.6 million, or 77%, compared to fiscal 2002. In fiscal 2003, none of our sales were made in currencies other than U.S. dollars.

Gross Margin

	Fiscal Year Ended September 30,			Fiscal Year Ended September 30,		
	2004	Change	2003	2003	Change	2002
Gross Margin	41%	20%	34%	34%	(28)%	48%

The improvement of gross margin in fiscal 2004 as compared to fiscal 2003 is a reflection of the benefits of:

- The full manufacturing integration of the ArrayChecker™ high-speed cameras, acquired as part of our acquisition of assets from Summit Imaging in May 2003;
- A higher percentage of revenue recognized after installation and final customer acceptance, which typically has a higher margin than revenue billed on the associated items that were previously delivered;
- Improved manufacturing efficiencies resulting from a more stable design of our Generation 5 products, which were introduced in fiscal 2003;
- Elimination of our use of a third-party contract manufacturer; and
- Manufacturing cost reduction due to sourcing of some raw materials and subassemblies in Asia.

These benefits were partially offset by:

- Longer cycle times and inefficiencies brought about by the addition and training of a second manufacturing shift during our second quarter;
- Higher initial costs related to the first production build of our dual-camera ArrayChecker™ and our Generation 6 ArraySaver™ systems
- The temporary loss of capacity early in our second quarter caused by the move to our new facility; and
- Higher warranty costs, rework costs and expedite fees incurred as a result of the execution issues surrounding the production ramp up in our Generation 6 products.

We anticipate that our gross margins for our first quarter of fiscal 2005 will increase slightly to 37-39% from our gross margins in our fourth quarter of fiscal 2004 of 34%. We anticipate that approximately 33% of our first quarter revenues will be generated from our repair systems, representing only a slight increase over the 31% in our fourth quarter of fiscal 2004.

Key factors that may impact our future gross margins include:

- Our revenue mix between higher margin ArrayChecker™ systems and lower margin ArraySaver™ systems;
- The costs of increasing customer service staff to support the increased demands of our customers;
- The challenges associated with our steep manufacturing ramp up, including gaining efficiencies or reducing manufacturing cycle times from a new manufacturing staff and costs associated with accelerating material procurement to support the ramp up in production;
- The inefficiencies of building new products;
- Costs associated with the integration of Quantum Composers and Tucson Optical Research Corporation; and
- Competitive pricing pressures, particularly in the array repair market.

The overall decrease in gross margin in fiscal 2003 as compared to fiscal 2002 was primarily due to manufacturing inefficiencies and additional costs incurred to meet product delivery dates and resolve quality problems as a result of technical design issues related to the release of our ArrayChecker™ 3500 product. Additionally, end-of-life pricing on the ArrayChecker™ 2000 systems, competitive pricing pressures, particularly on the ArraySaver™ product, and lower modulator yields contributed to lower gross margins.

Research and Development

	Fiscal Year Ended September 30,		Fiscal Year Ended September 30,		
	2004	Change	2003	2003	2002
	(Dollars in thousands)				
Expense	\$29,701	30%	\$22,786	\$22,786	\$10,878
Percent of Revenue	21%		34%	34%	22%

Our research and development expenses consisted primarily of salaries, related personnel costs, depreciation, prototype materials and fees paid to consultants and outside service providers, all of which relate to the design, development, testing, pre-manufacturing and improvement of our products. We increased our overall research and development spending in fiscal 2003 over fiscal 2002 to support simultaneous development of Generation 5, 6 and 7 test and repair products, primarily related to higher spending on prototype materials and engineering headcount. This spending increased again in absolute dollars in fiscal 2004 due to additional timing demands placed on both the ArrayChecker™ and ArraySaver™ Generation 6 and 7 product development groups, as well as our cell/module inspection systems group. In our fourth quarter of fiscal 2004, we incurred significant costs for redesign work performed during the quarter on our Generation 6 repair products.

We expect our research and development expenses to be flat to slightly higher in absolute dollars during our first quarter of fiscal 2005 as compared to research and development expenses of approximately \$9.7 million in fourth quarter of fiscal 2004 due to the continuation of our fourth quarter redesign work expected to be completed in early fiscal 2005. For fiscal 2005, we expect our research and development expenses to be flat to slightly greater in absolute dollars as compared to fiscal 2004 as we continue to expand our research and development efforts to address three areas:

- Ramp up our cell/module program to address mass production requirements;
- Increase our efforts on Generation 7 products and launch development programs for Generation 7.5 products; and
- Expand our repair product offering.

We will continue to invest in R&D to maintain technology leadership in our products. Our customers must continually improve their display quality performance and production costs in order to be successful in

the display market. To meet our customers' needs, we must improve our product performance in defect detection, repair success, cost of ownership, ease of use and throughput for each of our product generations.

Selling, General and Administrative

	Fiscal Year Ended September 30,			Fiscal Year Ended September 30,		
	2004	Change	2003	2003	Change	2002
	(Dollars in thousands)					
Expense	\$17,780	29%	\$13,763	\$13,763	55%	\$8,853
Percent of Revenue	12%		21%	21%		18%

Our selling, general and administrative expenses consisted primarily of salaries and related expenses for marketing, sales, finance, administration and human resources personnel, accounting, commissions, insurance, legal and other corporate expenses. The increase in selling, general and administrative expenses in absolute dollars in both fiscal 2004 and 2003 was primarily attributed to increases in expenses related to corporate governance requirements, severance expenses, legal costs and increased headcount. We expect these expenses to increase slightly in our first quarter of fiscal 2005 as compared to selling, general and administrative expenses of approximately \$4.6 million in our fourth quarter of fiscal 2004. For fiscal 2005, we expect our selling, general and administrative expenses to be flat to slightly higher in absolute dollars as compared to fiscal 2004 due to investments we intend to make in the marketing area.

Impairment of Goodwill, Purchased Intangibles and Fixed Assets

As previously discussed in Overview and Critical Accounting Policies and Estimates, we have exited all business lines other than the flat panel display products market and within the flat panel display market we have suspended operations of the LTPS and inverter products. As a result, we determined that all of our goodwill and long-lived assets related to LTPS and inverter products we had manufactured had been impaired, resulting in goodwill, intangible and fixed asset impairment charges of approximately \$665,000, \$2.1 million and \$234,000, respectively, in our first fiscal quarter of 2004.

In the fourth quarter of fiscal 2003, as a result of limited opportunities in the inverter market and uncertainty with regard to flat panel manufacturers' commitment to LTPS technology, we performed an impairment analysis of the \$3.5 million and \$7.4 million of goodwill associated with the acquisitions of Akron and the RTP Assets, respectively. The valuations were done as of July 1, 2003, using established valuation techniques, specifically, the income and market approaches. As a result of these analyses, we recorded goodwill impairment charges of \$2.7 million and \$7.3 million associated with the Akron and RTP asset goodwill, respectively.

In the fourth quarter of fiscal 2003, we also performed an impairment analysis of purchased intangible assets associated with the acquisitions of Akron and the RTP Assets. As a result, we recorded a write-off of \$2.0 million and \$1.5 million related to the acquired core and developed technologies of the Akron and RTP Assets, respectively.

Gain on Sale of Fixed Assets

In fiscal 2004, we recorded a net gain on sale of fixed assets of approximately \$427,000. In May 2004, we sold all of our assets in Korea related to our TFT-LCD Backlight Inverter business for approximately \$481,000. The assets include inventory and production equipment, intellectual property and some of the employees related to the inverter business. In the three months ended June 30, 2004, we recorded a gain on the transaction of approximately \$419,000.

Acquired In-Process Research and Development

	Fiscal Year Ended September 30,			Fiscal Year Ended September 30,		
	2004	Change	2003	2003	Change	2002
	(Dollars in thousands)					
Expense	\$210	(92)%	\$2,474	\$2,474	503%	\$410
Percent of Revenue	0%		4%	4%		1%

In June 2004, we acquired from Quantum Composers all of the assets of Quantum Composers related to the design and manufacture of laser assembly products for flat panel display LCD manufacturing and repair. In May 2003, we acquired all of the assets of Summit Imaging related to the design and manufacture of “cooled” cameras specifically tailored to our product offerings. In November 2002, we completed our acquisition of certain assets from Intevac, Inc. related to Intevac’s rapid thermal processing technology. In September 2002, we acquired Akcron Corporation, LTD., a privately held manufacturer of automated optical inspection equipment, image processing hardware and software algorithms and high-performance liquid crystal display backlight inverters for flat panel displays. The purchase prices of these acquisitions were allocated in accordance with FAS 141, “Business Combinations,” including in-process research and development charges that were expensed on the acquisition date as they represented ongoing research and development projects that had not yet reached technological feasibility and had no alternative future uses.

Acquired in-process research and development was identified and valued through interviews with executives of the companies from which the assets were acquired, analysis of data concerning developmental products and their stage of development, the time and resources needed to complete the projects, their expected income generating ability, target markets and associated risks. The income approach, which includes an analysis of the markets, cash flows and risks associated with achieving such cash flows, was the primary technique we utilized in valuing in-process research and development. We discounted projected incremental cash flows back to their present value using discount rates of 30%, 25% and 50% for the Quantum Composers, Intevac technology and Summit Imaging asset purchases, respectively, which was determined after consideration of our weighted average cost of capital and the weighted average return on assets.

In-process research and development related to Quantum Composers involves the design of the next generation laser cutting/ablation systems for our LCD panel repair products. At the time of acquisition, the project was approximately 75% complete, and was substantially completed by the end of fiscal 2004, with additional incurred costs of approximately \$25,000 to complete this development.

In-process research and development projects related to Intevac included a new transport system for more efficient handling of larger glass, redesign of the lamphouse for selective heating of the film and enhancement of low oxygen technology. These projects were substantially complete as of June 30, 2003.

In-process research and development related to Summit Imaging involved the design of the next generation cooled cameras for our ArrayChecker™ tools. This project was substantially complete as of September 30, 2003.

Risks associated with our acquired in-process research and development include the inherent difficulties and uncertainties in completing each project and thereby achieving technological feasibility, anticipated levels of market acceptance and penetration, market growth rates and risks related to the impact of potential changes in future target markets. The nature of the efforts required to develop the acquired in-process research and development into commercially viable products principally relate to the completion of all planning, designing, prototyping, verification and testing activities that are necessary to establish that the products can be produced to meet their design specifications, including functions, features and technical performance requirements. As such, the timing of completion and ultimate commercial application are affected by the successful completion of these activities and ultimately, market acceptance.

Amortization of Intangible Assets

	Fiscal Year Ended September 30,			Fiscal Year Ended September 30,		
	2004	Change	2003	2003	Change	2002
	(Dollars in thousands)					
Expense	\$789	(36)%	\$1,236	\$1,236	—	\$—
Percent of Revenue	0.6%		1.8%	1.8%		—

Through December 31, 2003, our identified intangible assets associated with the RTP Assets, Akron and Summit Imaging acquisitions were being amortized over a two to five year period, commencing on the date of the acquisitions. As of December 31, 2003, all intangible assets associated with the RTP Assets and Akron acquisitions had been written off. In March of 2004, we acquired additional intangible assets related to our termination and assignment agreement with Ishikawajima-Harima Heavy Industries. In June of 2004, we acquired certain intangible assets related to Quantum Composers. In August of 2004, we acquired certain intangible assets from Tucson Optical Research Corporation. As a result, we expect amortization of existing intangibles to be approximately \$397,000 per quarter through the second quarter of fiscal 2005. We then expect amortization of our existing intangibles to be approximately \$381,000 and \$372,000 in our third and fourth quarters of fiscal 2005, respectively, as the intangible asset associated with the Quantum non-compete agreement will be fully amortized. These estimates do not include any amounts that may be associated with any acquisitions that may occur in fiscal 2005.

Interest Income and Other, Net

	Fiscal Year Ended September 30,			Fiscal Year Ended September 30,		
	2004	Change	2003	2003	Change	2002
	(Dollars in thousands)					
Income	\$4,802	62%	\$2,968	\$2,968	2%	\$2,913
Percent of Revenue	3.4%		4.4%	4.4%		5.9%

Interest income and other, net consisted primarily of interest income, foreign currency exchange gains and losses, changes in the fair value of derivative financial instruments and other miscellaneous income and expense. The increase in "Interest income and other, net," in fiscal 2004, as compared to fiscal 2003, was primarily attributable to the receipt of a technology license fee resulting from a litigation settlement in the first quarter of fiscal 2004, the terms of which were confidential. This gain was offset by lower interest income earned in fiscal 2004 due to lower overall cash and investment balances as we used our cash to initially fund the ramp up in business in the last half of our fiscal year.

Provision for Income Taxes

The fiscal 2004, 2003 and 2002 effective tax rates were 4.6%, 0% and 0.1%, respectively. The effective tax rates for fiscal 2004 included a foreign withholding tax related to a technology license fee resulting from a litigation settlement in the first quarter of fiscal 2004. The effective tax rate in fiscal 2004 is lower than the statutory rate due primarily to tax benefits arising from net operating losses and primarily relate to alternative minimum taxes. The effective tax rate in fiscal 2003 is lower than the statutory rate due to tax net operating losses not being recognized. The effective tax rate in fiscal 2002 is less than the statutory federal income tax rate primarily as a result of an election reducing our tax benefits arising from acquired net operating losses and increasing tax bases in various purchased intangible assets.

As of September 30, 2004, we have federal and state net operating loss carryforwards of approximately \$68.3 million and \$12.0 million, respectively. We expect that our effective tax rate will be less than our statutory tax rate in fiscal 2005.

We record a valuation allowance against our net deferred tax assets. Realization of our deferred tax assets depends on our generating sufficient taxable income in future years in appropriate tax jurisdictions to obtain benefit from the reversal of temporary differences and from net operating loss and credit carryforwards. Due to

the uncertainty of the timing and the amount of such realization, management concluded that a full valuation allowance was required at September 30, 2004.

Our future effective income tax rate depends on various factors, such as tax legislation, the geographic composition of our pre-tax income, amount of and access to tax loss carryforwards, expenses incurred in connection with acquisitions that are not deductible for tax purposes, amounts of tax-exempt interest income and research and development credits as a percentage of aggregate pre-tax income, and the effectiveness of our tax planning strategies.

Discontinued Operations

Through January 14, 2003, we conducted business in three operating segments: flat panel display products, cathode ray tube display and high quality glass inspection products and printed circuit board assembly inspection products. In January 2003, we implemented a plan to exit the printed circuit board assembly inspection business. In June 2003, we implemented a plan to exit the cathode ray tube display and high quality glass inspection businesses. Accordingly, the operating results of these former business segments have been presented as discontinued operations for all periods presented.

Printed Circuit Board Assembly Inspection Business

	Fiscal Year Ended September 30,		
	2004	2003	2002
	(In thousands)		
Net Loss	\$(1,562)	\$(38,586)	\$(24,585)

The loss from discontinued operations for the year ended September 30, 2004, included approximately \$1.5 million in litigation costs for settlement of prior inventory purchase commitments and for settlement of a lawsuit brought by a former employee.

The loss from discontinued operations for the year ended September 30, 2003, includes a write-off of inventory of approximately \$7.6 million, a write-off of accounts receivable of approximately \$2.0 million, and a write-off of licensed technology of approximately \$1.9 million. The fiscal 2003 loss also includes impairment charges of approximately \$15.1 million of goodwill, \$2.9 million of purchase intangibles and \$2.5 million of long-lived assets recorded during the three months ended December 31, 2002, as a result of our assessment of indicators of impairment that existed prior to our formal decision to discontinue the operations of this segment.

The loss from discontinued operations for the year ended September 30, 2002, includes a restructuring charge of approximately \$2.6 million recorded in the fourth quarter of fiscal 2002 associated with a reduction in workforce, consolidation and closing of facilities and a write-off of related fixed assets. The fiscal 2002 loss also includes impairment charges of approximately \$11.2 million of goodwill and \$1.0 million of purchased intangibles recorded during the fourth quarter of 2002, as a result of our assessment of indicators of impairment related to the acquisition of Intelligent Reasoning Systems, Inc. In addition, we recorded approximately \$244,000 of acquired in-process research and development charges related to the acquisition of certain assets from Advanced Research Technologies, Inc. related to its Infrared Screening and Inspection Solutions Infrared Screening and Inspection Solutions ("ISIS") Division.

Cathode Ray Tube Display and High Quality Glass Inspection Business

	Fiscal Year Ended September 30,		
	2004	2003	2002
	(In thousands)		
Net Income (Loss)	\$171	\$(6,006)	\$(3,447)

The income from discontinued operations for the year ended September 30, 2004, includes a gain on the sale of certain assets related to the former glass inspection business.

The loss from discontinued operations for the year ended September 30, 2003, includes a write-off of inventory of approximately \$1.8 million, a write-off of accounts receivable of approximately \$152,000, and a write-off of fixed assets of approximately \$490,000. The fiscal 2003 loss also includes approximately \$460,000 in lease-related charges associated with excess facilities, and approximately \$979,000 in employee severance and related benefit charges.

In the future, we expect the effects of discontinued operations to be minimal, if any, and to relate primarily to settlements that may arise that are in addition to those amounts accounted for at the time the operations were discontinued. These expectations exclude amounts, if any, resulting from the outcome of our Amtower litigation. These matters are as described in "Item 3 — Legal Proceedings." Although we cannot predict the outcome of this litigation, we believe that an adverse judgment in this litigation could have a material adverse effect on our financial condition or results of operations.

Liquidity and Capital Resources

We have financed our growth primarily by a combination of cash flows from operations and public stock offerings. Working capital was \$133.7 million as of September 30, 2004, compared to \$125.6 million as of September 30, 2003. A major component of working capital is \$84.1 million of cash, cash equivalents and short-term investments as of September 30, 2004, compared to \$116.5 million as of September 30, 2003. Cash, cash equivalents and short-term investments were \$116.5 million as of September 30, 2003, compared to \$170.1 million as of September 30, 2002.

Operating Activities of Continuing Operations. Cash used in operating activities from continuing operations was \$24.4 million and \$6.7 million in fiscal 2004 and 2003, respectively, while cash provided by operating activities was \$2.3 million in fiscal 2002. In fiscal 2004, cash was provided by net income adjusted for non-cash related items. However, changes in assets and liabilities consumed approximately \$43.5 million of cash, resulting in a net use of cash in operations. Working capital sources of cash, primarily a \$14.4 million increase in accounts payable related primarily to inventory purchases, were more than offset by working capital uses of cash. The primary reductions in cash from changes in our working capital levels were: (a) an increase of approximately \$48.1 million in our net accounts receivable, resulting primarily from sales increasing from approximately \$21.0 million in the fourth quarter of fiscal 2003 to approximately \$24.5 million, \$26.5 million, \$38.5 million and \$53.8 million in our first, second, third and fourth quarters of fiscal 2004, respectively, and the timing of shipments in our fourth quarter; and (b) an increase of approximately \$22.7 million in our net inventory, which increased as a result of our ramping up inventory in preparation for our first quarter build schedules.

In January 2004, we moved into our new San Jose, California manufacturing and headquarters facility. In our second quarter of fiscal 2004, we began increasing our operations staff in order to meet market demand and to gain market share. We also saw in our second and third fiscal quarters an increase in operating expenses and certain working capital items, such as inventory and accounts receivable during this ramp up period, which has caused our use of cash in operating activities to increase. We continued to use cash in operating activities in our fourth quarter, but we were able to fund these increasing operating expenses and changes in working capital components with our cash, cash equivalents and short-term investments. We expect that inventory levels will stabilize in our fiscal 2005 and that our use of cash in operations will decline.

The increase in cash used in operating activities in fiscal 2003 compared to fiscal 2002 was primarily due to the \$27.8 million net loss generated in fiscal 2003, as compared to the \$6.2 million net income generated in fiscal 2002, and decrease in accounts payable partially offset by increases in deferred revenue. The increase in deferred revenue related to shipments occurring in the fourth quarter, while the decrease in accounts payable corresponded to a decrease in inventory levels.

Investing Activities of Continuing Operations. Cash provided by investing activities from continuing operations was \$26.7 million and \$21.9 million in fiscal 2004 and 2003, respectively, while cash used in investing activities was \$83.0 million in fiscal 2002. Cash provided by investing activities in fiscal 2004 was primarily the result of approximately \$39.1 million of net redemptions of short-term investments. This was partially offset by the acquisition of the Quantum and TORC Assets for approximately \$1.0 million and

\$625,000, respectively, and by approximately \$9.8 million in capital expenditures, of which approximately \$6.1 million was related to expenditures on leasehold improvements associated with our new facility in San Jose, California. Capital expenditures related to the facility move-in for leasehold improvements were substantially complete at March 31, 2004. The increase in cash provided by investing activities in fiscal 2003 compared to fiscal 2002 was primarily due to increases in the redemption of our short-term investments to fund our operations, offset by the purchase of the Intevac assets. Capital expenditures were \$2.6 million and \$2.1 million in fiscal 2003 and 2002, respectively.

Financing Activities of Continuing Operations. Cash provided by financing activities was \$6.2 million in fiscal 2004, resulting solely from sales of our common stock under our employee equity compensation plans. Cash used in financing activities was \$9.8 million in fiscal 2003, as sales of our common stock under our employee equity compensation plans was more than offset by the \$17.7 million of repurchases of our common stock during fiscal 2003. Cash provided by financing activities was \$105.5 million in fiscal 2002, primarily due to our public offering of our common stock during that year, resulting in net proceeds to us of approximately \$107.0 million, together with sales of our common stock under our employee equity compensation plans, which were partially offset by repurchases of our common stock in the amount of \$6.9 million.

The timing of and amounts received from employee stock option exercises are dependent upon the decisions of the respective option holders, and are not controlled by us. Therefore, funds raised from the issuance of common stock upon the exercise of employee stock options should not be considered an indication of additional funds to be received in future periods.

