

SECURITIES AND EXCHANGE COMMISSION
Washington, D. C. 20549

FORM 10-K/A
Amendment No. 1

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended ...October 31, 1999...

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...0-15451...

...PHOTRONICS, INC...
(Exact name of registrant as specified in its charter)

...Connecticut... ..06-0854886...
(State or other jurisdiction of (I.R.S. Employer
incorporation or organization) Identification No.)

...1061 East Indiantown Road, Jupiter, Florida... ..33477..
(Address of principal executive offices) (Zip Code)

...(561) 745-1222...
(Registrant's telephone number, including area code)

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

| Title of each class | Name of each exchange on which registered |
|---------------------|---|
| None | |

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

.....Common Stock, \$0.01 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.

As of December 31, 1999, 23,974,668 shares of the registrant's Common Stock were outstanding. The aggregate market value of registrant's voting stock held by non-affiliates of the registrant as of December 31, 1999 was approximately \$594,900,722.

DOCUMENTS INCORPORATED BY REFERENCE
None

Photronics, Inc. (the "Company") is filing this amendment to its Form 10-K filed for the fiscal year ended October 31, 1999 in order to: (i) provide certain additional disclosure in the third paragraph of Item 1, "Business-Fiscal 1999 Developments"; (ii) revise certain disclosure in Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operation ("MD&A); and (iii) provide the information required by Part III, rather than to incorporate the same by reference. The disclosure revisions to the MD&A relate to the first paragraph of "Results of Operations - Net Sales," and the last paragraph of "Liquidity of Capital Resources." As

revised, each of Item 1, Item 7 and Part III are being filed in their entirety herewith, along with a consent of Deloitte & Touche LLP, the Company's independent auditors.

PART I

ITEM 1. BUSINESS

General

Photronics, Inc. (the "Company" or "Photronics") is a leading manufacturer of photomasks, which are high precision photographic quartz plates containing microscopic images of electronic circuits. Photomasks are a key element in the manufacture of semiconductors and are used as masters to transfer circuit patterns onto semiconductor wafers during the fabrication of integrated circuits and, to a lesser extent, other types of electrical components. The Company operates principally from ten facilities, six of which are located in the United States, three in Europe and one in Singapore.

In addition to manufacturing photomasks, the Company, through its wholly-owned subsidiary Beta Squared, Inc. ("Beta Squared"), services wafer plasma etching systems and conducts research and development related to cleaning and etching processes. The Company also provides mask-related technology consulting and data processing services through its D2W division. See "Related Sales and Services."

During fiscal 1999, the Company continued to invest in its global manufacturing network and enhance its technological and manufacturing capabilities. In addition, the Company increased its research and development activities and continued to invest in advanced manufacturing equipment to allow it to meet future technological and volume demands. The Company believes that its efforts have established it as a leading independent photomask manufacturer on a global basis and provide it with the facilities and expertise to continue to expand its sales base.

The Company is a Connecticut corporation, organized in 1969. Its principal executive offices are located at 1061 East Indiantown Road, Jupiter, Florida, telephone (561) 745-1222.

Fiscal 1999 Developments

In January 1999, the Company sold its large area mask operation that was located in Colorado Springs, Colorado.

In March 1999, the Company acquired from Cirrus Logic, Inc., a leading supplier of semiconductor products, substantially all of the assets of its mask engineering group. As part of this acquisition, the Company established a new business unit, "D2W." D2W offers mask-related technology consulting and data processing services to the semiconductor industry to optimize the integration of the various processes used to produce semiconductors. D2W is based in Fremont, California and is staffed primarily by those employees formerly with Cirrus Logic, Inc.'s mask engineering group.

In July 1999, the Company and International Business Machines, Inc. ("IBM") began a joint research and development venture related to "next generation lithography" technologies. These "post-optical" manufacturing technologies involve an exposure source other than light (such as an X-ray or electron beam source) for circuits having critical dimensions smaller than believed possible with currently utilized optical exposure methods. The purpose of the venture is to further develop and create a commercialization path for masks for use in wafer exposure systems proposed for introduction when current optically-based wafer exposure systems become incapable of producing smaller circuit patterns. The venture is being conducted at an advanced manufacturing facility at IBM's Burlington, Vermont location. The Company and IBM generally have joint ownership of copyrightable materials and inventions created in connection with the venture.

Also in July 1999, the Company leased a building in Phoenix, Arizona to relocate the photomask manufacturing operations currently being conducted in Mesa, Arizona at facilities leased from Motorola, Inc. ("Motorola"). This operation resulted from the Company's December 1997 acquisition of Motorola's internal photomask manufacturing operations. The Company anticipates that the new Phoenix facility will be complete in the second half of fiscal 2000.