In March 2000, we entered into a bank line of credit ("line of credit") which had an initial term of one year. We have renegotiated the line of credit on an annual basis and currently have a \$4.0 million borrowing capacity on the line of credit with an interest rate of floating prime, expiring in October 2005. The line of credit is secured by substantially all of our assets and contains certain financial and other covenants. At September 30, 2004, no amounts were outstanding under the line of credit.

In August 2002, our Board of Directors approved a stock repurchase program authorizing us to repurchase up to an aggregate of \$25.0 million of our common stock. The repurchase program was terminated on January 15, 2003. The repurchases were made from time to time on the open market at prevailing prices, in negotiated transactions off the market or pursuant to a 10b5-1 plan adopted by us. The 10b5-1 plan allowed us to repurchase our shares during a period in which we were in possession of material non-public information, provided that we communicated share repurchase instructions to the broker at a time when we were not in possession of such material non-public information. During the period October 1, 2002 through January 15, 2003, we repurchased 903,032 shares for an aggregate repurchase price of approximately \$17.7 million. As of January 15, 2003, at the termination of the program, we had purchased a total of 1,253,932 shares for an aggregate repurchase price of approximately \$24.6 million.

Contractual Obligations

The following table summarizes the approximate contractual obligations that we have at September 30, 2004. Such obligations include both non-cancelable obligations and other obligations that are generally non-cancelable except under certain limited conditions.

	Contractual Obligations						
	Total	Payments Due by Fiscal Year					Thereafter
2005		2006	2007	2008	2009		
	(In thousands)						
Notes payable	\$ 2,829	\$ 1,446	\$ 1,383	\$ —	\$ —	\$ —	\$ —
Operating lease obligations	18,930	3,713	3,533	3,007	2,652	2,627	3,398
Purchase obligations	<u>27,326</u>	<u>24,582</u>	<u>1,294</u>	<u>726</u>	<u>715</u>	<u>9</u>	<u>—</u>
Total	<u>\$49,085</u>	<u>\$29,741</u>	<u>\$6,210</u>	<u>\$3,733</u>	<u>\$3,367</u>	<u>\$2,636</u>	<u>\$3,398</u>

In August 2003, we signed a lease agreement for a 128,520 square-foot building in San Jose, California into which we consolidated our former San Jose facilities, effective January 5, 2004. The lease on our prior San Jose location terminated concurrently with the inception date of the new lease. The new facility is leased under a non-cancelable operating lease that expires in 2010, with two renewal options at fair market value for additional five year periods and is reflected in the "operating lease obligations" in the table above.

We maintain certain open inventory purchase commitments with our suppliers to ensure a smooth and continuous supply chain for key components. Our liability under these purchase arrangements is generally restricted to purchase commitments over a forecasted time horizon as mutually agreed upon between the parties and is reflected in "purchase obligations" in the table above. The majority of these purchase commitments are covered by confirmed customer orders.

Working Capital

We believe that cash generated from operations, together with the liquidity provided by existing cash balances and borrowing capability, will be sufficient to meet our operating and capital requirements and obligations for at least the next twelve months. However, this forward-looking statement is based upon our current plans and assumptions, which may change, and our capital requirements may increase in future periods. In addition, we believe that success in our industry requires substantial capital in order to maintain the flexibility to take advantage of opportunities as they may arise. We may, from time to time, invest in or acquire complementary businesses, products or technologies and may seek additional equity or debt financing to fund such activities. There can be no assurance that such funding will be available to us on commercially reasonable terms, if at all, and if we were to proceed with acquisitions without this funding or with limited funding it would decrease our capital resources. The sale of additional equity or convertible debt securities could result in dilution to our existing shareholders.

Off-Balance Sheet Arrangements

As of September 30, 2004, we did not have any significant off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of SEC Regulation S-K.

Operating, Investing and Financing Activities of Discontinued Operations. In January 2003, we implemented a plan to exit the printed circuit board assembly inspection business and in June 2003 we implemented a plan to exit the cathode ray tube display and high quality glass inspection business. Accordingly, the operating results of these business segments have been reclassified as discontinued operations. Net cash used by discontinued operations during fiscal 2004, 2003 and 2002 is as follows:

	<u>Fiscal Year Ended</u>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
	(In thousands)		
Cash flows from operating activities:			
Printed circuit board business	\$(1,387)	\$(10,777)	\$ (2,709)
Cathode ray tube display and high quality glass inspection business	(47)	(1,858)	(8,994)
Net cash used in operating activities from discontinued operations	<u>(1,434)</u>	<u>(12,635)</u>	<u>(11,703)</u>
Cash flows from investing activities:			
Printed circuit board business	—	(92)	(4,133)
Cathode ray tube display and high quality glass inspection business	—	—	131
Net cash used in investing activities from discontinued operations	<u>—</u>	<u>(92)</u>	<u>(4,002)</u>
Cash flows from financing activities:			
Printed circuit board business	—	—	—
Cathode ray tube display and high quality glass inspection business	—	—	—
Net cash provided by financing activities from discontinued operations	<u>—</u>	<u>—</u>	<u>—</u>
Net decrease in cash and cash equivalents from discontinued operations:			
Printed circuit board business	(1,387)	(10,869)	(6,842)
Cathode ray tube display and high quality glass inspection business	(47)	(1,858)	(8,863)
Net decrease in cash and cash equivalents from discontinued operations	<u><u>\$ (1,434)</u></u>	<u><u>\$ (12,727)</u></u>	<u><u>\$ (15,705)</u></u>

Cash used in discontinued operations in fiscal 2004 consisted primarily of changes in working capital balances, payments for settlement of prior inventory purchase commitments, and the settlement of a lawsuit.

Impact of Accounting Pronouncements

In March 2004, the FASB issued a proposed Statement, "Share-Based Payment, an amendment of FASB Statements Nos. 123 and 95," that addresses the accounting for share-based payment transactions in which a company receives employee services in exchange for either equity instruments of the company or liabilities that are based on the fair value of the company's equity instruments or that may be settled by the issuance of such equity instruments. The proposed statement would eliminate the ability to account for share-based compensation transactions using the intrinsic method that we currently use and generally would require that such transactions be accounted for using a fair-value-based method and recognized as expense in our consolidated statements of operations. The recommended effective date of the proposed standard is currently for fiscal years beginning after June 15, 2005. Should this proposed statement be finalized in its current form,

it will have a significant impact on our consolidated statements of operations as we will be required to expense the fair value of our stock option grants and stock purchases under our employee stock purchase plan.

In March 2004, the Emerging Issues Task Force (“EITF”) reached a consensus on recognition and measurement guidance previously discussed under EITF Issue No. 03-01, “The Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments.” (“EITF 03-01”). The consensus clarifies the meaning of other-than-temporary impairment and its application to investments in debt and equity securities, in particular investments within the scope of FASB Statement No. 115, “Accounting for Certain Investments in Debt and Equity Securities,” and investments accounted for under the cost method. In September 2004, the Financial Accounting Standards Board approved the issuance of a FASB staff position to delay the requirement to record impairment losses under EITF 03-1. The approved delay applies to all securities within the scope of EITF 03-1 and is expected to end when new guidance is issued and comes into effect. Adoption of this consensus is not expected to have a material impact on our consolidated results of operations.

Factors Affecting Operating Results

We have sustained losses and we may sustain losses in the future.

We reported net losses for each of the fiscal years ended September 30, 2003 and 2002. Although we reported profits in each of the four quarters of fiscal 2004, and expect to report a profit in the first quarter of fiscal 2005, in the future our revenue may decline, remain flat or grow at a rate slower than expected. Our ability to maintain profitability is dependent in part on the success of our efforts to increase revenues and to reduce operating expenses as a percentage of revenue through our ongoing cost-cutting measures and our gross margin improvement programs. However, we recently increased our manufacturing capacity to meet greater demand for our products, and this has caused us to experience increased operating expenses. If the increase in demand for our products is not sustained, or if we are not able to increase our manufacturing capacity in a cost-efficient manner, this would impair our ability to maintain our recently achieved profitability. For all of these reasons, there is no assurance that we will be successful in achieving or maintaining increased revenue, reduced operating expenses, positive cash flows or profitability.

Our operating results are difficult to predict and may vary from investors' expectations, which could cause our stock price to fall.

We have experienced, and expect to continue to experience, significant fluctuations in our quarterly results. Consequently, past financial results may not be indicative of future financial results. A substantial percentage of our revenue is derived from the sale of a small number of yield management systems ranging in price from \$400,000 to \$2.5 million. Therefore, the timing of the sale of a single system could have a significant impact on our quarterly results. Moreover, customers may cancel or reschedule shipments, and production difficulties could delay shipments. For example, in the fourth quarter of 2004, we incurred additional costs such as expedite fees, premiums and delivery penalties in an effort to meet customer delivery schedules and quality related costs such as rework and higher warranty. In December 2002, we experienced technical delays with respect to the introduction of our next generation ArrayChecker™ 3500 system. This delay had a significant impact on the timing of both our revenue and net income for the second quarter of fiscal 2003.

Other factors which may influence our operating results in a particular quarter include:

- the timing of the receipt of orders from major customers;
- our product mix;
- competitive pricing pressures;
- our ability to obtain components from our single or limited source suppliers in a timely manner;
- global economic uncertainty;

- changing international economic conditions;
- worldwide political instability;
- our ability to design, manufacture and introduce new products on a cost-effective and timely basis;
- the delay between expenses to further develop marketing and service capabilities and the realization of benefits from those improved capabilities; and
- the introduction of new products by our competitors.

Our operating results also could be affected by sudden changes in customer requirements, currency exchange rate fluctuations and other economic conditions affecting customer demand and the cost of operations in the global markets in which we do business. As a result of these or other factors, our operating results could be significantly and adversely affected and our stock price could decline. In addition, it is possible that in some future quarter our operating results may be below the expectations of public market analysts and investors, which could cause our stock price to fall.

If our products experience performance, reliability or quality problems, our customers may reduce their orders.

We believe that future orders of our products will depend in part on our ability to satisfy the performance, reliability and quality standards required by our customers. Particularly as customers seek increased yields, greater throughput and higher quality end products we must continually redesign our products to meet the needs of our customers. As with the introduction of any new product, our customers may experience yield loss. For example, with our ArraySaver™ 650, ArrayChecker™ 3628 and ArrayChecker™ 3500, certain customers experienced yield loss higher than expected when the products were first introduced. If our products have performance, reliability or quality problems, then we may experience:

- delays in collecting accounts receivable;
- reduced orders;
- additional service expenses; and
- higher manufacturing costs.

If we are unable to meet the requirements of our customers, our revenue may decrease and our business could be harmed.

In addition, we typically provide a limited warranty on our products for a period of one year from final acceptance by customers. Warranty claim expense may, at times, exceed the estimated cost of warranty coverage we record in our warranty provision. For example, in our fourth quarter of fiscal 2004, we incurred higher warranty costs and recorded incremental warranty provisions to cover certain identified quality problems. In the future, we may incur substantial warranty claim expenses on our products and actual warranty claims may exceed recorded allowances, resulting in harm to our business.

Capital investment by manufacturers of flat panel display products can be highly cyclical and may decline in the future.

Our business depends in large part on capital expenditures by manufacturers of flat panel display products, which in turn depends on the current and anticipated market demand for the end products in that industry. The market for flat panel display products is highly cyclical and has experienced periods of oversupply resulting in significantly reduced demand for capital equipment. For example, the flat panel display industry experienced a downturn in 1998, which led many flat panel display manufacturers to delay or cancel capital expenditures. Additionally, in 2001, due to the general deteriorating economic environment, flat panel display manufacturers reduced capital expenditures resulting in a decrease in our revenue. In fiscal 2004, we saw AMLCD product supply exceed demand. Though this oversupply has been moderated given the panel

price decreases, it has resulted in a slowdown in capacity increases, with flat panel display manufacturers pressing forward with carefully considered new capacity investments.

If the flat panel display markets in which we sell our products experience further slowdowns in the future, it could cause our revenue to decrease significantly. We do not control the timing or volume of orders placed by our customers. Whether and to what extent our customers place orders for any specific products, as well as the mix and quantities of products included in those orders, are factors beyond our control. Insufficient orders, especially in a down cycle, will result in under-utilization of our manufacturing facilities and infrastructure and will negatively affect our operating results and financial condition. In addition, the need to invest in the engineering, research and development, and marketing required to penetrate targeted foreign markets and maintain extensive service and support capabilities limits our ability to reduce expenses during these downturns.

We depend on sales to a few large customers in the flat panel display industry, and if we lose any of our large customers our revenue could decrease significantly.

The flat panel display industry is extremely concentrated with a small number of manufacturers producing the majority of the world's flat panel displays. If one or more of our major customers ceased or significantly curtailed their purchases, our revenue could drop significantly. We may be unable to replace sales to these customers. Sales to our greater than 10% customers in the last three fiscal years is as follows: top four customers accounted for 73% of our revenues in fiscal 2004; top three customers accounted for 79% of our revenues in fiscal 2003; and top two customers accounted for 61% of our revenues in fiscal 2002.

We rely upon sales of a limited range of products, and if demand for one product decreases for any reason it could cause our revenue to decline significantly.

All of our revenue is expected to come from a limited range of products for the flat panel display industry. As a result, we are solely reliant on the flat panel display industry. Any decline in demand for, or failure to achieve continued market acceptance of, our primary products or any new version of these products could harm our business. Continued market acceptance of our array test, array repair and cell and module inspection products is critical to our success.

We may not be able to develop and introduce new products that respond to evolving industry requirements in a timely manner, which could reduce our ability to compete effectively.

The markets for our products are characterized by rapidly changing technologies and frequent new product introductions. The failure to develop new products and introduce them successfully and in a timely manner could harm our competitive position and results of operations. We believe that our future success will depend in part upon our ability to continue to enhance our existing products and to develop and manufacture new products. For example, the size of glass plates for flat panel displays and the resolution of flat panel displays have changed frequently and may continue to change, requiring us to redesign or reconfigure our flat panel display products.

We expect to continue to incur significant research and development costs. There can be no assurance that we will be successful in the introduction, marketing and cost effective manufacture of any of our new products, that we will be able to timely develop and introduce new products and enhance our existing products and processes to satisfy customer needs or achieve market acceptance, or that the new markets for which we are developing new products or expect to sell current products will develop sufficiently. For example, we experienced technical delays relating to the introduction of our ArrayChecker™ 3500 system causing us to reschedule several shipments from the first quarter to the second quarter of fiscal 2003. The initial shipments of the Generation 7 ArrayChecker™ and ArraySaver™ systems were shipped later than the customers requested delivery dates.

In addition, we depend on close relationships with our customers and the willingness of those customers to share information with us, and the failure to maintain these relationships could harm our product development efforts.

If we are not able to obtain critical components from our single or limited source suppliers, we may experience significant delays in producing our products, which could decrease our revenue for an extended period of time.

We obtain some equipment for our systems from a single source or a limited group of suppliers. For example, we currently obtain materials handling platforms from a single source supplier. Although we seek to reduce dependence on our sole and limited source suppliers, alternative sources of supply for this equipment may not be available or may be available on unfavorable terms. The partial or complete loss of our sole and limited source suppliers could at least temporarily delay our shipments or otherwise harm our results of operations and damage customer relationships. Further, a significant increase in the price of one or more of these pieces of equipment could harm our results of operations.

All of our revenue is derived from sales to companies located outside the United States, which exposes us to risks that we would not experience with domestic sales.

We expect sales to customers in foreign countries to continue to represent 100% of our revenue in the foreseeable future. A number of factors may adversely affect our international sales and operations, including:

- political instability and the possibility of hostilities, terrorist attacks, or war;
- imposition of governmental controls;
- fluctuations in interest and currency exchange rates;
- export license requirements;
- restrictions on the export of technology;
- limited foreign protection of intellectual property rights;
- trade restrictions;
- periodic or local international downturns;
- changes in tariffs; and
- difficulties in staffing and managing international operations.

If any of these factors occur, our operating results and revenue could be materially and adversely affected.

Compliance with Internal Controls Evaluations and Attestation Requirements

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, we will be required, beginning with our Annual Report on Form 10-K for our fiscal year 2005, to perform an evaluation of our internal control over financial reporting and have our auditor publicly attest to such evaluation. We have prepared an internal plan of action for compliance, which includes a timeline and scheduled activities, although as of the date of this filing we have not yet prepared the evaluation. Compliance with these requirements is expected to be expensive and time-consuming. If we fail to timely complete this evaluation, or if our registered independent accounting firm cannot timely attest to our evaluation, we could be subject to regulatory scrutiny and a loss of public confidence in our internal control over financial reporting. In addition, any failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm our operating results or cause us to fail to meet our reporting obligation.

We may have difficulty integrating the businesses or assets we have acquired and may acquire in the future, and we may not realize the benefits that we expect from these acquisitions.

In addition to our efforts to develop new technologies from internal sources, we also may seek to acquire new technologies from external sources. For example, in August 2004 we acquired all of the assets relating to the design and manufacture of pellicle products used in our modulators from Tucson Optical Research Corporation. In June 2004, we acquired from Quantum Composers, Inc. all of the assets related to the design

and manufacture of laser assembly products for our repair systems. In May, 2003, we acquired all of the assets of Summit Imaging related to the design and manufacture of "cooled" cameras. All three of these acquisitions were to purchase technology that we use in our products, so that we are not dependent on independent suppliers to provide the technology and related components. In the future, we may make additional acquisitions of, or significant investments in, businesses with complementary products, services and/or technologies. Integrating businesses can be a complex, time-consuming and expensive process. If we are not able to do so effectively, we will not be able to realize the benefits that we expect to receive from either our past or future acquisitions. For each acquisition, we must integrate separate technologies, product lines, business cultures and practices, employees and systems. Acquisitions are subject to numerous risks, including:

- difficulty in the assimilation of the technologies and products of the acquired company;
- entering markets in which we have no or limited direct prior experience;
- loss of key customers of the acquired company;
- diversion of management resources from the business of the combined company;
- incompatibility of business cultures or practices;
- loss of key employees of the acquired company;
- costs and delays in implementing common systems and procedures;
- potential inefficiencies in delivering services to the customers of the combined company; and
- assumption of unknown or undisclosed liabilities.

Any of these difficulties could increase our operating costs or result in impairment of purchased assets, which could harm our financial performance.

In addition, we may also elect to change our strategic direction and may no longer have need for the acquired businesses or technologies. For example, in 2004, we determined to not pursue new business for RTP Systems acquired from Intevac Corporation in November 2002. In 2003, we exited the printed circuit board assembly inspection and high quality glass inspection businesses. As a result, some or all of the technologies acquired in connection with certain of our prior acquisitions, including Advanced Research Technologies Inc., Intelligent Reasoning Systems, Inc. and Image Processing Systems, Inc. have been abandoned. In the third quarter of fiscal 2004, we sold all of our assets related to our TFT-LCD Backlight Inverter business. Future acquisitions may also result in potentially dilutive issuances of equity securities, incurrence of debt and contingent liabilities and amortization expenses related to acquired intangible assets, which could harm our profitability.

Any failure of, or other problems at or with our third party manufacturers could delay shipments of our flat panel display products, harm our relationships with our customers or otherwise negatively impact our business.

We use a wide range of materials in the production of our products, including custom electronic and mechanical components, and we use numerous suppliers to supply these materials. If any third party that we use to manufacture our products is unable to satisfy our quality requirements or provide us with the products and services in a timely manner, our shipments of these products may be delayed, our customer relationships may be harmed and our results of operations may be adversely impacted. There can be no assurance that our relationship with any third party that we use to manufacture our products will result in a reduction of our expenses or enable us to satisfy our customers' quality requirements or to deliver our products to our customers in a timely manner.

If we do not compete effectively in our target markets, we will lose market share.

The markets for yield management systems in the flat panel display industry are highly competitive. We face substantial competition from established competitors that have greater financial, engineering and

manufacturing resources than us and have larger service organizations and long-standing customer relationships. Our competitors can be expected to continue to improve the design and performance of their products and to introduce new products with competitive price and performance characteristics. Competitive pressures may force price reductions that could harm our results of operations. Our customers may also develop technology and equipment that may reduce or eliminate their need to purchase our products. Although we believe we have certain technological and other advantages over our competitors, maintaining and capitalizing on these advantages will require us to continue a high level of investment in engineering, research and development, marketing and customer service support. There can be no assurance that we will have sufficient resources to continue to make these investments or that we will be able to make the technological advances necessary to maintain our competitive advantages.

Our success depends in large part on the strength of the active matrix liquid crystal display in the flat panel display industry.

While our technology is applicable to other flat panel display technologies, our experience has been focused on applications for active matrix liquid crystal displays, the most prevalent and one of the highest performance flat panel displays available today. We derive 100% of our revenue from flat panel display products, substantially all of which were based on the active matrix liquid crystal display technology. An industry shift away from active matrix liquid crystal display technology to existing or new competing technologies could reduce the demand for our existing products and require significant expenditures to develop new products, each of which could harm our business.

Our business could be harmed if we fail to properly protect our intellectual property.

Our success depends largely on our ability to protect our intellectual property. While we attempt to protect our intellectual property through patents, copyrights and trade secrets in the United States and other countries, there can be no assurance that we will successfully protect our technology or that competitors will not be able to develop similar technology independently. We cannot assure you that the claims allowed on any patents held by us will be sufficiently broad to protect our technology against competition from third parties with similar technologies or products. In addition, we cannot assure you that any patents issued to us will not be challenged, invalidated or circumvented or that the rights granted there under will provide competitive advantages to us. Moreover, the laws of some foreign countries do not protect intellectual property rights to the same extent as the laws of the United States and we could experience various obstacles and high costs in protecting our intellectual property rights in foreign countries. If we are unable to obtain or maintain these protections, we may not be able to prevent third parties from using our intellectual property.

We also rely on trade secrets, proprietary know-how and continuing technological innovation to remain competitive. We have taken measures to protect our trade secrets and know-how, including the use of confidentiality agreements with our employees. It is possible that these agreements may be breached and that the available remedies for any breach will not be sufficient to compensate us for damages incurred.

Litigation may be necessary to enforce or defend against claims of intellectual property infringement, which could be expensive and, if we lose, could prevent us from selling our products.

Litigation may be necessary in the future to enforce our patents and other intellectual property rights, to protect our trade secrets or to determine the validity and scope of the proprietary rights of others. Any litigation, regardless of the outcome, could be costly and require significant time and attention of key members of our management and technical personnel.

Our domestic and international competitors, many of which have substantially greater resources and have made substantial investments in competing technologies, may have patents that will prevent, limit or interfere with our ability to manufacture and sell our products. We have not conducted an independent review of patents issued to third parties. Third parties may assert infringement claims, successful or otherwise, against us, and litigation may be necessary to defend against claims of infringement or invalidity. An adverse outcome in the defense of a patent suit could subject us to significant liabilities to third parties, require disputed rights

to be licensed from third parties or require us to cease selling our products. Even successful defenses of patent suits can be costly and time-consuming.

We must attract and retain key employees and our management team and employees must work effectively together to maintain and grow our business.

Our future success depends in part on our ability to retain key personnel, particularly senior management and engineers. We also need to attract additional skilled personnel in significant areas of our business to grow. There can be no assurance that we will be able to retain our existing personnel or attract additional qualified employees in the future. We generally do not have employment contracts with our employees and do not maintain key person life insurance on any of our employees.

Terrorism and international political instability may negatively affect our operations.

The threat of terrorism targeted at the regions of the world in which we do business increases the uncertainty in our markets and may delay any recovery in the general economy, which could threaten our business.

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

The outbreak of severe acute respiratory syndrome, or other infectious diseases, may impact our operations or adversely affect our customers and therefore harm our business.

Our ability to address normal business transaction issues in Asia may still be at risk due to the potential reoccurrence of a Severe Acute Respiratory Syndrome (SARS) outbreak or outbreaks of other infectious diseases. Risks related to an outbreak include but are not limited to temporary closure of operating facilities in affected locations, travel restrictions and delays, difficulties generating new business opportunities and increased political and social tension. Especially if any of our employees, or any of the employees of our customers, become infected with SARS or another outbreak of infectious disease, we may experience reduced sales and increased costs and our operating results may be harmed.

Our manufacturing facilities may be subject to disruption from natural disasters.

Operations at our manufacturing facilities are subject to disruption for a variety of reasons, including work stoppages, acts of war, terrorism, fire, earthquake, energy shortages, flooding or other natural disasters. Our corporate and manufacturing facilities in California are located near major earthquake faults which have experienced earthquakes in the past. Such disruption could cause delays in shipments of products to our customers. We cannot ensure that alternate production capacity would be available if a major disruption were to occur or that, if it were available, it could be obtained on favorable terms. Such disruption could result in cancellation of orders or loss of customers and could seriously harm our business. It could also significantly delay our research and engineering efforts for the development of new products, most of which is conducted at our California facilities.

In addition, some of our customers in Asia are located near fault lines. A major earthquake in Asia could disrupt our operations or the operations of our customers, which could reduce demand for our products.

Our stock price may fluctuate significantly.

The market price of our common stock could fluctuate significantly in response to variations in quarterly operating results and other factors, such as:

- announcements of technological innovations or new products by us or by our competitors;
- government regulations;
- developments in patent or other property rights; and
- developments in our relationships with our customers.

In addition, the stock market has in recent years experienced significant price fluctuations. These fluctuations often have been unrelated to the operating performance of the specific companies whose stock is traded. Broad market fluctuations, general economic condition and specific conditions in the flat panel display industry may adversely affect the market price of our common stock.

Some anti-takeover provisions may affect the price of our common stock.

Our Amended and Restated Articles of Incorporation authorize our board of directors to issue up to 5,000,000 shares of preferred stock. The board also has the authority to determine the price, rights, preferences and privileges, including voting rights, of those shares without any further vote or action by the shareholders. The rights of our shareholders will be subject to, and may be impaired by, the rights of the holders of any preferred stock that may be issued in the future. These and other provisions contained in our charter documents and applicable provisions of California law could serve to depress our stock price or discourage a hostile bid in which shareholders could receive a premium for their shares. In addition, these provisions could make it more difficult for a third party to acquire a majority of our outstanding voting stock or otherwise effect a change in control of us.

We do not anticipate paying cash dividends.

We have never declared or paid any cash dividends on our capital stock and do not anticipate paying cash dividends in the foreseeable future. We have also agreed not to pay cash dividends under our current bank line of credit. Instead, we intend to apply any earnings to the expansion and development of our business.

Future changes in accounting and taxation standards or practices.

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

For example, any changes requiring that we record compensation expense in the statements of operations for employee stock options using the fair value method or changes in existing taxation rules related to stock options could have a significant negative effect on our reported results. Several agencies and entities are considering, and the FASB has announced, proposals to change generally accepted accounting principles in the United States that, if implemented, would require us to record charges to earnings for employee stock option grants. This pending requirement would negatively impact our earnings.

Recent and proposed regulations related to equity compensation could adversely affect our ability to attract and retain key personnel.

Since our inception, we have used stock options and other long-term equity incentives as a fundamental component of our employee compensation packages. We believe that stock options and other long-term equity incentives directly motivate our employees to maximize long-term stockholder value and, through the use of

vesting, encourage employees to remain with Photon Dynamics. The Financial Accounting Standards Board (FASB) has proposed changes to U.S. GAAP that, if implemented, would require us to record a charge to earnings for employee stock option grants. This pending accounting standard would negatively impact our earnings. For example, recording a charge for employee stock options under SFAS 123, "Accounting for Stock-Based Compensation" would have increased net loss by \$6.9 million, \$3.6 million and \$7.9 million for fiscal 2004, 2003 and 2002, respectively. See Note 1 to the Notes to Consolidated Financial Statements — Summary of Significant Accounting Policies — Stock-Based Compensation Plans. In addition, new regulations implemented by The Nasdaq National Market requiring shareholder approval for all stock option plans, as well as new regulations implemented by the New York Stock Exchange prohibiting NYSE member organizations from giving a proxy to vote on equity-compensation plans unless the beneficial owner of the shares has given voting instructions, could make it more difficult for us to grant options to employees in the future. To the extent that new regulations make it more difficult or expensive to grant stock options to employees, we may incur increased compensation costs, change our equity compensation strategy or find it difficult to attract, retain and motivate employees, each of which could materially and adversely affect our business.

Effective Transactions with Related and Certain Other Parties

A full recourse loan of \$250,000 plus accrued interest of approximately \$45,000 was outstanding at September 30, 2003, from one of our former officers. The loan, secured by shares of our stock held by the individual, was repaid in full in fiscal 2004. There were no loans due from any other of our employees as of September 30, 2004.

During fiscal 2004 and 2003, we paid \$138,000 and \$18,000, respectively, to one board member for consulting services rendered to us. During fiscal 2004 and 2003, we recorded approximately \$206,000 and \$190,000, respectively, in stock ownership expense related to options granted to this consultant.

Item 7A. *Quantitative and Qualitative Disclosures about Market Risk*

Foreign Currency Exchange Rate Risk

We are exposed to changes in foreign currency exchange rates primarily related to the operating results of our foreign affiliates. Actual changes in foreign exchange rates could adversely affect our operating results or financial condition. The potential impact depends upon the magnitude of the rate change. We believe our exposure to changes in foreign currency exchange rates for our cash, accounts receivable and accounts payable is limited as substantially all of our cash, accounts receivable and accounts payable are denominated in U.S. dollars. In fiscal 2004, approximately \$4.4 million of our sales were made in currencies other than U.S. dollars.

We did not have any outstanding forward sales contracts at September 30, 2004. As of September 30, 2003, we had forward exchange contracts outstanding to sell approximately \$2.8 million in foreign currency in order to hedge certain anticipated foreign currency denominated transactions that occurred in fiscal 2004. None of these contracts were held for trading purposes. Detail of these securities is included in Note 7 of our "Notes to Consolidated Financial Statements" included under Part II, Item 8. "Financial Statements and Supplemental Data." Gains and losses on these contracts had been recognized in income at September 30, 2003. Net gains from changes in fair values in fiscal 2004 were approximately \$208,000. Net losses from changes in fair values in fiscal 2003 were approximately \$208,000.

Our forward exchange contracts were subject to exchange rate risk and would fluctuate with the changes in exchange rates. A hypothetical 10% immediate and uniform adverse move in all currency exchange rates affecting the contracts from the rates at September 30, 2003 would have decreased the fair value of the contracts by approximately \$341,000.

Market Risk

The primary objective of our investment activities is to preserve principal while maximizing the income we receive from our investments without significantly increasing risk. Some of the securities that we may invest in may be subject to market risk. To minimize this risk, we maintain our portfolio of cash equivalents and short-term investments in a variety of securities, including commercial paper, money market funds, government and non-government debt securities and certificates of deposit.

Our exposure to market risk relates primarily to interest rate fluctuations in connection with our cash and cash equivalents and short-term investment portfolios. We enter into financial instruments for non-trading purposes and do not have derivative financial instruments in our portfolio. The following table presents principal amounts and related weighted average interest rates by year of maturity for our short-term investment portfolio, substantially all of which is held in U.S. dollars:

<u>September 30, 2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>Total</u>	<u>Fair Value</u>
	(Dollars in thousands)						
Cash equivalents (variable rate)	\$25,483	—	—	—	—	\$25,483	\$25,483
Average interest rate	0.65%						
Short-term investments (variable rate) . . .	\$24,370	—	—	—	—	\$24,370	\$24,370
Average interest rate	1.86%						
Short-term investments (fixed rate)	\$ —	\$34,488	—	—	—	\$34,488	\$34,302
Average interest rate		3.42%					
 <u>September 30, 2003</u>	 <u>2004</u>	 <u>2005</u>	 <u>2006</u>	 <u>2007</u>	 <u>2008</u>	 <u>Total</u>	 <u>Fair Value</u>
	(Dollars in thousands)						
Cash equivalents (variable rate)	\$18,305	—	—	—	—	\$18,305	\$18,305
Average interest rate	0.63%						
Short-term investments (variable rate) . . .	\$53,750	—	—	—	—	\$53,750	\$53,750
Average interest rate	1.17%						
Short-term investments (fixed rate)	\$ —	\$44,224	—	—	—	\$44,224	\$44,414
Average interest rate		2.63%					

These securities, as with all fixed income instruments, are subject to interest rate risk and will fall in value if market interest rates increase.

Item 8. *Financial Statements and Supplementary Data*

Index to Consolidated Financial Statements

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**REPORT OF ERNST & YOUNG LLP,
INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The Board of Directors and Shareholders
Photon Dynamics, Inc.

We have audited the accompanying consolidated balance sheets of Photon Dynamics, Inc. as of September 30, 2004 and 2003, and the related consolidated statements of operations, shareholders' equity, and cash flows for each of the three years in the period ended September 30, 2004. Our audits also included the financial statement schedule listed in the index at Item 15(a)(2). These financial statements and schedule are the responsibility of the management of Photon Dynamics, Inc. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Photon Dynamics, Inc. as of September 30, 2004 and 2003, and the consolidated results of its operations and its cash flows for each of the three years in the period ended September 30, 2004, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

/s/ ERNST & YOUNG LLP

Palo Alto, California
October 24, 2004

PHOTON DYNAMICS, INC.
CONSOLIDATED BALANCE SHEETS

	September 30,	
	2004	2003
	(In thousands except share data)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 25,483	\$ 18,305
Short-term investments	58,672	98,164
Accounts receivable, net	58,341	10,402
Inventories	31,716	9,887
Other current assets	4,536	6,449
Total current assets	178,748	143,207
Land, property and equipment, net	20,337	12,298
Other assets	3,909	3,002
Intangible assets, net	4,753	2,894
Goodwill	153	518
Total assets	\$ 207,900	\$ 161,919
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 18,485	\$ 4,239
Warranty	6,194	2,363
Employee notes payable	667	—
Other current liabilities	9,593	8,242
Deferred gross margin	10,104	2,739
Total current liabilities	45,043	17,583
Other liabilities	1,528	193
Commitments and contingencies		
Shareholders' equity:		
Preferred stock, no par value, 5,000,000 shares authorized, none outstanding, as of September 30, 2004 and 2003, respectively	—	—
Common stock, no par value, 30,000,000 shares authorized, 16,859,084 and 16,389,727 shares issued and outstanding, as of September 30, 2004 and 2003, respectively	285,790	279,417
Accumulated deficit	(124,808)	(135,872)
Accumulated other comprehensive income	347	598
Total shareholders' equity	161,329	144,143
Total liabilities and shareholders' equity	\$ 207,900	\$ 161,919

See accompanying notes to consolidated financial statements.

PHOTON DYNAMICS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended September 30,		
	2004	2003	2002
	(In thousands, except per share data)		
Revenue	\$143,269	\$ 67,196	\$ 49,342
Cost of revenue	<u>83,969</u>	<u>44,071</u>	<u>25,799</u>
Gross margin	59,300	23,125	23,543
Operating expenses:			
Research and development	29,701	22,786	10,878
Selling, general and administrative	17,780	13,763	8,853
Goodwill impairment charge	665	10,010	—
Impairment of purchased intangibles	2,089	3,548	—
Impairment of fixed assets	234	—	—
Gain on sale of fixed assets	(427)	—	—
Acquired in-process research and development	210	2,474	410
Amortization of intangible assets	<u>789</u>	<u>1,236</u>	<u>—</u>
Total operating expenses	51,041	53,817	20,141
Income (loss) from operations	8,259	(30,692)	3,402
Interest income and other, net	<u>4,802</u>	<u>2,968</u>	<u>2,913</u>
Income (loss) from continuing operations before income taxes and discontinued operations	13,061	(27,724)	6,315
Provision for income taxes	<u>606</u>	<u>56</u>	<u>85</u>
Income (loss) from continuing operations before discontinued operations	12,455	(27,780)	6,230
Loss from discontinued operations	<u>(1,391)</u>	<u>(44,592)</u>	<u>(28,032)</u>
Net income (loss)	<u>\$ 11,064</u>	<u>\$ (72,372)</u>	<u>\$ (21,802)</u>
Income (loss) per share from continuing operations:			
Basic	<u>\$ 0.75</u>	<u>\$ (1.73)</u>	<u>\$ 0.39</u>
Diluted	<u>\$ 0.73</u>	<u>\$ (1.73)</u>	<u>\$ 0.37</u>
Loss per share from discontinued operations:			
Basic	<u>\$ (0.08)</u>	<u>\$ (2.77)</u>	<u>\$ (1.76)</u>
Diluted	<u>\$ (0.08)</u>	<u>\$ (2.77)</u>	<u>\$ (1.67)</u>
Net income (loss) per share:			
Basic	<u>\$ 0.67</u>	<u>\$ (4.50)</u>	<u>\$ (1.37)</u>
Diluted	<u>\$ 0.65</u>	<u>\$ (4.50)</u>	<u>\$ (1.30)</u>
Weighted average number of shares:			
Basic	16,631	16,089	15,923
Diluted	17,087	16,089	16,791

See accompanying notes to consolidated financial statements.

PHOTON DYNAMICS, INC.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

	Common Stock and Capital in Excess of Par Value		Accumulated Deficit	Accumulated Other Comprehensive Income	Total
	Share	Amount			
Balances at September 30, 2001	13,885	\$184,500	\$ (41,698)	\$ 506	\$143,308
Components of comprehensive loss:					
Net loss	—	—	(21,802)	—	(21,802)
Change in unrealized gain on investments	—	—	—	289	289
Currency translation adjustments	—	—	—	15	15
Total comprehensive loss					(21,498)
Net issuance of common stock	3,236	112,384	—	—	112,384
Repurchase of common stock, net	(351)	(6,901)	—	—	(6,901)
Cancellation of returned IRSI escrow shares	(53)	(1,425)	—	—	(1,425)
Stock ownership expense	—	275	—	—	275
Balances at September 30, 2002	16,717	288,833	(63,500)	810	226,143
Components of comprehensive loss:					
Net loss	—	—	(72,372)	—	(72,372)
Change in unrealized gain on investments	—	—	—	(206)	(206)
Currency translation adjustments	—	—	—	(6)	(6)
Total comprehensive loss					(72,584)
Net issuance of common stock	576	7,898	—	—	7,898
Repurchase of common stock, net	(903)	(17,678)	—	—	(17,678)
Stock ownership expense	—	364	—	—	364
Balances at September 30, 2003	16,390	279,417	(135,872)	598	144,143
Components of comprehensive loss:					
Net income	—	—	11,064	—	11,064
Change in unrealized gain on investments	—	—	—	(377)	(377)
Currency translation adjustments	—	—	—	126	126
Total comprehensive income					10,813
Net issuance of common stock	469	6,167	—	—	6,167
Stock ownership expense	—	206	—	—	206
Balances at September 30, 2004	<u>16,859</u>	<u>\$285,790</u>	<u>\$(124,808)</u>	<u>\$ 347</u>	<u>\$161,329</u>

See accompanying notes to consolidated financial statements.

PHOTON DYNAMICS, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended September 30,		
	2004	2003	2002
	(In thousands)		
Cash flows from operating activities:			
Net income (loss) from continuing operations	\$ 12,455	\$ (27,780)	\$ 6,230
Adjustments to reconcile net income (loss) from continuing operations to net cash used in operating activities from continuing operations:			
Depreciation	2,898	3,119	2,058
Amortization of intangible assets	789	1,793	—
Acquired in process research and development	210	2,474	410
Impairment of goodwill	665	10,010	—
Impairment of purchased intangibles and fixed assets	2,323	3,548	—
Loss on disposal of equipment	—	211	709
Stock ownership expense	206	364	275
Gain on sale of fixed assets	(427)	—	—
Accretion of non-interest bearing notes payable	17	—	—
Changes in assets and liabilities:			
Accounts receivable	(48,074)	(4)	(3,603)
Inventories	(22,720)	993	(1,762)
Other current assets	1,553	1,498	(4,598)
Related party receivable	250	—	—
Other assets	(1,157)	(166)	(4,271)
Accounts payable	14,448	(4,167)	6,421
Other current liabilities	4,837	(647)	1,883
Deferred gross margin	7,365	2,717	(1,477)
Other liabilities	(49)	(684)	—
Net cash provided by (used in) operating activities from continuing operations	(24,411)	(6,721)	2,275
Net cash used in operating activities from discontinued operations	(1,434)	(12,635)	(11,703)
Net cash used in operating activities	(25,845)	(19,356)	(9,428)
Cash flows from investing activities:			
Purchase of property and equipment	(9,803)	(2,547)	(2,099)
Proceeds from sale of fixed assets	481	—	—
Acquisition of Akcron Corporation Ltd.	—	—	(2,559)
Acquisition of Rapid Thermal Processing Division from Intevac, Inc.	(300)	(20,000)	—
Acquisition of Quantum Composers, Inc.	(1,000)	—	—
Acquisition of Tucson Optical Research Corporation	(625)	—	—
Acquisition of Summit Imaging, Inc.	—	(1,676)	—
Acquisition of certain intangible assets upon termination of a distributor agreement	(1,138)	—	—
Purchase of short-term investments	(420,296)	(569,566)	(662,097)
Redemption of short-term investments	459,411	615,759	583,739
Net cash provided by (used in) investing activities from continuing operations	26,730	21,970	(83,016)
Net cash used in investing activities from discontinued operations	—	(92)	(4,002)
Net cash provided by (used in) investing activities	26,730	21,878	(87,018)

PHOTON DYNAMICS, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS — (Continued)

	Year Ended September 30,		
	2004	2003	2002
	(In thousands)		
Cash flows from financing activities:			
Issuance of common stock, net	6,167	7,898	112,384
Repurchase of common stock	—	(17,678)	(6,901)
Capital lease repayments	—	(11)	—
Net cash provided by (used in) financing activities from continuing operations	6,167	(9,791)	105,483
Effect of exchange rate changes on cash and cash equivalents	126	(6)	15
Net increase in cash and cash equivalents from continuing operations	8,612	5,452	24,757
Net decrease in cash and cash equivalents from discontinued operations	(1,434)	(12,727)	(15,705)
Net increase (decrease) in cash and cash equivalents	7,178	(7,275)	9,052
Cash and cash equivalents at beginning of year	18,305	25,580	16,528
Cash and cash equivalents at end of year	<u>\$ 25,483</u>	<u>\$ 18,305</u>	<u>\$ 25,580</u>
Supplemental cash flow disclosures:			
Income taxes paid	\$ 59	\$ 69	\$ 101
Interest paid	6	21	10
Supplemental non-cash financing and investing activities disclosure:			
Assumed liabilities from acquisition of Infrared Screening and Inspection Solutions Division from Advanced Research Technologies, Inc.	—	—	260
Assumed liabilities from acquisition of Akcron Corporation Ltd.	—	—	970
Cancellation of returned Intelligent Reasoning Systems, Inc. escrow shares	—	—	1,425
Assumed liabilities from acquisition of Rapid Thermal Processing Division from Intevac, Inc. assets	—	350	—
Assumed liabilities from acquisition of Summit Imaging, Inc. assets	—	15	—
Assumed liabilities from acquisition of Quantum Composers, Inc. assets	155	—	—
Note payable from acquisition of Quantum Composers, Inc. assets	2,000	—	—
Note payable from acquisition of Tucson Optical Research Corporation assets	625	—	—

See accompanying notes to consolidated financial statements.

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1 — Summary of Significant Accounting Policies

Description of Operations and Principles of Consolidation. Photon Dynamics, Inc. (“Photon Dynamics” or the “Company”) is a supplier of integrated yield management solutions for the flat panel display industry. The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. Intercompany accounts and transactions have been eliminated.

Subsidiaries of the Company are as follows:

- Akron Corporation, Ltd.
- CR Technology, Inc.
- Intelligent Reasoning Systems, Inc.
- Intelligent Reasoning Systems Intl KK
- Kabushiki Kaisha Photon Dynamics
- Photon Dynamics Canada Inc., formerly known as Image Processing Systems Inc. (“IPS”)
- Photon Dynamics International Trading (Shanghai) Co., Ltd.
- Photon Dynamics Korea Inc.
- Photon Dynamics Nova Scotia Company
- Photon Dynamics Technology (Beijing) Co., Ltd.

Through January 14, 2003, the Company conducted business in three operating segments: flat panel display products, cathode ray tube display and high quality glass inspection products and printed circuit board assembly inspection products. In January 2003, the Company implemented a plan to exit the printed circuit board assembly inspection business. In June 2003, the Company implemented a plan to exit the cathode ray tube display and high quality glass inspection businesses. Accordingly, the operating results of these former business segments have been presented as discontinued operations in accordance with the provisions of Statement of Financial Accounting Standards No. 144, “Accounting for the Impairment or Disposal of Long-lived Assets,” (“FAS 144”). Accordingly, in the consolidated statements of operations, the operating results of these former businesses have been classified as “Loss from discontinued operations” for all periods presented. The cash flows from these businesses have been presented as “Net cash flows from discontinued operations” in the operating, investing and financing sections of the consolidated statements of cash flows.

Management Estimates. The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates. Significant estimates made by management include revenue recognition, the calculation of allowance for doubtful accounts, inventory write-downs, warranty provisions, impairment of goodwill and other acquired intangible assets, acquired in-process research and development, restructuring expenses and litigation and contingency assessments.

Fair Value of Financial Instruments. The Company evaluates the estimated fair value of financial instruments using available market information and valuation methodologies. The use of different market assumptions and/or estimation methodologies could have a negative effect on the estimated fair value amounts. The fair value of the Company’s cash, cash equivalents, accounts receivable, accounts payable and other current liabilities approximates the carrying amount due to the relatively short maturity of these items (see Note 7).

Cash Equivalents and Short-Term Investments. Cash equivalents consist of highly liquid investments with insignificant interest rate risk and have original maturity dates of three months or less from the date of acquisition. Short-term investments consist of highly liquid investments with remaining maturities greater than three months from the balance sheet date. The Company classifies all securities as available-for-sale in accordance with the provisions of the Statement of Financial Accounting Standards No. 115, “Accounting for

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Certain Investments in Debt and Equity Securities” (“FAS 115”). The cost and fair market value of short-term investments are based on the specific identification method. Securities classified as available-for-sale are reported at fair market value with the related unrealized gains or losses, net of tax, presented as a separate component of shareholders’ equity under the caption “Accumulated other comprehensive income.” All realized gains and losses and unrealized losses and declines in fair value that are other than temporary are recorded in earnings in the period of occurrence.

Inventories. Inventories, consisting of raw materials, work in process and finished goods, are stated at the lower of cost (first-in, first-out) or market. Inventory which is obsolete (defined as inventory that will no longer be used in the manufacturing process) or in excess of the forecasted usage is written down to its estimated market value based on projected demand, historical usage and other known factors. Photon Dynamics reviews the appropriate valuation of its inventories on a quarterly basis. If actual demand were to decline below the Company’s forecasts, the Company may need to take additional inventory write-downs.

Land, Property and Equipment. Property and equipment are recorded at cost. Depreciation of property and equipment is based on the straight-line method over the estimated useful lives of the assets which are thirty years for buildings, and three to five years for equipment and office furniture and fixtures. Leasehold improvements are amortized over the shorter of the life of the lease or the useful life of the related asset. Land is recorded at cost, with no depreciation recorded.

Goodwill and Intangible Assets. The Company accounts for goodwill and other intangible assets resulting from its acquisitions in accordance with Statement of Financial Accounting Standards No. 142 “Goodwill and Other Intangible Assets” (“FAS 142”). FAS 142 prohibits the amortization of goodwill and intangible assets with indefinite useful lives and requires that these assets be reviewed for impairment at least annually. The process for evaluating the potential impairment of goodwill is highly subjective and requires significant judgment at many points during the analysis. In estimating the fair value of the reporting unit with recognized goodwill for the purposes of our fiscal 2004 financial statements, the Company made estimates and judgments about the future cash flows of that reporting unit. The Company’s cash flow forecasts were based on assumptions that were consistent with the plans and estimates it was using to manage the underlying business. The Company also considers its market capitalization (adjusted for unallocated monetary assets such as cash, marketable debt securities and debt) in determining the fair value of the respective businesses.

Intangible assets with finite lives and other long-lived assets are amortized over their estimated useful lives and subject to evaluation for impairment.

Impairment of Long-Lived Assets. The Company reviews long-lived assets including intangible assets with finite lives for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable, such as a significant industry downturn, significant decline in the market value of the company, or significant reductions in projected future cash flows. An impairment loss would be recognized when estimated undiscounted future cash flows expected to result from the use of the asset and its eventual disposition is less than its carrying amount. Impairment, if any, is assessed using discounted cash flows. In assessing the recoverability of long-lived assets, including intangible assets, the Company must make assumptions regarding estimated future cash flows and other factors to determine the fair value of the respective assets.

Accumulated other comprehensive Income. Statement of Accounting Standards No. 130 “Reporting Comprehensive Income” (“FAS 130”) requires that all items required to be recognized under accounting standards as components of comprehensive income, including unrealized gains and losses on available-for-sale securities and foreign currency translation adjustments, be reported in the consolidated financial statements. As a result, the Company has reported comprehensive income (loss) within the accompanying Consolidated Statements of Shareholders’ Equity.

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Concentration of Credit and Other Risk. Financial instruments which potentially subject the Company to concentrations of credit risk consist principally of available for sale securities, trade accounts receivable and derivative financial instruments used to mitigate the effect of exchange rate changes.

The Company invests excess cash in securities that the Company believes bear minimal risk. These investments are of a short-term nature and include investments in auction rate preferred securities, commercial paper and government and corporate debt securities. The Company has not experienced any losses due to institutional failure or bankruptcy.

The Company's customers are located in Korea, Taiwan, Japan and China. Therefore, the Company's sales to these customers may be adversely affected by the overall health of these economies, including the effects of currency exchange rate fluctuations. The Company generally does not require collateral for its trade accounts receivable. The Company maintains a provision for potential credit losses based upon expected collectibility of all accounts receivable. For sales to some of its customers in certain geographic regions, the Company requires letters of credit. The majority of the Company's revenue is invoiced in U.S. dollars. The Company believes its credit evaluation and monitoring mitigates its credit risk.

The Company is exposed to credit loss in the event of non-performance by counterparties on the foreign exchange contracts used to mitigate the effect of exchange rate changes. These counterparties are large international financial institutions and to date, no such counterparty has failed to meet its financial obligations to the Company. Photon Dynamics does not anticipate nonperformance by these counterparties. The Company had no outstanding foreign exchange forward contracts at September 30, 2004.

The Company's products include certain components that are currently single-sourced. The Company believes that other vendors would be able to provide similar components; however, the qualification of such vendors may require start-up time. In order to mitigate any adverse impacts from a disruption of supply, the Company attempts to maintain an adequate supply of critical single-sourced components.

Foreign Currency. The functional currencies of the Company's foreign subsidiaries are their respective local currencies. Accordingly, all assets and liabilities of the foreign operations are translated to U.S. dollars at current period end exchange rates, and revenues and expenses are translated to U.S. dollars using weighted average exchange rates in effect during the period. The gains and losses from the translation of these subsidiaries' financial statements into the U.S. dollar are recorded directly into a separate component of shareholders' equity under the caption "Accumulated other comprehensive income" in shareholders' equity. Currency transaction gains and losses are included in the Company's results of operations.

Derivative Financial Instruments. The Company may use forward exchange contracts to mitigate the effect of exchange rate changes on a portion of, but not all, existing and anticipated foreign currency denominated transactions expected to occur within the following 18 months. The purpose of Photon Dynamics' foreign currency program is to manage the effect of exchange rate fluctuations on certain foreign currency denominated revenues, cost and eventual cash flows. The Company believes these financial instruments do not subject it to speculative risk that would otherwise result from changes in currency exchange rates. The Company does not use derivative financial instruments for speculative or trading purposes.

The Company's derivative instruments are recorded at fair value based on quoted market prices for comparable instruments. Gains and losses are recorded immediately in earnings.

The Company had no outstanding foreign exchange forward contracts at September 30, 2004. At September 30, 2003, the Company had foreign exchange forward contracts maturing throughout fiscal 2004 to sell \$2.8 million in Japanese yen. See Note 7 for further information related to derivatives.

Warranty. The Company's warranty policy generally states that it will provide warranty coverage for a period of one year from final acceptance. The Company records the estimated cost of warranty coverage,

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

primarily material and labor to repair and service the equipment, upon product shipment, when the related revenue is recognized. The Company's warranty obligation is affected by product failure rates, material usage rates and the efficiency by which the product failure is corrected.

Revenue Recognition. Photon Dynamics derives revenue primarily from the sale and installation of equipment and spare part sales. The Company recognizes revenue when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the selling price is fixed or determinable and collectibility is reasonably assured.

The Company accounts for certain of its product sales, including sales to a value-added reseller, as arrangements with multiple deliverables in accordance with Emerging Issues Task Force Issue 00-21 "Revenue Arrangements with Multiple Deliverables." For arrangements with multiple deliverables, the Company recognizes revenue for the delivered items if the delivered items have value to the customer on a standalone basis, the amount of revenue for delivered elements is not subject to refund, the Company has met defined customer acceptance experience levels for the delivered items, and the fair value of undelivered items, such as installation and system upgrade rights, can be reliably determined. The Company allocates revenue to the delivered items based on the lesser of the amount due and billable upon shipment and the allocated fair value, with the remaining amount recognized after installation and acceptance when the final amount becomes due. The Company recognizes all other product sales upon customer acceptance. The Company recognizes revenue from the sale of spare parts generally upon shipment.

Terms and conditions of the Company's sale of products to its value-added reseller are generally consistent with terms and conditions offered to other customers and title typically transfers to the value-added reseller upon shipment. The Company does not grant any rights of return, stock rotation or price protection for its product sales to its value-added reseller. Accordingly, sales transactions with the value-added reseller are recorded in accordance with the policy stated above.

The Company records a provision based on historical rates for estimated sales returns in the same period as the related revenue is recorded, which is netted against revenue.

The Company's products are generally subject to warranty and such estimated costs are provided for in costs of sales when product revenue is recognized. Installation and other services are not essential to the functionality of the products as these services do not alter the product capabilities, do not require specialized skills or tools and can be performed by other vendors.

Shipping Costs. The Company's shipping and handling costs are included under cost of sales for all periods presented. In those instances where the Company does bill for shipping and handling, the amounts billed are classified as revenue.

Advertising. Advertising costs are expensed as incurred. Advertising expense was \$109,000, \$173,000 and \$248,000 for fiscal 2004, 2003 and 2002, respectively.

Research and Development Cost. Costs to develop the Company's products, which include both hardware and software components are expensed as incurred. Software incorporated in the Company's products is an integral part of the overall product design process and costs to develop software, which is deemed to be incidental, are not tracked separately. The Company does not sell or market any software product on a standalone basis.

Interest Income. Interest Income was approximately \$1.5 million, \$2.5 million and \$3.4 million for fiscal 2004, 2003 and 2002, respectively.

Income Taxes. The Company accounts for income taxes in accordance with the liability method in accounting for income taxes. Under the liability method, deferred tax assets and liabilities are measured based

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

on differences between the financial reporting and tax bases of assets and liabilities using enacted tax rates and laws that will be in effect when differences are expected to reverse (see Note 8).

Earnings Per Share. Basic net income (loss) per share is calculated using the weighted average number of shares of common stock outstanding. Diluted earnings per share is computed in the same manner and also gives effect to all dilutive common equivalent shares outstanding during the period. Common equivalent shares consist of stock options issued to employees under employee stock option plans and warrants (see Note 9).

Stock-Based Compensation Plans. The Company accounts for its stock-based employee compensation plans using the intrinsic value method in accordance with the provisions of Accounting Principles Board (“APB”) Opinion No. 25, “Accounting For Stock Issued to Employees” (“APB 25”) and related interpretations.

Pro forma information regarding net income and earnings per share is required by Statement of Financial Accounting Standards No. 123, “Accounting for Stock-Based Compensation” (“FAS 123”) and has been determined as if the Company had accounted for its employee stock purchase plan and employee stock options granted under the fair value method of FAS 123. The fair value of each option grant is estimated on the date of grant using the Black-Scholes option pricing model for the multiple option approach with the following weighted-average assumptions:

	<u>2004</u>	<u>2003</u>	<u>2002</u>
Stock option plan:			
Expected stock price volatility	0.83	0.93	0.96
Risk free interest rate	2.33%	2.05%	3.21%
Expected life of options (years)	6	5	3
Stock purchase plan:			
Expected stock price volatility	0.96	0.90	0.99
Risk free interest rate	2.13%	2.19%	3.13%
Expected life of plan (years)	2	0.9	1.7

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

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

For purposes of pro forma disclosures required by FAS 123, the estimated fair value of the options is amortized to expense over the options' vesting periods using the straight-line method. The Company's pro forma information for the years ended September 30, 2004, 2003 and 2002 is as follows:

	Year Ended September 30,		
	2004	2003	2002
	(In thousands, except per share data)		
Net income (loss) — as reported	\$11,064	\$(72,372)	\$(21,802)
Plus: stock based employee compensation expense included in reported net income	—	364	275
Less: total stock-based employee compensation expense determined under fair value based method for all awards	(6,886)	(3,991)	(8,146)
Net income (loss) — pro forma	\$ 4,178	\$(75,999)	\$(29,673)
Basic net income (loss) per share — as reported	\$ 0.67	\$ (4.50)	\$ (1.37)
Diluted net income (loss) per share — as reported	\$ 0.65	\$ (4.50)	\$ (1.30)
Basic net income (loss) per share — pro forma	\$ 0.25	\$ (4.72)	\$ (1.86)
Diluted net income (loss) per share — pro forma	\$ 0.24	\$ (4.72)	\$ (1.77)

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

Recent Accounting Pronouncements. In March 2004, the FASB issued a proposed Statement, "Share-Based Payment, an amendment of FASB Statements Nos. 123 and 95," that addresses the accounting for share-based payment transactions in which a Company receives employee services in exchange for either equity instruments of the Company or liabilities that are based on the fair value of the Company's equity instruments or that may be settled by the issuance of such equity instruments. The proposed statement would eliminate the ability to account for share-based compensation transactions using the intrinsic method that Photon Dynamics currently uses and generally would require that such transactions be accounted for using a fair-value-based method and recognized as expense in the Company's consolidated statements of operations. The recommended effective date of the proposed standard is currently for fiscal years beginning after June 15, 2005. Should this proposed statement be finalized in its current form, it will have a significant impact on the Company's consolidated statements of operations as the Company will be required to expense the fair value of its stock option grants and stock purchases under our employee stock purchase plan.

In March 2004, the Emerging Issues Task Force ("EITF") reached a consensus on recognition and measurement guidance previously discussed under EITF Issue No. 03-01, "The Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments." ("EITF 03-01"). The consensus clarifies the meaning of other-than-temporary impairment and its application to investments in debt and equity securities, in particular investments within the scope of FASB Statement No. 115, "Accounting for Certain Investments in Debt and Equity Securities," and investments accounted for under the cost method. In September 2004, the Financial Accounting Standards Board approved the issuance of a FASB Staff Position ("FSP") to delay the requirement to record impairment losses under EITF 03-1. The approved delay applies to all securities within the scope of EITF 03-1 and is expected to end when new guidance is issued and comes into effect. Adoption of this consensus is not expected to have a material impact on our consolidated results of operations.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Note 2 — Financial Statement Components

	September 30,	
	2004	2003
	(In thousands)	
Balance Sheet		
Accounts receivable		
Accounts receivable, gross	\$ 58,838	\$ 11,128
Allowance for doubtful accounts	(497)	(726)
Total	\$ 58,341	\$ 10,402
Inventories:		
Raw materials	\$ 15,529	\$ 3,945
Work-in-process	15,046	4,565
Finished goods	1,141	1,377
Total	\$ 31,716	\$ 9,887
Land, property and equipment:		
Land and building	\$ 7,299	\$ 7,299
Equipment	17,647	13,751
Office furniture and fixtures	3,057	2,097
Leasehold improvements	8,934	2,619
	36,937	25,766
Less: accumulated depreciation and amortization	(16,600)	(13,468)
Total	\$ 20,337	\$ 12,298
Intangible assets:		
Core technology	\$ 8,695	\$ 7,997
Developed technology	6,865	4,734
Backlog	557	557
Non-compete agreement	969	199
Patents	123	123
License agreement	1,139	—
	18,348	13,610
Less: accumulated amortization	(4,059)	(3,269)
Less: accumulated impairment charges(1)	(9,536)	(7,447)
Total	\$ 4,753	\$ 2,894
Goodwill:		
Initial goodwill	\$ 37,389	\$ 37,089
Subsequent adjustments to goodwill	(278)	(278)
	37,111	36,811
Less: accumulated impairment charges(1)	(36,958)	(36,293)
Total	\$ 153	\$ 518

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

	<u>September 30,</u>	
	<u>2004</u>	<u>2003</u>
	(In thousands)	
Other current liabilities:		
Compensation	\$ 3,984	\$ 2,369
Commissions	197	1,128
Due to Akcron shareholders	—	1,035
Obligation to a manufacturing subcontractor in connection with inventory purchases	623	647
Accrued closing costs associated with discontinued operations	449	666
Notes Payable (Note 14)	519	576
Other accrued expenses	<u>3,821</u>	<u>1,821</u>
Total	<u>\$ 9,593</u>	<u>\$ 8,242</u>
Accumulated other comprehensive income		
Foreign currency translation adjustments	\$ 533	\$ 407
Unrealized gains (losses) on available for sale securities	<u>(186)</u>	<u>191</u>
Total	<u>\$ 347</u>	<u>\$ 598</u>

	<u>Year Ended September 30</u>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
	(In thousands)		
Statements of Operations			
Interest income and other, net			
Interest income	\$1,508	\$2,548	\$3,374
Interest expense	(25)	(11)	(7)
Foreign exchange gain (loss)	(90)	(425)	(211)
Other(2)	<u>3,409</u>	<u>856</u>	<u>(243)</u>
Total	<u>\$4,802</u>	<u>\$2,968</u>	<u>\$2,913</u>

- (1) In fiscal 2002, 2003 and 2004, the Company recorded impairment charges against certain of its goodwill and intangible assets. In accordance with FAS 142 and Statement of Financial Accounting Standards No. 144 "Accounting for the Impairment or Disposal of Long-Lived Assets" ("FAS 144"), these impairments established new cost bases for the related assets. See additional detail in Note 5.
- (2) In fiscal 2004, the Company recorded a technology license fee resulting from a litigation settlement in the first quarter of fiscal 2004, the terms of which were confidential. See additional detail in Note 11.

Note 3 — Discontinued Operations

Printed Circuit Board Assembly Inspection Business

The Company's printed circuit board assembly inspection products enabled printed circuit board assembly inspection manufacturers to detect and identify defects, thereby increasing yields and quality and reducing costs. The Company previously sold its products for the printed circuit board assembly industry primarily through sales representatives and distributors. The Company generally recognized revenue from the sale of its printed circuit board assembly inspection products upon shipment as such product sales were not subject to customer acceptance provisions. In January 2003, the Company implemented a plan to exit the

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

printed circuit board assembly inspection business. Accordingly, the operating results of this former business segment have been reclassified as a discontinued operation for all periods presented. As of September 30, 2004, the Company has completed liquidation of the operation's remaining inventory through a third-party auctioneer and is attempting to sublease the facilities associated with the discontinued operations, but there can be no assurances that the Company will be successful in recovering any additional costs associated with this discontinued operation.

The following table summarizes the results of discontinuing the printed circuit board assembly inspection products reporting segment:

	Year Ended September 30,		
	2004	2003	2002
	(In thousands)		
Revenue	\$ 83	\$ 4,320	\$ 12,366
Cost of revenue	<u>—</u>	<u>11,661</u>	<u>9,605</u>
Gross margin	<u>83</u>	<u>(7,341)</u>	<u>2,761</u>
Operating expenses:			
Research and development	21	3,695	4,367
Selling, general and administrative	1,624	6,827	6,925
Goodwill impairment charge	—	15,083	11,200
Impairment of purchased intangibles and fixed assets	—	5,445	1,017
Restructuring charges	—	—	2,551
Acquired in-process research and development	—	—	244
Amortization of intangible assets	<u>—</u>	<u>195</u>	<u>1,042</u>
Total operating expenses	<u>1,645</u>	<u>31,245</u>	<u>27,346</u>
Loss from discontinued operations	<u><u>\$(1,562)</u></u>	<u><u>\$(38,586)</u></u>	<u><u>\$(24,585)</u></u>

The loss from discontinued operations for the year ended September 30, 2004, includes litigation costs of approximately \$1.5 million for settlement of prior inventory purchase commitments, the settlement of the Thomason v. Photon Dynamics lawsuit (See Note 11) and the legal expenses incurred as part of the settlement.

The loss from discontinued operations for the year ended September 30, 2003, includes a write-off of inventory of approximately \$7.6 million, a write-off of accounts receivable of approximately \$2.0 million, and a write-off of licensed technology of approximately \$1.9 million. The fiscal 2003 loss also includes impairment charges of approximately \$15.1 million of goodwill, \$2.9 million of purchase intangibles and \$2.5 million of long-lived assets recorded during the three months ended December 31, 2002, as a result of management's assessment of indicators of impairment that existed prior to the Company's formal decision to discontinue the operations of this segment. Such impairment charges were recorded in accordance with the provisions of FAS 142 and FAS 144.

The loss from discontinued operations for the year ended September 30, 2002 includes a restructuring charge of approximately \$2.6 million recorded in the fourth quarter of fiscal 2002 associated with a reduction in workforce, consolidation and closing of facilities and a write-off of related fixed assets. See Note 6 for additional details of this restructuring reserve. The fiscal 2002 loss also includes impairment charges of approximately \$11.2 million of goodwill and \$1.0 million of purchased intangibles recorded during the fourth quarter of 2002, as a result of management's assessment of indicators of impairment related to the acquisition of Intelligent Reasoning Systems, Inc. ("IRSI"). Such impairment charges were recorded in accordance with

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

the provisions of FAS 142 and FAS 121. In addition, the Company recorded approximately \$244,000 of acquired in-process research and development charges related to the acquisition of certain assets from Advanced Research Technologies, Inc. (“ART”) related to ART’s Infrared Screening and Inspection Solutions (“ISIS”) Division.

The Company determined the fair values of the assets impaired based on the estimated net realizable values of the assets, taking into account independent appraisals of those net realizable values.

The following summarizes the assets and liabilities of the printed circuit board assembly inspection products discontinued operations:

	September 30	
	2004	2003
	(In thousands)	
ASSETS		
Current assets:		
Accounts receivable, net.....	\$ —	\$ 104
Other current assets	<u>908</u>	<u>1,268</u>
Total assets	<u>\$908</u>	<u>\$1,372</u>
LIABILITIES		
Current liabilities:		
Accounts payable	\$ 5	\$ 102
Other current liabilities	<u>707</u>	<u>819</u>
Total current liabilities	712	921
Other liabilities	<u>113</u>	<u>193</u>
Total liabilities	<u>\$825</u>	<u>\$1,114</u>

Other current assets at September 30, 2004 include a receivable of approximately \$733,000 against shares that are being held in escrow related to the IRSI acquisition (See Note 4), and \$175,000 in security deposits on various leases.

Other current liabilities at September 30, 2004 include approximately \$79,000 related to current operating lease obligations, approximately \$90,000 related to accrued legal costs and approximately \$537,000 related to potential vendor obligations. Other liabilities of approximately \$113,000 relate entirely to non-current operating lease obligations. Lease obligations are to be paid out through December 2006.

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

In the second quarter of fiscal 2003, in accordance with Statement of Financial Accounting Standards No. 146, "Accounting for Costs Associated with Exit or Disposal Activities" ("FAS 146"), the Company recorded a liability of approximately \$2.0 million for costs associated with the discontinuation of the business, including termination benefits of approximately \$700,000 and approximately \$1.3 million of purchase obligations to suppliers. The following summarizes the liability since inception:

	<u>One-time Termination Benefits</u>	<u>Other Costs</u>	<u>Total</u>
		(In thousands)	
Inception of liability	\$ 696	\$1,326	\$ 2,022
Cash expenditures	(614)	(447)	(1,061)
Adjustments to the liability	<u>(82)</u>	<u>(342)</u>	<u>(424)</u>
Balance at September 30, 2003	—	537	537
Cash expenditures	—	—	—
Adjustments to the liability	<u>—</u>	<u>—</u>	<u>—</u>
Balance at September 30, 2004	<u>\$ —</u>	<u>\$ 537</u>	<u>\$ 537</u>

The balance of \$537,000 remaining at September 30, 2004, consists primarily of potential obligations that the Company is currently negotiating.

Cathode Ray Tube Display and High Quality Glass Inspection Business

The Company's cathode ray tube display and high quality glass inspection products allowed cathode ray tube display manufacturers to locate and characterize defects and glass manufacturers to detect and identify defects such as scratches, pits, bubbles, stones, inclusions and distortions, thereby increasing yields and quality and reducing costs. The Company previously sold its products for the cathode ray tube display and high quality glass inspection industry primarily through sales representatives and distributors. The Company generally recognized revenue from product sales upon customer acceptance. In June 2003, the Company implemented a plan to exit the cathode ray tube display and high quality glass inspection business. Accordingly, the operating results of this former business segment have been reclassified as a discontinued operation for all periods presented and the Company now conducts business in one segment.

The following table summarizes the results of discontinuing the cathode ray tube display and high quality glass inspection products reporting segment:

	<u>Year Ended September 30,</u>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
	(In thousands)		
Revenue	\$ —	\$ 2,412	\$ 7,518
Cost of revenue	<u>—</u>	<u>4,393</u>	<u>4,626</u>
Gross margin	<u>—</u>	<u>(1,981)</u>	<u>2,892</u>
Operating expenses:			
Research and development	—	701	3,574
Selling, general and administrative	38	2,533	2,765
Impairment of purchased intangibles and fixed assets		791	—
Gain on sale of fixed assets	<u>(209)</u>	<u>—</u>	<u>—</u>
Total operating expenses	<u>(171)</u>	<u>4,025</u>	<u>6,339</u>
Income (loss) from discontinued operations	<u>\$ 171</u>	<u>\$ (6,006)</u>	<u>\$ (3,447)</u>

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The income from discontinued operations for the year ended September 30, 2004, includes a gain on the sale of certain assets related to the former glass inspection business. The loss from discontinued operations for the year ended September 30, 2003, includes a write-off of inventory of approximately \$1.8 million, a write-off of accounts receivable of approximately \$152,000, and a write-off of fixed assets of approximately \$490,000. The fiscal 2003 loss also includes approximately \$460,000 in lease-related charges associated with excess facilities, and approximately \$979,000 in employee severance and related benefit charges accounted for in accordance with FAS 146. The Company has paid out substantially all of the severance and related benefit amounts as of September 30, 2003.

The following summarizes the assets and liabilities of the cathode ray tube display and high quality glass inspection discontinued operations:

	<u>September 30</u>	
	<u>2004</u>	<u>2003</u>
	(In thousands)	
ASSETS		
Current assets:		
Accounts receivable, net.....	\$ —	\$ 31
Total current assets.....	<u>\$ —</u>	<u>\$ 31</u>
LIABILITIES		
Current liabilities:		
Other current liabilities	\$797	\$1,046
Total current liabilities.....	<u>\$797</u>	<u>\$1,046</u>

Other current liabilities at September 30, 2004 include approximately \$193,000 related to warranty obligations, approximately \$256,000 related to operating lease obligations and approximately \$348,000 related to a loan payable (See Note 14). Lease obligations are to be paid out through March of 2008. Future minimum lease payments, due by fiscal year are approximately: \$91,000 in fiscal 2005, \$83,000 in fiscal 2006, \$76,000 in fiscal 2007 and \$6,000 in fiscal 2008.

In the third quarter of fiscal 2003, in accordance with FAS 146, the Company recorded a liability of approximately \$1.9 million for costs associated with the discontinuation of the business. The following summarizes the liability since inception:

	<u>One-time Termination Benefits</u>	<u>Contract Termination Costs</u>	<u>Other Costs</u>	<u>Total</u>
	(In thousands)			
Inception of liability	\$ 1,116	\$ 771	\$ 11	\$ 1,898
Cash expenditures	(1,085)	(171)	(26)	(1,282)
Adjustments to the liability	—	—	50	50
Balance of liability at September 30, 2003.....	31	600	35	666
Cash expenditures	(31)	(151)	(35)	(217)
Balance of liability at September 30, 2004.....	<u>\$ —</u>	<u>\$ 449</u>	<u>\$ —</u>	<u>\$ 449</u>

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Note 4 — Acquisitions and Dispositions

Year ended September 30, 2004 dispositions

In May 2004, the Company sold all of its assets in Korea related to its TFT-LCD Backlight Inverter business to WOYOUNG CO. LTD for approximately \$481,000. The assets include inventory and production equipment for which the Company had previously recorded impairment charges, intellectual property and certain employees related to the inverter business. For the year ended September 30, 2004, the Company recorded a gain on the transaction of approximately \$419,000, which is included in "Operating income" in the Consolidated Statements of Operations.

Year ended September 30, 2004 acquisitions

In June 2004, the Company acquired all of the assets of Quantum Composers, Inc., related to the design and manufacture of laser assembly products for flat panel display LCD manufacturing and repair (the "Quantum Assets"). Quantum Composers designed and sold pulse generator and laser diagnostic systems and provided contract engineering and system design services to the laser industry. The purchase price was approximately \$3.0 million, of which the Company paid \$1.0 million up front and issued \$2.0 million of non-interest bearing notes payable, due through June of 2007. In addition, the Company assumed approximately \$156,000 of liabilities and incurred approximately \$56,000 in acquisition-related expenses, consisting primarily of consulting, legal and accounting fees. The identifiable tangible assets acquired consisted primarily of inventory.

In August 2004, the Company acquired all of the assets of Tucson Optical Research Corporation ("TORC") related to the design and manufacture of pellicle products which are used in the Company's modulators (the "TORC Assets"). The purchase price was approximately \$1.3 million, of which the Company paid \$625,000 up front and issued \$625,000 of non-interest bearing notes payable, due through August of 2005. In addition, the Company incurred approximately \$25,000 in acquisition-related expenses, consisting primarily of consulting, legal and accounting fees. The identifiable tangible assets acquired consisted primarily of inventory.

Year ended September 30, 2003 purchase acquisitions

In May 2003, the Company acquired all of the assets of Summit Imaging, Inc. related to the design and manufacture of "cooled" cameras specifically tailored to the Company's product offerings (the "Summit Assets"). Summit Imaging designed and manufactured "cooled" cameras for the capital equipment industry. The purchase price was \$1.5 million of cash. In addition, the Company assumed approximately \$15,000 of liabilities and incurred approximately \$130,000 in acquisition-related expenses, consisting primarily of consulting, legal and accounting fees. The identifiable tangible assets acquired consisted primarily of inventory.

In November 2002, the Company acquired rapid thermal processing technology assets (the "RTP Assets") from Intevac, Inc. ("Intevac"). The purchase price was \$20.0 million of cash, of which \$18.0 million was paid to Intevac at closing and an additional \$2.0 million was placed into escrow to be released either to the Company or to Intevac depending on the occurrence of certain future events during the escrow period as follows: \$1.2 million related to the attainment of a certain level of sales by the Company of equipment included in the RTP Assets acquired from Intevac; \$500,000 related to the re-issuance of a former rapid thermal processing patent in Japan for certain acquired technology; and \$300,000 for indemnification and reimbursement should Intevac breach any representations and warranties under the acquisition agreement.

In September 2003, the Company filed a claim against the escrow for the full \$2.0 million. In October 2003, the Company received \$1.7 million on its claim against the \$2.0 million escrow related to the purchase of the RTP Assets from Intevac. The claim for the remaining \$300,000 was resolved in favor of Intevac and,

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

accordingly, the Company recorded an additional goodwill impairment charge in the three months ended December 31, 2003.

Year ended September 30, 2002 purchase acquisitions

In September 2002, the Company acquired Akcron Corporation LTD (“Akcron”), a designer and seller of automated optical inspection equipment, image processing hardware and software algorithms and high-performance liquid crystal display backlight inverters for flat panel displays, which has expanded the Company’s cell and module inspection capability. The purchase price was approximately \$4.2 million of which the Company paid cash of \$2.6 million at the closing of the acquisition, established a \$1.6 million liability for the remainder of the purchase price, assumed \$600,000 in liabilities and incurred \$400,000 in acquisition related charges consisting primarily of legal and accounting fees. The remaining \$1.6 million of cash due to the Akcron shareholders was held by the Company to secure the Company’s rights to indemnification and reimbursement should Akcron breach any of their representations and warranties under the acquisition agreement. The Company made claims for \$320,000 for a breach of warranty related to the collectibility of a receivable and \$350,000 related to the non-occurrence of a certain event. The remaining \$1.0 million was paid to the Akcron shareholders in November 2003.

In July 2002, the Company purchased certain assets (the “ISIS Assets”) from Advanced Research Technologies, Inc. (“ART”). The purchase price was approximately \$5.5 million in cash and the Company assumed certain liabilities of \$100,000 related to ART’s Infrared Screening and Inspection Solutions (“ISIS”) Division. The Company incurred \$200,000 in acquisition related charges consisting primarily of legal and accounting fees. All of the assets purchased from ART were written off as part of the discontinuation of the printed circuit board assembly inspection business.

Purchase Price Allocation and Pro Forma Information

The acquisitions of TORC Assets, Quantum Assets, Summit Assets, RTP Assets, Akcron and ISIS Assets were accounted for under the purchase method of accounting. The purchase prices were allocated by management to the assets acquired and liabilities assumed taking into account an independent appraisal of their respective fair values. To determine the value of the developed and core technologies, the expected future cash flows attributed to all existing technology were discounted, taking into account risks related to the characteristics and application of the technology, existing and future markets and assessments of the life cycle stage of the technology. The value of the non-compete agreements was valued at the cash paid up front and the present value of the non-interest payments on the notes issued. The value attributed to the RTP backlog was related to purchase orders that had been received prior to the close of the acquisition, determined as the expected discounted cash flow resulting from the revenue related to the shipment of such orders, less normal profit margins.

The value of in-process research and development was determined based on the expected cash flow attributed to the in-process projects, taking into account revenue that was attributable to previously developed technology, the level of effort to date in the in-process research and development, the percentage of completion of the project and the level of risk associated with the in-process technology. The projects identified as in-process were those that were underway as of the acquisition date and that will, after the applicable closing date, require additional effort in order to establish technological feasibility and have no alternative future uses. These projects have identifiable technological risk factors that indicate that even though successful completion is expected, it is not assured. The value of in-process research and development has been included in the Company’s results of operations.

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The Company applied discount factors to the projected cash flows of the acquired technology in order to determine the present value, based on discount rates with inherent risk and expected growth of the developed, core and in-process technologies. The discount rates used for the developed, core and in-process technologies for each acquisition were as follows:

	<u>TORC Assets</u>	<u>Quantum Assets</u>	<u>Summit Assets</u>	<u>RTP Assets</u>	<u>Akron Assets</u>	<u>ISIS Assets</u>
Developed technology	—	25%	—	15%	15%	15%
Core technology	25%	25%	50%	20%	20%	20%
In-process technology	—	30%	60%	25%	25%	25%

A summary of the allocation of the purchase prices is as follows:

	<u>TORC Assets</u>	<u>Quantum Assets</u>	<u>Summit Assets</u>	<u>RTP Assets</u>	<u>Akron Assets</u>	<u>ISIS Assets</u>
	(In thousands)					
Acquired core technology	\$1,144	\$ 699	\$ 565	\$ 3,764	\$ 225	\$ 196
Acquired developed technology	—	1,006	—	2,673	252	315
Patents	—	—	—	—	—	123
Backlog	—	—	—	557	—	—
Acquired in-process research and development	—	210	625	1,849	410	244
Non-compete agreement	—	769	199	—	—	—
Goodwill	—	—	106	7,386	3,454	3,419
Net fair value of acquired tangible assets and assumed liabilities	<u>114</u>	<u>397</u>	<u>163</u>	<u>2,621</u>	<u>234</u>	<u>1,322</u>
Total	<u>\$1,258</u>	<u>\$3,081</u>	<u>\$1,658</u>	<u>\$18,850</u>	<u>\$4,575</u>	<u>\$5,619</u>

The acquired core technology associated with the TORC Assets is being amortized over four years. The acquired core technology and acquired developed technology associated with the Quantum Assets are being amortized over four years. The acquired core technology associated with the Summit Assets is being amortized over four years. The non-compete agreements from the Summit Assets and Quantum Assets are being amortized over two and three years, respectively. The RTP backlog was amortized to cost of sales at the time revenue was recognized for the related customer orders.

The purchase price for the Summit Assets and RTP Assets resulted in the recognition of goodwill. The primary factor contributing to the recognition of goodwill for Summit Assets was the ability to integrate a workforce with technical expertise. The primary factors contributing to the recognition of goodwill for the RTP Assets included 1) an increase in speed to market through acquisition of the business and associated products and technology, 2) the integration of a workforce with the technical expertise, and 3) a deeper penetration of the Company's current customer base with a broader portfolio of products. The Company expects that the goodwill for both the Summit Assets and RTP Assets will be deductible for tax purposes in the United States.

The purchase price of the TORC Assets and Quantum Assets resulted in the fair value of the identifiable assets acquired exceeding the cost of the acquired business by approximately \$2.2 million and \$676,000, respectively. In accordance with Statement of Financial Accounting Standards No. 141 "Business Combinations," the values of the non-current assets acquired were reduced by a proportionate part of the excess to determine the assigned values.

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The acquired core technology and acquired developed technology associated with the Akron Assets and RTP Assets were partially written off and the goodwill associated with the Akron Assets and RTP Assets was entirely written off as part of the impairment of intangibles and goodwill impairment charges taken in the fourth quarter of fiscal 2003. The remaining acquired core technology and acquired developed technology amounts were written off in the three months ended December 31, 2003 as additional impairment charges. These additional impairment charges were a result of the continuing deterioration in business conditions that included emergence of alternative and competing technologies, shrinkage of the potential total market opportunity due to one of the primary potential customer's decision to pursue an alternative technology and further softness in this particular sector of the market since September 30, 2003. Accordingly, the Company performed an impairment analysis for the remaining acquired intangible assets as required by Statement of Financial Accounting Standards No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets" ("FAS 144").

The following pro forma information presents the results of continuing operations of the Company for the years ended September 30, 2004 and 2003 as if TORC Assets, Quantum Assets, Summit Assets, RTP Assets and Akron Assets had been acquired as of the beginning of the fiscal year of acquisition and the immediately preceding period. Pro forma information related to ISIS Assets has been excluded from the presentation as during 2003 the Company exited from such businesses and the associated results of operations for all periods presented have been included under loss from discontinued operations. The pro forma information does not purport to be indicative of what would have occurred had the acquisition been made as of these dates or of results that may occur in the future.

The pro forma results exclude nonrecurring charges, such as the write-off of purchased in-process research and development, which resulted directly from these transactions. The unaudited pro forma information is as follows:

	Year Ended September 30,		
	2004	2003	2002
		(Unaudited)	
	(In thousands, except per share data)		
Total revenue	\$147,811	\$ 71,734	\$56,262
Net income (loss) from continuing operations	9,494	(26,922)	(117)
Net income (loss)	13,690	(24,010)	2,188
Pro forma income (loss) per share from continuing operations:			
Basic	\$ 0.57	\$ (1.67)	\$ (0.01)
Diluted	\$ 0.56	\$ (1.67)	\$ (0.01)
Pro forma income (loss) per share:			
Basic	\$ 0.82	\$ (1.49)	\$ 0.14
Diluted	\$ 0.80	\$ (1.49)	\$ 0.13

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Note 5 — Goodwill and Other Purchased Intangible Assets

Goodwill

Changes in the carrying amount of goodwill for the years ended September 30, 2004 and 2003 are as follows:

	<u>Flat Panel Display</u>	<u>Discontinued Operations</u>	<u>Total</u>
	(In thousands)		
Balance as of September 30, 2002	\$ 3,454	\$ 15,083	\$ 18,537
Goodwill on businesses acquired during the year	7,492	—	7,492
Adjustments to goodwill, net	(418)	—	(418)
Goodwill impairment charge	<u>(10,010)</u>	<u>(15,083)</u>	<u>(25,093)</u>
Balance as of September 30, 2003	518	—	518
Adjustments to goodwill, net	300	—	300
Goodwill impairment charge	<u>(665)</u>	<u>—</u>	<u>(665)</u>
Balance as of September 30, 2004	<u>\$ 153</u>	<u>\$ —</u>	<u>\$ 153</u>

In the first quarter of fiscal 2003, due to further deterioration of business conditions from the fourth quarter of fiscal 2002, the Company performed an interim analysis of the fair value of the former printed circuit board assembly reporting unit. As a result of this analysis, the Company determined that the goodwill remaining in the former printed circuit board assembly reporting unit was impaired and recorded an impairment charge of \$15.1 million in the quarter ended December 31, 2002. The valuation was performed as of December 31, 2002, using established valuation techniques, specifically, the income and market approaches.

In conjunction with the Company's acquisition of Akcron in September 2002, the Company established a \$1.7 million liability for a portion of the purchase price to be held by the Company as security for indemnification should Akcron breach any of its representations and warranties. For the year ended September 30, 2003, adjustments of \$770,000 were made to the Akcron liability, consisting of \$320,000 for a breach of warranty related to the collectibility of a receivable and \$350,000 related to the non-occurrence of a certain event.

For the year ended September 30, 2003, the Company recorded net adjustments of approximately \$418,000 to reduce goodwill, consisting of the aforementioned \$350,000 reduction to the Akcron liability, which reduced the purchase price with no change to the net assets acquired and reductions of \$83,000 and \$62,000 to the purchase prices of Akcron and the RTP Assets, respectively, for accrued acquisition costs which were subsequently reduced. These reductions were offset by an increase to the Summit Assets goodwill of approximately \$47,000 and other miscellaneous adjustments that increased goodwill by a net of approximately \$5,000, primarily associated with the RTP acquisition.

In the fourth quarter of fiscal 2003, as a result of limited opportunities in the inverter market and uncertainty with regard to flat panel manufacturers' commitment to LTPS technology, the Company performed an impairment analysis of the \$3.1 million and the \$7.4 million of goodwill associated with the Akcron and RTP reporting units, respectively. The valuation was done as of July 1, 2003, using established valuation techniques, specifically, the income and market approaches. As a result of this analysis, the Company recorded goodwill impairment charges of \$2.7 million and \$7.3 million associated with Akcron and RTP, respectively.

In November 2002, as part of the acquisition of the RTP Assets, \$2.0 million was placed into escrow to be released either to the Company or to Intevac depending on the occurrence of certain future events during

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

the escrow period. In September 2003, the Company filed a claim against the escrow for the full \$2.0 million. In October 2003, the Company received \$1.7 million on its claim against the \$2.0 million escrow related to the RTP Asset purchase from Intevac. The claim for the remaining \$300,000 was resolved in favor of Intevac. Because the Company has written off all goodwill resulting from the acquisition of the RTP Assets, the \$300,000 resolved in favor of Intevac resulted in an adjustment to record additional goodwill, which was deemed to be impaired due to continuing deterioration in business conditions during the three month period ended December 31, 2003.

During the three months ended December 31, 2003, the Company recorded a goodwill impairment charge of approximately \$365,000 under the provisions of Statement of Financial Accounting Standards No. 142, "Goodwill and Other Intangible Assets" ("FAS 142"), representing the remaining goodwill associated with its Akcron reporting unit. This impairment charge was a result of the continuing softness in the inverter market since September 30, 2003. Accordingly the Company performed an impairment analysis for the remaining acquired intangible assets as required by FAS 144.

In accordance with FAS 142 and FAS 144, these fiscal 2003 and 2004 impairment charges established new cost basis for the remaining goodwill assets. Goodwill as of September 30, 2004 relates entirely to the Company's purchase of assets from Summit Imaging.

Intangible Assets

Information regarding the Company's intangible assets is as follows:

	Developed Technology	Core Technology	Patents	License Agreement	Non Compete Contract	Backlog	Total
	(In thousands)						
Balance as of September 30, 2002 . . .	\$ 557	\$ 2,878	\$119	\$ —	\$ —	\$ —	\$ 3,554
Acquired during the period	2,673	4,329	—	—	199	557	7,758
Amortization during the period included in continuing operations . .	(552)	(639)	(3)	—	(42)	—	(1,236)
Amortization during the period included in discontinued operations	(16)	(173)	(6)	—	—	—	(195)
Amortization of backlog to cost of revenue in continuing operations during the period	—	—	—	—	—	(557)	(557)
Impairment of purchased intangibles included in continuing operations . .	(1,537)	(1,981)	(30)	—	—	—	(3,548)
Impairment of purchased intangibles included in discontinued operations	(470)	(2,332)	(80)	—	—	—	(2,882)
Balance as of September 30, 2003 . . .	655	2,082	—	—	157	—	2,894
Acquired during the period	987	1,843	—	1,138	770	—	4,737
Amortization during the period included in continuing operations . .	(221)	(219)	—	(190)	(160)	—	(789)
Impairment of purchased intangibles included in continuing operations . .	(589)	(1,500)	—	—	—	—	(2,089)
Balance as of September 30, 2004 . . .	<u>\$ 832</u>	<u>\$ 2,206</u>	<u>\$ —</u>	<u>\$ 948</u>	<u>\$ 767</u>	<u>\$ —</u>	<u>\$ 4,753</u>

In the first quarter of fiscal 2003, based on certain indicators of impairment in the printed circuit board assembly inspection division, the Company performed an impairment analysis of purchased intangible assets and certain other long-lived assets associated with the printed circuit board assembly inspection reporting unit.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

As a result, the Company recorded impairment charges of approximately \$2.9 million related to the unamortized portion of the acquired developed and core technology intangible assets and approximately \$2.9 million related to certain other long-lived assets to reduce the carrying values of purchased intangible assets and other long-lived assets to their respective estimated values.

In the fourth quarter of fiscal 2003, as a result of limited opportunities in the inverter market and uncertainty with regard to flat panel manufacturers' commitment to LTPS technology, the Company performed an impairment analysis of purchased intangible assets and certain other long-lived assets associated with Akron and the RTP reporting units which are both part of the flat panel display reporting unit. As a result, the Company recorded impairment charges of approximately \$3.5 million related to the unamortized portion of the acquired developed technology, core technology and patent intangible assets to reduce the carrying values of purchased intangible assets to their respective estimated values.

During the three months ended March 31, 2004, the Company signed a Termination and Assignment Agreement (the "Agreement") with Ishikawajima-Harima Heavy Industries ("IHI"), the Company's value-added reseller of its flat panel display products in Japan. Under the terms of the Agreement, all prior existing agreements between IHI and the Company were terminated, including IHI's rights to sell and support the Company's flat panel display products on an exclusive basis in Japan. As part of this termination agreement, IHI assigned to the Company the right to use all intellectual property rights associated with the Company's products held by IHI, including any patents and patent applications associated with the intellectual property rights. Additionally, as part of this termination agreement, IHI retained rights to purchase systems from the Company for resale to one particular customer in Japan for purchase orders issued from the customer to IHI prior to April 1, 2005. The Company paid to IHI \$1.5 million, consisting of \$339,000 for IHI's remaining field spares inventory and \$1.1 million for the aforementioned intellectual property rights and other intangible assets. These intangible assets are being amortized over three years, beginning in April 2004.

During the three months ended December 31, 2003, the Company recorded impairment charges of approximately \$2.1 million related to the remaining portion of the acquired developed technology and core technology related to the Akron and RTP reporting units. These charges have been reflected in the results of operations in the quarter ended December 31, 2003 (See Note 4).

In accordance with FAS 142 and FAS 144, these fiscal 2003 and 2004 impairment charges established new cost basis for the remaining goodwill assets.

Future estimated amortization expense relating to intangible assets at September 30, 2004 is approximately \$1.5 million, \$1.5 million, \$1.2 million and \$558,000 in fiscal 2005 through 2009, respectively.

In accessing the recoverability of its intangible assets, the Company must make assumptions regarding estimated future cash flows and other factors to determine the fair value of the respective assets. It is reasonably possible that these estimates, or their related assumptions, may change in the future, in which case the Company may be required to record additional impairment charges for these assets.

Note 6 — Restructuring Charges

During the fourth quarter of fiscal 2002, the Company implemented a restructuring plan to reduce its workforce, consolidate and close certain facilities and write-off related fixed assets. Prior to the date of the financial statements, management approved and implemented the plan and determined the benefits that would be offered to the employees being terminated. All 29 of the affected employees were notified of their termination prior to the date of the financial statements and the benefits package was explained in sufficient detail such that each affected employee was able to determine the type and amount of benefits he or she was entitled to receive. The reductions occurred primarily in the former printed circuit board assembly business segment and related sales and service. The Company recorded a restructuring charge of \$2.6 million, included in loss from discontinued operations, which is comprised of approximately \$550,000 for employee severance

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

and related benefits, \$1.3 million related to excess facilities and \$700,000 of abandoned assets with no future economic benefit. The charge for excess facilities relates to rent obligations under long term operating lease agreements which are to be paid in cash through December 2006. Approximately \$235,000 of the employee severance and related benefits were paid out on September 30, 2002. In the second quarter of fiscal 2003, management settled all remaining employee severance and related benefits. In the second quarter of fiscal 2003, the Company renegotiated the terms of the lease obligation related to one of the excess facilities, resulting in a reduction to the liability of approximately \$237,000. In the third quarter of fiscal 2003, the Company subleased a portion of one of the excess facilities, resulting in a reduction to the liability of approximately \$483,000. These benefits were taken as part of the discontinued operations. As of September 30, 2004 and 2003, the remaining liability associated with the restructuring plan was approximately \$0 and \$364,000, respectively, with the 2003 balance consisting entirely of operating lease obligations associated with excess facilities.

Note 7 — Financial Instruments

Cash Equivalents and Short-term Investments

The fair value of the Company's cash equivalents approximates the carrying amount due to the relatively short maturity of these items. The amortized costs and estimated fair value of securities available-for-sale, by type, as of September 30, 2004 and 2003 are as follows:

	<u>Amortized Cost</u>	<u>Gross Unrealized Gains</u>	<u>Gross Unrealized Losses</u>	<u>Fair Value</u>
	(In thousands)			
September 30, 2004				
Auction rate preferred securities	\$24,370	\$ —	\$ —	\$24,370
Commercial paper and corporate debt securities	<u>34,488</u>	<u>—</u>	<u>(186)</u>	<u>34,302</u>
Amounts included in short-term investments	<u>\$58,858</u>	<u>\$ —</u>	<u>\$(186)</u>	<u>\$58,672</u>
September 30, 2003				
Auction rate preferred securities	\$53,750	\$ —	\$ —	\$53,750
Commercial paper and corporate debt securities	<u>44,224</u>	<u>208</u>	<u>(18)</u>	<u>44,414</u>
Amounts included in short-term investments . . .	<u>\$97,974</u>	<u>\$208</u>	<u>\$(18)</u>	<u>\$98,164</u>

Net realized gains and losses for the years ended September 30, 2004 and 2003 were not material to the Company's financial position or results of operations and have been included in "Interest income and other, net" in the Consolidated Statements of Operations in the respective period.

Photon Dynamics' investment portfolio consists of both corporate and government securities that have a maximum maturity of 4.25 years. The longer the duration of these securities, the more susceptible they are to changes in market interest rates and bond yields. As yields increase, those securities with a lower yield-at-cost show a mark-to market unrealized loss. All unrealized losses are due to changes in interest rates and bond yields. The Company believes it has the ability to realize the full value of all these investments upon maturity. The following table summarizes the fair value and gross unrealized losses of our long-term investments,

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

aggregated by investment instrument and length of time that the individual securities have been in a continuous unrealized loss position at September 30, 2004:

	Total in a Loss Position(1)	
	FMV	Gross Unrealized Losses
	(In thousands)	
Corporate equity	\$14,789	\$ (93)
Municipal bonds	15,907	(93)
Total	<u>\$30,696</u>	<u>\$(186)</u>

(1) Of the total gross unrealized losses, approximately \$28,000 of gross unrealized losses relates primarily to corporate equity with a fair value of \$4.6 million that have been in a loss position for 12 months or more.

The contractual maturities of debt securities classified as available-for-sale as of September 30, 2004, regardless of the consolidated balance sheet classification, are as follows:

	Cost	Estimated Fair Value
	(In thousands)	
Due within one year	\$24,370	\$24,370
Due after one year through two years	27,988	27,802
Due after two years	6,500	6,500
Total cost and estimated fair values	<u>\$58,858</u>	<u>\$58,672</u>

Derivative Financial Instruments

Under its foreign currency risk management strategy, the Company may utilize derivative instruments to protect its interests from unanticipated fluctuations in earnings and cash flows caused by volatility in currency exchange rates. This financial exposure is monitored and managed by the Company as an integral part of its overall risk management program which focuses on the unpredictability of financial markets and seeks to reduce the potentially adverse effects that the volatility of these markets may have on its operating results.

The Company accounts for its derivatives instruments according to Statement of Financial Accounting Standards No. 133, "Accounting for Derivative Instruments and Hedging Activities" ("FAS 133"), which requires that all derivatives be recorded on the balance sheet at fair value. Changes in the fair value of derivatives which do not qualify or are not effective as hedges must be recognized currently in earnings. The Company does not use derivative financial instruments for speculative or trading purposes, nor does it hold or issue leveraged derivative financial instruments.

The Company's international sales are primarily denominated in U.S. dollars. For foreign currency denominated sales, however, the volatility of the foreign currency markets represents risk to the Company's margins. The Company defines its exposure as the risk of changes in the functional-currency-equivalent cash flows (generally U.S. dollars) attributable to changes in the related foreign currency exchange rates. The Company records the mark-to-market change in fair value of its derivative instruments within "Other current liabilities" in the Company's Consolidated Balance Sheet. The Company did not have any forward sales contracts at September 30, 2004. At September 30, 2003, the Company had foreign exchange forward contracts maturing throughout fiscal 2004 to sell approximately \$2.8 million in foreign currencies, primarily Japanese Yen. The Company did not qualify these forward sales contract as hedging instruments, as defined by FAS 133, and, as such, recorded the changes in the fair value of these derivatives immediately in "Interest

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

income and other, net” in the Consolidated Statements of Operations. The Company recorded a net gain of approximately \$208,000 from changes in fair values of these foreign currency exchange contracts in fiscal year 2004 and a net loss of approximately \$208,000 in fiscal year 2003. These gains and losses are included in “Interest income and other, net” in the Consolidated Statements of Operations. The fair value of these open contracts at September 30, 2004 and 2003 were approximately \$0 and \$208,000, respectively, and were included in “Other current liabilities” in the Consolidated Balance Sheet. The Company did not have any forward sales contracts in fiscal 2002.

Note 8 — Income Taxes

The provision for income taxes related to continuing operations consists of the following:

	Year Ended September 30,		
	2004	2003	2002
	(In thousands)		
Current:			
Federal	\$191	\$—	\$—
State	3	—	—
Foreign	412	56	85
Deferred:			
Federal	—	—	—
Provision for income taxes	\$606	\$56	\$85

Income (loss) before income taxes related to continuing operations consists of the following:

	Year Ended September 30,		
	2004	2003	2002
	(In thousands)		
Domestic	\$18,889	\$(17,848)	\$5,683
Foreign	(5,828)	(9,876)	632
Income (loss) before income taxes	\$13,061	\$(27,724)	\$6,315

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The significant components of the Company's deferred income tax assets are as follows:

	September 30,	
	2004	2003
	(In thousands)	
Deferred tax assets:		
Net operating loss carryforwards	\$ 31,875	\$ 26,334
Research credit carryforwards	9,834	8,225
Canadian research and development expenditures	3,722	2,826
Purchased intangibles	696	17,280
Inventory write-downs	3,244	3,003
Depreciation	1,572	837
Allowance for doubtful accounts	202	204
Expenses not currently deductible	5,374	3,255
Deferred revenue	7,173	1,852
Total deferred tax assets	63,692	63,816
Valuation allowance	(63,692)	(63,816)
Net deferred tax assets	—	—
Deferred tax liabilities	—	—
Total net deferred tax assets	\$ —	\$ —

Deferred tax assets reflect net operating loss and credit carryforwards and the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes.

The valuation allowance decreased by approximately \$0.1 million in fiscal 2004 and increased by approximately \$29.8 million in fiscal 2003. As of September 30, 2004, approximately \$15.2 million of the valuation allowance is related to the benefits of stock option deductions, which will be credited to paid-in capital when realized. The current year unrealized benefit generated is approximately \$2.5 million.

As of September 30, 2004, the Company has federal and state net operating loss carryforwards of approximately \$68.3 million and \$12.0 million, respectively. The federal net operating loss carryforwards will begin expiring in fiscal year 2012 if not utilized. The state net operating loss carryforwards will expire at various times beginning in fiscal year 2012 if not utilized. The Company also has federal and state research and development tax credit carryforwards of \$4.5 million and \$3.4 million, respectively. The federal credits will begin expiring in fiscal year 2010 and will continue to expire on an annual basis through fiscal year 2024 if not utilized. The state credits have an indefinite carryforward period.

The Company has cumulative foreign loss carryforwards for Canadian income tax purposes of approximately \$10.1 million. These foreign loss carryforwards will begin expiring in fiscal year 2005 and will continue to expire through 2010 if not utilized.

The Company has cumulative Canadian scientific research and development expenditures ("SR&D") available for deduction in future years of approximately \$10.6 million. These deductible SR&D can be carried forward to reduce future Canadian taxable income indefinitely. The Company also has SR&D credit carryforwards of \$2.8 million, which will expire in fiscal year 2005 and will continue to expire on an annual basis through fiscal year 2013.

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Under certain provisions of the Internal Revenue Code of 1986, as amended, the availability of the Company's domestic net operating loss and tax credit carryforwards may be subject to limitation if it should be determined that there has been a change in ownership of more than 50% of the value of the Company's stock. Such determination could limit the utilization of net operating loss and tax credit carryforwards.

The reconciliation of the U.S. federal statutory income tax rate to the Company's effective income tax rate is as follows:

	Year Ended September 30,		
	2004	2003	2002
	(In thousands)		
Expected provision (benefit) at federal statutory rate	\$ 4,084	\$ (9,723)	\$ 2,181
Foreign income taxes	410	56	85
Election to treat subsidiary stock purchase as asset purchase . .	—	—	11,906
Losses (benefited)/not benefited — Discontinued operations . .	—	(18,171)	(11,423)
Losses (benefited)/not benefited	(3,889)	26,993	(2,868)
Other individually immaterial items	<u>1</u>	<u>901</u>	<u>204</u>
	<u>\$ 606</u>	<u>\$ 56</u>	<u>\$ 85</u>

Note 9 — Shareholders' Equity and Employee Benefits

Common Stock. In August 2002, the Company's Board of Directors approved a stock repurchase program authorizing the Company to repurchase up to an aggregate of \$25.0 million of the Company's common stock. The repurchase program was terminated on January 15, 2003. The repurchases were made from time to time on the open market at prevailing prices, in negotiated transactions off the market or pursuant to a 10b5-1 plan adopted by the Company. The 10b5-1 plan allowed the Company to repurchase its shares during a period in which the Company was in possession of material non-public information, provided that the Company communicated share repurchase instructions to the broker at a time when it was not in possession of such material non-public information. As of September 30, 2002 the Company had repurchased 350,900 shares for an aggregate repurchase price of approximately \$6.9 million. During the period October 1, 2002 through January 15, 2003, the Company repurchased 903,032 shares for an aggregate repurchase price of approximately \$17.7 million. The Company repurchased a total of 1,253,932 shares for an aggregate repurchase price of approximately \$24.6 million under this program.

Warrants. In connection with the acquisition of IRSI in July 2001, the Company assumed the terms of a warrant originally issued by IRSI to Leader Technologies Ltd. The original terms of the warrant provided the holder with the right to purchase 1,300,000 shares of Series E Preferred Stock of IRSI at a purchase price of \$1.20 per share. Upon the closing of the acquisition and pursuant to the terms therein, the warrant became exercisable for 28,766 shares of the Company's common stock at a purchase price of \$54.23 per share. The warrant expires on March 1, 2005.

Stock Option Plans. Under the Company's 1995 and 2001 stock option plans, the Board of Directors may, at its discretion, grant incentive or non-qualified stock options to employees, officers, directors and consultants at prices no less than 100% of the fair market value of shares at the date of grant. The plans also permit the grant of stock bonus awards to qualified individuals. Options generally vest over a period of 50 months commencing from the date of grant and expire ten years after the options are granted.

On January 26, 2004, at the Company's Annual Meeting of Shareholders, the Company's shareholders approved an increase of 400,000 shares reserved for grant under the Company's Amended and Restated 1995 Stock Option Plan from a total of 2,990,943 shares to 3,390,943 shares and an increase of 250,000 shares

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

authorized for issuance under the Company's 1995 Employee Stock Purchase Plan from a total of 1,250,000 shares to 1,500,000 shares.

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

	<u>Available for Grant</u>	<u>Options Outstanding</u>	<u>Weighted-Average Exercise Price</u>
Balances at September 30, 2001	360,032	1,961,809	19.74
Additional shares reserved	650,000	—	—
Options granted	(667,107)	667,107	29.38
Options canceled/expired	559	(114,089)	26.09
Options exercised	<u>—</u>	<u>(288,004)</u>	<u>13.33</u>
Balances at September 30, 2002	343,484	2,226,823	23.11
Additional shares reserved	400,000	—	—
Options granted	(789,083)	789,083	21.20
Options canceled/expired	770,746	(786,231)	14.25
Options exercised	<u>—</u>	<u>(479,037)</u>	<u>28.73</u>
Balances at September 30, 2003	725,147	1,750,638	22.14
Additional shares reserved	400,000	—	—
Options granted	(618,550)	618,550	31.72
Options canceled/expired	352,407	(352,407)	13.27
Options exercised	<u>—</u>	<u>(384,572)</u>	<u>22.74</u>
Balances at September 30, 2004	<u>859,004</u>	<u>1,632,209</u>	<u>\$27.73</u>

The following table summarizes information about stock options outstanding as of September 30, 2004:

Range of Exercise Price	Options Outstanding			Options Vested and Exercisable	
	Number of Shares Outstanding at September 30, 2004	Weighted-Average Remaining Contract Life (In years)	Weighted-Average Exercise Price at September 30, 2004	Number Vested and Exercisable	Weighted-Average Exercise Price at September 30, 2004
\$ 3.00 - \$ 6.13	49,176	4.08	\$ 4.76	49,176	\$ 4.76
10.63 - 16.88	143,983	6.18	14.90	133,291	14.75
17.75 - 23.63	219,325	7.01	19.18	139,179	19.47
24.43 - 26.24	274,260	7.94	25.51	131,624	25.64
27.58 - 29.31	370,926	9.01	28.36	73,266	28.73
29.69 - 47.31	561,289	8.51	36.31	238,841	39.82
59.00 - 59.00	<u>13,250</u>	<u>5.74</u>	<u>59.00</u>	<u>13,250</u>	<u>59.00</u>
<u>\$ 3.00 - \$59.00</u>	<u>1,632,209</u>	<u>7.97</u>	<u>\$27.73</u>	<u>778,627</u>	<u>\$26.56</u>

The weighted average fair value of options granted in fiscal 2004, 2003 and 2002 was \$21.63, \$15.14 and \$17.33, respectively. Options exercisable were 778,627, 769,177 and 906,589 as of September 30, 2004, 2003 and 2002, respectively.

Employee Purchase Plan. The Company's employee stock purchase plan provides that eligible employees may contribute up to 10% of their base earnings, through accumulated payroll deductions, toward the semi-annual purchase of the Company's common stock. Participants purchase shares on the last day of each offering period. The price at which shares are purchased is equal to 85% of the lower of the fair market value

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

of a share of common stock on the first day of the two-year offering period or the purchase date. In fiscal 2004, 2003, and 2002, employees purchased 84,785, 96,601 and 48,087 shares, respectively. At September 30, 2004, 846,868 shares were reserved and available for issuance under the plan. The weighted-average fair value of shares issued in fiscal 2004, 2003, and 2002 was \$15.80, \$9.40 and \$16.92 respectively.

Other Employee Benefits Plans. The Company has a retirement savings plan that qualifies as a deferred salary arrangement under Section 401(k) of the Internal Revenue Code. In fiscal 2004 and 2003, but not fiscal 2002, the Company matched 50% on the first 7% up to \$3,500 per year of an eligible employee's contribution. The total charge to operations under the 401(k) program was approximately \$411,000, \$282,000, and \$0 in fiscal 2004, 2003 and 2002, respectively.

During fiscal 2004, the Company recorded approximately \$206,000 in stock ownership expense related to options granted to a consultant. The fair value of these options was computed using the Black-Scholes option-pricing model. The Options are subject to variable accounting and will be revalued until they are fully vested and exercised. During fiscal 2003, the Company recorded approximately \$174,000 in stock ownership expense related to the acceleration of options for two former officers of the Company. The stock ownership expense for this option acceleration was computed using intrinsic value in accordance with APB 25. During fiscal 2003, the Company recorded approximately \$190,000 in stock ownership expense related to options granted to a consultant who was subsequently hired by the Company. The fair value was computed using the Black-Scholes option-pricing model. The options are subject to variable accounting and would be revalued until they are fully vested and exercised.

Shares Reserved. The Company has reserved shares of common stock for future issuance as follows:

	September 30, 2004
Stock options outstanding	1,632,209
Stock options, available for grant	859,004
Shares for employee stock purchase plan	846,868
Warrants	28,766
Total	3,366,847

Note 10 — Net Income (Loss) Per Share

Basic earnings per share is calculated using the weighted average number of shares of common stock outstanding. Diluted earnings per share is computed in the same manner and also gives effect to all dilutive potential common shares outstanding during the period. Common equivalent shares consist of stock options issued to employees under employee stock option plans and warrants.

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The following table sets forth the computation of basic and diluted net income (loss) per share:

	Year Ended September 30,		
	2004	2003	2002
	(In thousand, except per share data)		
Numerator:			
Net income (loss) from continuing operations before discontinued operations	\$12,455	\$(27,780)	\$ 6,230
Net loss from discontinued operations	<u>(1,391)</u>	<u>(44,592)</u>	<u>(28,032)</u>
Net income (loss)	<u>\$11,064</u>	<u>\$(72,372)</u>	<u>\$(21,802)</u>
Denominator:			
Weighted average shares for basic net income (loss) per share	16,631	16,089	15,923
Effect of dilutive securities:			
Employee stock options	<u>456</u>	<u>—</u>	<u>868</u>
Weighted average shares for diluted net income per share	<u>17,087</u>	<u>16,089</u> (1)	<u>16,791</u>
Earnings per share:			
Basic net income (loss) per share:			
Net income (loss) from continuing operations ..	\$ 0.75	\$ (1.73)	\$ 0.39
Net loss from discontinued operations	<u>(0.08)</u>	<u>(2.77)</u>	<u>(1.76)</u>
Net income (loss) per share	<u>\$ 0.67</u>	<u>\$ (4.50)</u>	<u>\$ (1.37)</u>
Diluted net income (loss) per share:			
Net income (loss) from continuing operations ..	\$ 0.73	\$ (1.73)	\$ 0.37
Net loss from discontinued operations	<u>(0.08)</u> (2)	<u>(2.77)</u>	<u>(1.67)</u> (2)
Net income (loss) per share	<u>\$ 0.65</u>	<u>\$ (4.50)</u>	<u>\$ (1.30)</u>

(1) The effect of dilutive securities from employee stock options and warrants to purchase 479,000 shares at September 30, 2003, was not included in the computation of diluted earnings per share as the effect is antidilutive due to net losses.

(2) In accordance with Statement of Accounting Standards No. 128 "Earnings Per Share," the Company included the effect of dilutive securities from employee stock options and warrants to purchase 456,000 and 868,000 shares in its calculation of 2004 and 2002 diluted net loss from discontinued operations, respectively.

At September 30, 2004, 2003 and 2002, options to purchase 243,000, 982,000 and 275,000 shares, respectively, were not included in the computation of diluted earnings per share because the exercise price was greater than the average market price of common shares for the respective periods.

Note 11 — Commitments and Contingencies

Facilities

In August 2003, the Company signed a lease agreement for a 128,520 square-foot building in San Jose, California into which it consolidated its San Jose facilities in the second quarter of fiscal 2004. The lease on the prior San Jose location terminated concurrently with the inception date of the new lease. The new facility

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

is leased under a non-cancelable operating lease that expires in 2010, with two renewal options at fair market value for additional five year periods. In fiscal 2002, the Company renewed the lease on its Markham, Ontario (Canada) facilities under a non-cancelable operating lease that expires in fiscal 2007. The Company leases its Austin, Texas facility under a non-cancelable operating lease that expires in fiscal 2005. The Company also leases office facilities in various foreign locations under non-cancelable operating leases that range in terms from one to two years. The Company also leases equipment under operating leases.

Total rent expense under all operating leases was approximately \$2.4 million, \$1.8 million and \$1.6 million for the years ended September 30, 2004, 2003 and 2002, respectively.

Future minimum lease commitments under operating leases at September 30, 2004, net of expected sublease income, are approximately \$3.6 million, \$3.4 million, \$3.0 million, \$2.7 million, and \$2.6 million in fiscal 2005 through 2009, respectively. Sublease income is approximately \$141,000, \$141,000 and \$35,000 in fiscal 2005 through 2007, respectively.

Line of Credit

In March 2000, the Company entered into a bank line of credit ("line of credit") which had an initial term of one year. The Company has renegotiated the line of credit on an annual basis and currently has a \$4.0 million borrowing capacity on the line of credit with an interest rate of floating prime, expiring in October 2005. The line of credit is secured by substantially all of the Company's assets and contains certain financial and other covenants. At September 30, 2004, no amounts were outstanding under the line of credit.

Purchase Agreements

The Company maintains certain open inventory purchase commitments with its suppliers to ensure a smooth and continuous supply chain for key components. The Company's liability in these purchase commitments is generally restricted to a forecasted time horizon as mutually agreed upon between the parties. The Company's open inventory purchase commitments were \$27.3 million as of September 30, 2004.

Retention Bonus

The Company entered into an agreement with certain key employees of Summit Imaging, Inc. whereby the Company will pay incentive bonuses to retain the identified employees. The agreement provides for a total bonus payment of \$1.5 million, to be paid out in four annual installments beginning on April 1, 2004. As of September 30, 2004 and 2003, the Company had accrued approximately \$188,000 and \$170,000, respectively, through charges to earnings which is included in "Other current liabilities" in the financial statements.

The Company entered into an agreement with certain key employees of Quantum Composers, Inc. whereby the Company will pay incentive bonuses to retain the identified employees. The agreement provides for a total bonus payment of \$398,000, to be paid out in four annual installments. As of September 30, 2004, the Company had accrued approximately \$71,000, through charges to earnings which is included in "Other current liabilities" in the financial statements.

The Company entered into an agreement with certain key employees of Tucson Optical Research Corporation whereby the Company will pay incentive bonuses to retain the identified employees. The agreement provides for a total bonus payment of \$200,000, to be paid out in four annual installments. As of September 30, 2004, the Company had accrued approximately \$11,000, through charges to earnings which is included in "Other current liabilities" in the financial statements.

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Warranty Obligations

The Company generally offers warranty coverage for a period of one year from the date of final customer acceptance. Upon product shipment, the Company records the estimated cost of warranty coverage, primarily material and labor to repair and service the equipment. Factors that affect the Company's warranty liability include the number of installed units under warranty, product failure rates, material usage rates and the efficiency by which the product failure is corrected. The Company periodically assesses the adequacy of its recorded warranty liability and adjusts the amount as necessary.

Changes in the Company's product liability during fiscal 2004 and 2003 were as follows:

	Fiscal 2004	Fiscal 2003
	(In thousands)	
Beginning balance	\$ 2,363	\$ 2,383
Estimated warranty cost of new shipments during the period.....	6,744	2,883
Warranty charges during the period.....	(4,588)	(2,523)
Changes in liability for pre-existing warranties, including expirations	1,675	(530)
Liability assumed as a result of the acquisition of the RTP Assets.....	—	150
Ending balance	\$ 6,194	\$ 2,363

Legal Proceedings

The Company and certain of its directors and officers have been named as defendants in a lawsuit captioned *Amtower v. Photon Dynamics, Inc.*, No. CV797876, filed on April 30, 2001 in the Superior Court of the State of California, County of Santa Clara. The plaintiff, who previously served as one of the Company's officers, has asserted several causes of action arising out of alleged misrepresentations made to plaintiff regarding the existence and enforcement of the Company's insider trading policy. The plaintiff is seeking damages of approximately \$17.7 million for defendants' alleged refusal to allow plaintiff to sell shares of the Company's stock in May of 2000, plus unspecified emotional distress and punitive damages. On December 6, 2001, the court granted defendants' motion to dismiss the complaint for failure to allege facts sufficient to state a cause of action, with leave to file an amended complaint. On January 17, 2002, plaintiff filed his amended complaint and defendants again moved to dismiss the action. On June 27, 2002, the court issued an order granting in part and denying in part the motion, and further granted plaintiff an opportunity to restate certain claims. On October 1, 2002, plaintiff filed his Second Amended Complaint, which was heard on April 8, 2003, and defendants again moved to dismiss the action. On April 21, 2003, the court granted in part and denied in part the Company's motion. The pleadings have been finalized and certain claims against the Company and the individual defendants will proceed. The parties currently are engaged in discovery, and a court-mandated mediation session on July 30, 2004 did not resolve the case. Trial is scheduled to commence on March 7, 2005. The Company believes the plaintiff's case is without merit and intends to defend this action vigorously. Although the Company cannot predict the outcome of this litigation, the Company believes that any adverse judgment in this litigation could have a material adverse effect on the Company's financial condition or results of operations.

The Company has been named as a defendant in a lawsuit captioned *Sanmina SCI Corporation v. Photon Dynamics, Inc.*, No. CV 013715, filed on February 3, 2004 in the Superior Court of the State of California, County of Santa Clara. The plaintiff in this action, who previously was a third-party manufacturer of the Company, has asserted several causes of action arising out of the alleged nonperformance by the Company of the manufacturing outsourcing agreement between the Company and the plaintiff, and is seeking approximately \$3.1 million in compensatory damages and punitive damages in an unknown amount. The Company responded to the complaint on March 19, 2004, by filing an answer and cross complaint seeking damages of at

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

least \$135,000. The Company amended its cross complaint on June 26, 2004. The parties attempted to mediate this dispute, which attempt was not successful. The parties are currently engaged in discovery. Although the Company cannot predict the outcome of this litigation, the Company believes that any adverse judgment in this litigation would not have a material adverse effect on the Company's financial condition or results of operations.

The Company was named as defendant in a lawsuit captioned *Thomason v. Photon Dynamics, Inc. et al.*, No. 02CC03568, filed on February 28, 2002 in the Superior Court of the State of California, County of Orange. The plaintiff in this action purported to assert that he was wrongly not allowed to exercise certain stock options and sought damages of approximately \$1.1 million and punitive damages in an unknown sum. On April 23, 2004, the parties to the litigation settled all litigation between them and the Company paid \$750,000 to the plaintiff as part of the settlement agreement. The charge for this settlement is included in discontinued operations for the Printed Circuit Board Assembly Inspection Business in the Consolidated Statements of Operations.

The Company filed a lawsuit captioned *Photon Dynamics, Inc. vs. PanelVision Technology and Guillermo Toro-Lira*, No. CO202563PJH on May 28, 2002, in the U.S. District Court for the Northern District of California, County of Santa Clara. The Company was alleging infringement of a U.S. Patent owned by it and was seeking full compensatory damages and an injunction against the defendants. On July 17, 2002, the defendants answered the Company's complaint and asserted a counterclaim alleging damages of at least \$6.0 million in compensatory damages for loss of business. On January 23, 2003, the Company added Shimadzu Corporation as an additional defendant. On April 23, 2003, the defendants added additional counterclaims against the Company alleging violations of the antitrust laws and requesting the damages sought to be trebled. Subsequently, the court bifurcated the antitrust claims of Toro-Lira and Shimadzu Corporation against the Company, thus deferring any consideration of these claims until the conclusion of the patent infringement issues. On October 16, 2003, the parties to the litigation settled all litigation between them regarding US Patent 5,081,687, US Reissue Patent No.37,847 and Japanese Patent 3292990. Pursuant to the agreement between the parties, Shimadzu Corporation, companies affiliated with Shimadzu, and customers of Shimadzu are irrevocably licensed world-wide under US Patent 5,081,687, US Reissue Patent No. 37,847 and Japanese Patent 3292990 and any corresponding patents to manufacture, use, and sell e-beam based panel test equipment designed by or for Shimadzu. All other terms of the settlement agreement are confidential. The proceeds of this settlement are included in "Interest income and other, net," in the Consolidated Statements of Operations.

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

Note 12 — Segment Reporting and Geographic Information

Statement of Accounting Financial Standards No. 131, "Disclosures About Segments of an Enterprise and Related Information," establishes standards for reporting information about operating segments. Operating segments are defined as components of an enterprise about which separate financial information is available that is evaluated regularly by the chief operating decision maker, or decision making group, in deciding how to allocate resources and in assessing performance of the company. The Company's chief operating decision maker is considered to be the Company's Chief Executive Officer ("CEO"). The CEO reviews the Company's financial information presented on a consolidated basis substantially similar to the accompanying consolidated financial statements. Therefore, the Company has concluded that it operates in

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

one segment, the manufacture and servicing of flat panel display products, and accordingly has provided only the required enterprise wide disclosures.

The Company sells its products for the flat panel display industry directly to customers in Korea, Taiwan, China and Japan. The Company also, on a limited basis, sells in Japan through a value-added distributor, Ishikawajima-Harima Heavy Industries Co., Ltd. ("IHI"). For geographical reporting, revenue is attributed to the geographic location to which the product was shipped. Long-lived assets consist primarily of property, plant and equipment, and are attributed to the geographic location in which they are located.

The following is a summary of revenue by geographic area based on location where the product was shipped:

	<u>Year Ended September 30,</u>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
	(In thousands)		
Revenue:			
Korea	\$ 68,510	\$47,024	\$28,132
Taiwan	62,132	19,125	16,546
Japan	11,017	1,047	4,664
China	<u>1,610</u>	<u>—</u>	<u>—</u>
Total	<u>\$143,269</u>	<u>\$67,196</u>	<u>\$49,342</u>

The following is a summary of revenue by product line (as a percentage of total revenue):

	<u>Year Ended September 30,</u>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
Revenue:			
ArrayChecker™	75%	81%	72%
ArraySaver™	19%	4%	15%
RTP systems	1%	6%	0%
Spares and other	<u>5%</u>	<u>9%</u>	<u>13%</u>
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>

Sales to individual unaffiliated customers in excess of 10% of total revenue were as follows:

	<u>Year Ended September 30,</u>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
	(Percent of revenue)		
Customer A	39%	43%	48%
Customer B	*	23%	*
Customer C	14%	*	*
Customer E	*	13%	13%
Customer F	10%	*	*
Customer H	10%	*	*

* Customer accounted for less than 10% of total revenue for the period.

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Accounts receivable from individual unaffiliated customers in excess of 10% of total gross accounts receivable were as follows:

	<u>September 30,</u>	
	<u>2004</u>	<u>2003</u>
	(Percent of gross accounts receivable)	
Customer A	29%	25%
Customer C	16%	*
Customer D	13%	*
Customer F	12%	*
Customer H	*	58%

* Customer accounted for less than 10% of total gross accounts receivable for the period.

Long-lived assets by geographical area were as follows:

	<u>Year Ended</u> <u>September 30,</u>	
	<u>2004</u>	<u>2003</u>
	(In thousands)	
United States	\$22,889	\$13,709
Canada	1,947	1,815
Other	<u>407</u>	<u>186</u>
Total	<u>\$25,243</u>	<u>\$15,710</u>

Note 13 — Related Party Transactions

A full recourse loan of \$250,000 plus accrued interest of approximately \$45,000 was outstanding at September 30, 2003, from a former officer of the Company. The loan, secured by shares of the Company's stock held by the individual, was repaid in full in fiscal 2004. There were no loans due from any other employees of the Company as of September 30, 2004.

During fiscal 2004 and 2003, the Company paid \$138,000 and \$18,000, respectively, to one board member for consulting services rendered to the Company. During fiscal 2004 and 2003, the Company recorded approximately \$206,000 and \$190,000, respectively, in stock ownership expense related to options granted to this consultant.

Note 14 — Notes Payable

Photon Dynamics Canada, Inc. had a loan payable of approximately \$341,000 to the National Research Council of Canada (NRC). The loan amount was advanced to IPS under a program for pre-commercialization assistance in the development of glass inspection technology. Under this agreement, IPS would repay the NRC based on a percentage of gross revenue earned, on a quarterly basis, beginning on October 1, 2002 and up to and including July 1, 2004. The amount repayable to NRC was capped at 150% of the contribution amount received by IPS. At September 30, 2004 and 2003, approximately \$348,000 and \$316,000, respectively, was outstanding and was classified in "Other current liabilities" in the Consolidated Balance Sheet. As a result of the discontinuation of the high quality glass and cathode ray tube inspection business, the loan is to be repaid in full in fiscal 2005.

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

In the third quarter of fiscal 2004, the Company issued a \$2.0 million promissory note in connection with the acquisition of Quantum Composers, Inc. The note is non-interest bearing and matures on June 25, 2007. The discount on the note of \$127,000 was calculated based on an imputed interest rate of 6%. The outstanding balance on the promissory note, net of unamortized discount, was approximately \$1.9 million at September 30, 2004.

In the fourth quarter of fiscal 2004, the Company issued a \$625,000 promissory note in connection with the acquisition of TORC. The note is non-interest bearing and matures on August 6, 2005. The discount on the note of \$17,000 was calculated based on an imputed interest rate of 3%. The outstanding balance on the promissory note, net of unamortized discount, was approximately \$608,000 at September 30, 2004.

Akron Corporation, Ltd. had two revolving credit agreements for unsecured borrowings in local currency up to approximately \$260,000. The first agreement expired in October 2003, and the second in March 2004. The agreements provided for borrowings at 7.5% and 1.5%, and included financial and other covenants with which Akron was in compliance at September 30, 2003. Approximately \$261,000 was outstanding under these agreements at the end of fiscal 2003 and was included in "Other current liabilities" in the Consolidated Balance Sheet. These agreements were repaid in full in fiscal 2004.

The following table summarizes the notes payable that we have at September 30, 2004.

	Payments Due by Fiscal Year						
	Total	2005	2006	2007	2008	2009	Thereafter
Notes payable	\$2,829	\$1,446	\$1,383	\$—	\$—	\$—	\$—

Note 15 — Quarterly Consolidated Results of Operations (Unaudited)

The following tables contain selected unaudited consolidated statements of operations data for each quarter of fiscal 2004 and 2003:

	Three Months Ended			
	December 31, 2003	March 31, 2004	June 30, 2004	September 30, 2004
	(In thousands, except per share data)			
Revenue	\$24,499	\$26,478	\$38,452	\$53,840
Cost of revenue	<u>13,412</u>	<u>14,183</u>	<u>20,711</u>	<u>35,663</u>
Gross margin	11,087	12,295	17,741	18,177
Operating expenses:				
Research and development	5,810	6,144	8,031	9,716
Selling, general and administrative	4,598	3,966	4,594	4,622
Goodwill impairment charge	665	—	—	—
Impairment of purchased intangibles	2,089	—	—	—
Impairment of fixed assets	234	—	—	—
(Gain) loss on sale of fixed assets	(10)	(20)	(419)	22
Acquired in-process research and development	—	—	210	—
Amortization of intangible assets	<u>201</u>	<u>60</u>	<u>155</u>	<u>373</u>
Total operating expenses	13,587	10,150	12,571	14,733

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

	Three Months Ended			
	December 31, 2003	March 31, 2004	June 30, 2004	September 30, 2004
	(In thousands, except per share data)			
Income (loss) from operations	(2,500)	2,145	5,170	3,444
Interest income and other, net	<u>3,771</u>	<u>334</u>	<u>389</u>	<u>308</u>
Income before income taxes	1,271	2,479	5,559	3,752
Provision for income taxes	<u>362</u>	<u>64</u>	<u>134</u>	<u>46</u>
Income from continuing operations	909	2,415	5,425	3,706
Income (loss) from discontinued operations	<u>47</u>	<u>(1,276)</u>	<u>(265)</u>	<u>103</u>
Net income	<u>\$ 956</u>	<u>\$ 1,139</u>	<u>\$ 5,160</u>	<u>\$ 3,809</u>
Net income per share from continuing operations:				
Basic	<u>\$ 0.06</u>	<u>\$ 0.15</u>	<u>\$ 0.33</u>	<u>\$ 0.22</u>
Diluted	<u>\$ 0.05</u>	<u>\$ 0.14</u>	<u>\$ 0.32</u>	<u>\$ 0.22</u>
Net income (loss) per share from discontinued operations:				
Basic	<u>\$ 0.00</u>	<u>\$ (0.08)</u>	<u>\$ (0.02)</u>	<u>\$ 0.01</u>
Diluted	<u>\$ 0.00</u>	<u>\$ (0.07)</u>	<u>\$ (0.02)</u>	<u>\$ 0.01</u>
Net income per share:				
Basic	<u>\$ 0.06</u>	<u>\$ 0.07</u>	<u>\$ 0.31</u>	<u>\$ 0.23</u>
Diluted	<u>\$ 0.06</u>	<u>\$ 0.07</u>	<u>\$ 0.30</u>	<u>\$ 0.22</u>
Weighted average number of shares:				
Basic	16,461	16,572	16,663	16,826
Diluted	17,174	17,172	17,071	16,977

	Three Months Ended			
	December 31, 2002	March 31, 2003	June 30, 2003	September 30, 2003
	(In thousands, except per share data)			
Revenue	\$ 19,162	\$ 9,058	\$17,996	\$ 20,980
Cost of revenue	<u>11,569</u>	<u>7,909</u>	<u>11,789</u>	<u>12,804</u>
Gross margin	7,593	1,149	6,207	8,176
Operating expenses:				
Research and development	4,487	5,419	6,313	6,567
Selling, general and administrative	3,068	3,776	3,176	3,743
Goodwill impairment charge	—	—	—	10,010
Impairment of purchased intangibles	—	—	—	3,548
Acquired in-process research and development	1,849	—	625	—
Amortization of intangible assets	<u>260</u>	<u>367</u>	<u>408</u>	<u>201</u>
Total operating expenses	9,664	9,562	10,522	24,069

PHOTON DYNAMICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

	Three Months Ended			
	December 31, 2002	March 31, 2003	June 30, 2003	September 30, 2003
	(In thousands, except per share data)			
Loss from operations	(2,071)	(8,413)	(4,315)	(15,893)
Interest income and other, net	<u>824</u>	<u>717</u>	<u>955</u>	<u>472</u>
Loss before income taxes	(1,247)	(7,696)	(3,360)	(15,421)
Provision for income taxes	<u>11</u>	<u>37</u>	<u>3</u>	<u>5</u>
Loss from continuing operations	(1,258)	(7,733)	(3,363)	(15,426)
Income (loss) from discontinued operations	<u>(23,760)</u>	<u>(15,280)</u>	<u>(5,607)</u>	<u>55</u>
Net loss	<u><u>\$(25,018)</u></u>	<u><u>\$(23,013)</u></u>	<u><u>\$(8,970)</u></u>	<u><u>\$(15,371)</u></u>
Net loss per share from continuing operations:				
Basic	<u>\$ (0.08)</u>	<u>\$ (0.49)</u>	<u>\$ (0.21)</u>	<u>\$ (0.95)</u>
Diluted	<u>\$ (0.08)</u>	<u>\$ (0.49)</u>	<u>\$ (0.21)</u>	<u>\$ (0.95)</u>
Net income (loss) per share from discontinued operations:				
Basic	<u>\$ (1.47)</u>	<u>\$ (0.96)</u>	<u>\$ (0.35)</u>	<u>\$ 0.00</u>
Diluted	<u>\$ (1.47)</u>	<u>\$ (0.96)</u>	<u>\$ (0.35)</u>	<u>\$ 0.00</u>
Net loss per share:				
Basic	<u><u>\$ (1.55)</u></u>	<u><u>\$ (1.44)</u></u>	<u><u>\$ (0.56)</u></u>	<u><u>\$ (0.95)</u></u>
Diluted	<u><u>\$ (1.55)</u></u>	<u><u>\$ (1.44)</u></u>	<u><u>\$ (0.56)</u></u>	<u><u>\$ (0.95)</u></u>
Weighted average number of shares:				
Basic	16,156	15,944	16,003	16,176
Diluted	16,156	15,944	16,003	16,176

Item 9. *Changes in and Disagreements with Accountants on Accounting and Financial Disclosure*

There were no changes in or disagreements with Ernst & Young LLP on accounting and financial disclosure required to be reported under this Item 9.

Item 9A. *Controls and Procedures*

Evaluation of Disclosure Controls and Procedures. Based on our management's evaluation (with the participation of our chief executive officer and chief financial officer), as of the end of the period covered by this report, our chief executive officer and chief financial officer have concluded that, subject to limitations described below, our disclosure controls and procedures (as defined in Securities Exchange Act Rules 13a-15(e) and 15d-15(e)) are effective to provide reasonable assurance that the information required to be disclosed by us in reports that we file or submit under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms.

Identification of Material Weaknesses. During the fourth fiscal quarter our financial resources became significantly strained due to the combination of the following factors: (a) the operational workload associated with the major production ramp we experienced; (b) the increasing demands in preparation for our fiscal year 2005 compliance with Section 404 of the Sarbanes Oxley Act of 2002; and (c) the full impact of the transfer of certain operational activities to our Japanese subsidiary resulting from the termination of our relationship with IHI in February 2004. As a result, in our fiscal 2005 planning process we identified that it would be advisable to hire additional resources in the areas of cost accounting, general accounting and international accounting. We had previously added resources in our third fiscal quarter and early in our fourth fiscal quarter in the areas of revenue accounting, tax and SEC compliance and reporting. Although we recognized the advisability of adding more resources, we did not believe at that time that the lack of such resources would have a material impact on our ability to produce accurate financial statements. However, throughout the year end close and audit processes, a number of issues were discovered by us and our independent auditors which resulted in adjustments in our financial statements. Upon discovery of these issues, we performed additional procedures to ensure the accuracy of our financial statements. In addition, we analyzed the nature of the adjustments and identified the associated internal control weaknesses. Additionally, we have reviewed the internal controls associated with other processes and have concluded that the adjustments discovered throughout the year end close and audit process were the result of material weaknesses in our internal control over the financial close process. The material weaknesses consist of failures to ensure:

- an appropriate level of review of those significant financial statement accounts requiring a higher degree of judgment and estimates, in part due to the need for more personnel as well as more highly skilled and trained personnel in certain positions;
- a formal review process of the financial statements and supporting schedules of our international subsidiaries; and
- consistent processes and controls over revenue transactions entered into and recorded by our Japanese subsidiary with those processes and controls in place in the U.S.

In addition to the material weaknesses identified above, we also identified a number of internal control deficiencies that we have concluded do not constitute material weaknesses.

During the course of the year end audit, differences between amounts recorded by us in the financial statements and amounts that our independent auditors believed were required to be recorded under U.S. generally accepted accounting principles in our financial statements were recorded by management. We reviewed the nature of the material weaknesses and the impact of such issues on prior quarters and concluded that the material weaknesses did not exist in prior quarters and therefore the adjustments we recorded only affected the fourth quarter.

We are currently searching for qualified candidates for those positions identified as being advisable additions and strengthening the controls around those processes determined to be material weaknesses or

internal control deficiencies. We currently are unable to determine when these material weaknesses and internal control deficiencies will be fully remediated. However, we do not believe that we will be able to do so by the end of our first quarter of fiscal 2005, and expect to report in our Quarterly Report on Form 10-Q for the first quarter of fiscal 2005 that material weaknesses and internal control deficiencies continue to exist.

Changes in Internal Control over Financial Reporting. Other than as set forth above, there was no change in our internal control over financial reporting during the quarter ended September 30, 2004, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Limitations on the Effectiveness of Disclosure Controls and Procedures. Our management, including the chief executive officer and chief financial officer, do not expect that our disclosure controls and procedures or internal control over financial reporting will prevent all error and all fraud. A control system no matter how well designed and implemented, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues within a company are detected. The inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistakes. Controls can also be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of the controls. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Item 9B. *Other Information*

Not applicable.

PART III

Certain information required by Part III of this Form 10-K is omitted from this report because registrant will file a definitive Proxy Statement within 120 days after the end of its fiscal year pursuant to Regulation 14A for its 2005 Annual Meeting of Shareholders to be held in March 2005 (the "Proxy Statement"), and the information included therein is incorporated herein by reference.

Item 10. *Directors and Executive Officers of the Registrant*

Information with respect to Directors and Executive Officers may be found under the caption "Executive Officers of the Registrant" at the end of Item 1 of this Annual Report on Form 10-K, and in the section entitled "Proposal 1 — Election of Directors" appearing in the Proxy Statement. Such information is incorporated herein by reference. Information with respect to compliance with Section 16(a) of the Securities Exchange Act of 1934 and our code of ethics may be found in the sections entitled "Security Ownership of Certain Beneficial Owners and Management — Section 16(A) Beneficial Ownership Reporting Compliance" and "Proposal 1 — Election of Directors — Code of Business Conduct and Ethics," respectively, appearing in the Proxy Statement. Such information is incorporated herein by reference.

Item 11. *Executive Compensation*

The information required by this Item is incorporated herein by reference to the information from the Proxy Statement under the section entitled "Executive Compensation."

Item 12. *Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters*

The information required by this Item with respect to security ownership of certain beneficial owners and management is incorporated herein by reference to the information from the Proxy Statement under the section entitled "Security Ownership of Certain Beneficial Owners and Management." The information required by this Item with respect to securities authorized for issuance under our equity compensation plans is incorporated herein by reference to the information from the Proxy Statement under the section entitled

“Proposal 2 — Approval of the Photon Dynamics, Inc. 2005 Equity Incentive Plan — Equity Compensation Plan Information.”

Item 13. *Certain Relationships and Related Transactions*

The information required by this Item is incorporated herein by reference to the information from the Proxy Statement under the section entitled “Executive Compensation — Certain Relationships and Related Transactions.”

Item 14. *Principal Accounting Fees and Services*

The information required by this Item is incorporated herein by reference to the information from the Proxy Statement under the section entitled “Proposal 5 — Ratification of Selection of Independent Registered Public Accounting Firm.”

Consistent with Section 10A(i)(2) of the Securities Exchange Act of 1934, as added by Section 202 of the Sarbanes-Oxley Act of 2002, we are responsible for listing the non-audit services approved by our Audit Committee to be performed by Ernst & Young LLP, our independent registered public accounting firm. Non-audit services are defined as services other than those provided in connection with an audit or a review of our financial statements and other than those services that are normally provided in connection with statutory and regulatory filings or engagements. In the period covered by this report, our Audit Committee pre-approved the following non-audit services rendered, currently being rendered, or to be rendered, to us by Ernst & Young LLP:

- consultations relating to the implementation of Section 404 of the Sarbanes-Oxley Act of 2002;
- tax services in connection with a Section 382 Study;
- services, which shall not include “legal services”, in connection with the dissolution of the subsidiary in Shanghai, China;
- tax services in connection with ex-patriot work;
- preparation of certain foreign tax returns, and tax advice in preparing for and in connection therewith; and
- accounting advice on the proper recording of various transactions entered into, or to be entered into, by us.

PART IV

Item 15. *Exhibits and Financial Statement Schedules*

(a)1. *Financial Statements*

See Index to Consolidated Financial Statements in Item 8 of this Annual Report on Form 10-K, which is incorporated herein by reference.

2. *Financial Statement Schedules*

The following financial statement schedule is filed as part of this annual report on Form 10-K. All other financial statement schedules have been omitted because they are either not applicable or the required information is shown in the consolidated financial statements or notes thereto.

SCHEDULE II
PHOTON DYNAMICS, INC.
VALUATION AND QUALIFYING ACCOUNT

	Year Ended September 30,				Balance at End of Period
	Balance at Beginning of Period	Charged to Expense	Charged to Other Accounts	Deductions	
	(In thousands)				
Allowance for doubtful accounts:					
2004	\$ 726	—(1)	—	229(2)	\$ 497
2003	\$1,466	3,132(1)	—	3,872(2)	\$ 726
2002	\$1,897	111(1)	—	542(2)	\$1,466

(1) Includes charges to expense from discontinued operations of approximately \$0, \$2.9 million and \$34,000 in fiscal 2004, 2003 and 2002, respectively.

(2) Includes write-offs of uncollectible accounts from discontinued operations of approximately \$0, \$3.9 million and \$0 in 2004, 2003 and 2002, respectively.

3. Exhibits

<u>Number</u>	<u>Exhibit</u>
2.3(E)	Agreement and Plan of Merger, dated as of July 6, 2001, by and among the Registrant; Iris Acquisition, LLC, a Texas limited liability company; Intelligent Reasoning Systems, Inc., a Texas corporation; and Clinton Bybee (as the Shareholders' Agent), as amended on July 12, 2001.
3.1(H)	Amended and Restated Articles of Incorporation of the Registrant.
3.2(C)	Bylaws of the Registrant and amendments thereto.
3.3(H)	Certificate of Amendment to Articles of Incorporation of the Registrant.
4.1	Reference is made to Exhibits 3.1, 3.2 and 3.3.
10.1(A)*	Form of Indemnification Agreement between the Registrant and each of its executive officers and directors.
10.2(A)*	1987 Stock Option Plan and Form of Stock Option Agreement.
10.3.1(B)	Lease agreement between Berg & Berg Developers and the Registrant dated August 6, 1996.
10.3.2(H)	First Amendment to Lease between Mission West Properties, L.P. II and the Registrant dated December 7, 2001.
10.8(M)*	Offer Letter between the Registrant and Elwood Spedden dated February 4, 2003.
10.9(D)*	Agreement Regarding Change of Control between the Registrant and Jeffrey Hawthorne dated October 15, 1995.
10.10(P)	Lease Agreement between Corridor Park Pointe II, L.P. and Intelligent Reasoning Systems, Inc., dated May 21, 1999.
10.11(P)	First Amendment to Lease Agreement between Corridor Park Pointe II, L.P. and Intelligent Reasoning Systems, Inc. dated November 9, 1999.
10.12(P)	Second Amendment to Lease Agreement between Corridor Park Pointe II, L.P. and Intelligent Reasoning Systems, Inc. dated March 15, 2000.
10.13(F)	Agreement for Purchase and Sale of Commercial Property between the Registrant and Integrated Power Chip Corporation dated February 12, 2001.
10.15(G)	Image Processing Systems Inc. Amended Share Incentive Plan.
10.16(P)	Series E Stock Purchase Warrant for Leader Technologies LTD, dated March 1, 2000.
10.17(I)	Manufacturing Services Agreement, dated as of December 10, 2001 by and between the Registrant and Sanmina-SCI Corporation.
10.18(H)	Real Estate Sublease by and between the Registrant and Sanmina-SCI Corporation dated December 10, 2001.
10.19(H)	Amended and Restated Agreement for Purchase of Inventory by and between the Registrant and Sanmina-SCI Corporation dated January 29, 2002.
10.20(L)*	Amended and Restated 1995 Stock Option Plan, as amended.
10.20.1*	Form of Stock Option Agreement under 1995 Stock Option Plan, as amended.
10.21(L)*	1995 Employee Stock Purchase Plan, as amended.
10.22(M)*	2001 Equity Incentive Plan, as amended.
10.22.1*	Form of Stock Option Agreement under 2001 Equity Incentive Plan, as amended.
10.25.1(Q)	Lease Agreement between Bruce N. Huntley Contracting Limited and Image Processing Systems Inc. dated September 17, 1997.
10.25.2(Q)	Option to Renew Agreement between Bruce N. Huntley Contracting Limited and Photon Dynamics Canada Inc. dated May 24, 2002.
10.26(V)	Third Amendment to Lease Agreement between the Registrant and Mission West Properties L.P. II dated as of August 2003.
10.29(R)*	Offer Letter between the Registrant and Richard Okumoto dated April 21, 2003.
10.30(V)*	Consulting Agreement between the Registrant and Malcolm Thompson dated July 28, 2003.

<u>Number</u>	<u>Exhibit</u>
10.31(V)*	Amendment to Consulting Agreement between the Registrant and Malcolm Thompson dated September 1, 2003.
10.33(S)*	Separation Agreement, dated December 4, 2003, between Elwood Spedden and Photon Dynamics, Inc.
10.34(S)	Settlement and License Agreement, dated November 10, 2003, between Photon Dynamics, Inc., Shimadzu Corporation, Panelvision Technology, Inc. and Guillermo Toro-Lira.
10.35(T)*	Consulting Agreement, dated March 18, 2004, between the Registrant and Malcolm Thompson.
10.36(T)	Termination and Assignment Agreement, dated February 27, 2004, between Photon Dynamics, Inc. and Ishikawajima-Harima Heavy Industries Co. Ltd.
10.37(U)	Confidential Mutual Settlement Agreement and Mutual General Release of All Claims, dated April 22, 2004, between Photon Dynamics, Inc. and Robert L. Thomason, et. al.
10.38*	Offer Letter between the Registrant and Mark Merrill dated April 27, 2004.
10.39*	Executive Officer Bonus Compensation Plan.
10.40*	Outside Director Cash Compensation Arrangement.
21.1	Subsidiaries of the Registrant.
23.1	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm.
24.1	Power of Attorney (included on the signature pages hereto).
31.1	Certification required by Rule 13a-14(a) or Rule 15d-14(a).
31.2	Certification required by Rule 13a-14(a) or Rule 15d-14(a).
32.1**	Certifications required by Rule 13a-14(b) or Rule 15d-14(b) and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350).

Key to Exhibits:

- (A) Previously filed on the Registrant's Registration Statement on Form SB-2 (Commission File No. 33-98232-LA) as filed with the Securities and Exchange Commission (the "SEC") on November 15, 1995 and incorporated herein by reference.
- (B) Previously filed as an exhibit to the Registrant's Annual Report on Form 10-KSB for the fiscal year ended September 30, 1996 (Commission File No. 000-27234) as filed with the SEC on December 30, 1996, and incorporated herein by reference.
- (C) Previously filed as an exhibit to the Registrant's Annual Report on Form 10-KSB for the fiscal year ended September 30, 1998 as filed with the SEC on December 18, 1998, and incorporated herein by reference.
- (D) Previously filed as an exhibit to the Registrant's Annual Report on Form 10-KSB for the fiscal year ended September 30, 1999 as filed with the SEC on October 27, 1999, and incorporated herein by reference.
- (E) Previously filed as an exhibit to the Registrant's Current Report on Form 8-K as filed with the SEC on July 25, 2001, and incorporated herein by reference.
- (F) Previously filed as an exhibit to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2001 as filed with the SEC on May 4, 2001, and incorporated herein by reference.
- (G) Previously filed as an exhibit to the Registrant's Registration Statement on Form S-8 as filed with the SEC on January 24, 2001, and incorporated herein by reference.
- (H) Previously filed as an exhibit to the Registrant's Registration Statement on Form S-1 (Commission File No. 333-76650) as filed with the SEC on January 14, 2002, as amended, and incorporated by reference herein.
- (I) Previously filed as an exhibit to the Registrant's Current Report on Form 8-K as filed with the SEC on January 7, 2002, and incorporated herein by reference. Confidential treatment has been granted for portions of this exhibit.
- (K) Previously filed as an exhibit to the Registrant's Current Report on Form 8-K/A as filed with the SEC on July 29, 2002, and incorporated herein by reference.

- (L) Previously filed as an exhibit to the Registrant's Registration Statement on Form S-8 (Reg. No. 333-117021) as filed with the SEC on June 30, 2004, and incorporated herein by reference.
- (M) Previously filed as an exhibit to the Registrant's Quarterly Report Form on Form 10-Q for the quarter ended March 31, 2003 as filed with the SEC on May 9, 2003, and incorporated herein by reference.
- (N) Previously filed as an appendix to the Registrant's Definitive Proxy Statement as filed with the SEC on November 8, 1999 and incorporated herein by reference.
- (O) Previously filed as an exhibit to the Registrant's Registration Statement on Form S-3 as filed with the SEC on November 7, 2000 and incorporated herein by reference.
- (P) Previously filed as an exhibit to the Registrant's Annual Report on Form 10-K for the fiscal year ended September 30, 2001 as filed with the SEC on December 6, 2001, and incorporated here by reference.
- (Q) Previously filed as an exhibit to the Registrant's Annual Report on Form 10-K for the fiscal year ended September 30, 2002 as filed with the SEC on December 11, 2002, and incorporated here by reference.
- (R) Previously filed as an exhibit to the Registrant's Quarterly Report Form on Form 10-Q for the quarter ended June 30, 2003 as filed with SEC on August 14, 2003, and incorporated herein by reference.
- (S) Previously filed as an exhibit to the Registrant's Quarterly Report Form on Form 10-Q for the quarter ended December 31, 2003 as filed with SEC on February 17, 2004, and incorporated herein by reference. Confidential treatment has been granted for portions of Exhibit 10.34.
- (T) Previously filed as an exhibit to the Registrant's Quarterly Report Form on Form 10-Q for the quarter ended March 31, 2004 as filed with SEC on May 14, 2004, and incorporated herein by reference. Confidential treatment has been granted for portions of Exhibit 10.36.
- (U) Previously filed as an exhibit to the Registrant's Quarterly Report Form on Form 10-Q for the quarter ended June 30, 2004 as filed with SEC on August 16, 2004, and incorporated herein by reference. Confidential treatment has been requested for portions of this exhibit.
- (V) Previously filed as an exhibit to the Registrant's Annual Report on Form 10-K for the fiscal year ended September 30, 2003 as filed with the SEC on December 24, 2003, and incorporated here by reference.

* Indicates a management contract or compensatory plan or arrangement.

** The certification attached as Exhibit 32.1 accompanies the Annual Report on Form 10-K pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not be deemed "filed" by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

(b) *Exhibits*

See Item 15(a) above.

(c) *Financial Statement Schedules*

See Item 15(a) above.

BOARD OF DIRECTORS

Dr. Malcolm J. Thompson

Mr. Nick E. Brathwaite

Ms. Terry Carlitz

Mr. Jeffrey Hawthorne

Mr. Michael J. Kim

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Interim Chief Executive Officer of Vitex Systems, Inc.

Chief Technical Officer of Flextronics International Ltd.

Independent Business Advisor

Chief Executive Officer and President of Photon Dynamics, Inc.

Consultant

General Partner of Kleiner Perkins Caufield & Byers

Consultant

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Mr. Richard Okumoto

Mr. Steve Song

Mr. Mark Merrill

Executive Chairman of the Board of Directors

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Chief Financial Officer and Secretary

Vice President, Sales

Vice President, Marketing

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STOCK LISTINGS

Photon Dynamics, Inc. common stock trades on The Nasdaq Stock Market® under the ticker symbol PHTN.

WEBSITE

For current information on Photon Dynamics, Inc., please visit our website at www.photodynamics.com





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