On September 15, 1999, the Company, AL Acquisition Corp., a wholly owned subsidiary of the Company, and Align-Rite International, Inc. ("Align-Rite"), entered into an Agreement and Plan of Merger, as amended by Amendment No. 1 to the Agreement and Plan of Merger, dated January 10, 2000 (as amended, the "Merger Agreement") pursuant to which the Company would acquire Align-Rite in a merger transaction (the "Merger"). The Merger Agreement provides, among other things, that each outstanding share of Align-Rite's common stock will be converted into .85 shares of the Company's common stock on the effective date of the Merger, resulting in Align-Rite shareholders holding approximately 15% of the Company's outstanding shares of common stock when the Merger is complete. The Merger is subject to the approval of Align-Rite's shareholders, and to various regulatory and closing conditions, including compliance with the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended.

Align-Rite manufactures photomasks using electron beam, laser beam and optical-based technologies at four facilities located in Burbank, California; Melbourne, Florida; Bridgend, Wales; and Heilbronn, Germany. Align-Rite is a public company whose shares trade on the NASDAQ Stock Market under the symbol "MASK."

On November 1, 1999, the Company sold substantially all the assets and transferred to the buyer substantially all of the liabilities of the Company's Beta Squared business unit that sold refurbished semiconductor manufacturing equipment and replacement parts and provided engineering and field services for such equipment (the "Beta Lithography Equipment Division").

Manufacturing Technology

The Company manufactures photomasks, which are primarily used as masters to transfer circuit patterns onto semiconductor wafers. The Company's photomasks are manufactured in accordance with circuit designs provided on a confidential basis by its customers. The typical manufacturing process for one of the Company's photomasks involves receipt and conversion of circuit design data to manufacturing pattern data. This manufacturing data is then used to control the lithography system that exposes the circuit pattern onto the photomask blank. The exposed areas are dissolved and etched to produce that pattern on the photomask. The photomask is inspected for defects and conformity to the customer design data, any defects are repaired, any required pellicles (or protective membranes) are applied and, after final cleaning, the photomask is shipped to the customer.

The Company currently supports customers across the full spectrum of integrated circuit production technologies by manufacturing photomasks using electron beam or laser-based technologies and, to a significantly lesser degree, optical-based technologies. Laser-based or electron beam systems are the predominant technologies used for photomask manufacturing. Such technologies are capable of producing the finer line resolution, lighter overlay and larger die size for the larger and more complex circuits currently being designed. Laser and electron beam generated photomasks can be used with the most advanced processing techniques to produce VLSI (very large scale integrated circuit) devices. The Company currently owns a number of laser writing systems and electron beam systems and has committed to purchase additional advanced systems in order to maintain technological leadership. Compared to laser or electron beam generated photomasks, the production of photomasks by the optical method is less expensive, but also less precise. The optical method traditionally is used on less complex and lower priced photomasks.

The first several levels of photomasks sometimes are required to be delivered by the Company within 24 hours from the time it receives a customer's design. The ability to manufacture high quality photomasks within short time periods is dependent upon efficient manufacturing methods, high yields and high equipment reliability. The Company believes that it meets these requirements and has made significant investments in manufacturing and data processing systems and statistical process control methods to optimize the manufacturing process and reduce cycle times.

Quality control is an integral part of the photomask manufacturing process. Photomasks are manufactured in temperature, humidity and particulate controlled clean rooms because of the high level of precision, quality and yields required. Each photomask is inspected several times during the manufacturing process to ensure compliance with customer specifications. The Company has made a substantial investment in equipment to inspect and repair photomasks and to ensure that customer specifications are met. After inspection and any necessary repair, the Company utilizes technological processes to clean the photomasks prior to shipment.

Sales and Marketing

The market for photomasks primarily consists of semiconductor manufacturers and designers, both domestic and international, including manufacturers that have the capability to manufacture photomasks. Generally, the Company and each of its customers engage in a qualification and correlation process before the Company becomes an approved supplier. Thereafter, the Company typically negotiates pricing parameters for a customer's orders based on the customer's specifications in order to expedite the placement of individual purchase orders. Some of these prices may remain in effect for an extended period. The Company also negotiates prices, and occasionally enters into purchase arrangements, based on the understanding that, so long as the Company's performance is competitive, the Company will receive a specified percentage of that customer's photomask requirements.

The Company conducts its sales and marketing activities through a staff of full-time sales personnel and customer service representatives who work closely with the Company's general management and technical personnel. In addition to the sales personnel at the Company's manufacturing facilities in Brookfield, Connecticut; Milpitas and Sunnyvale, California; Allen and Austin, Texas; Dresden, Germany; Manchester, United Kingdom; Neuchatel, Switzerland; and Singapore, the Company has sales offices in Carlsbad and Pasadena, California; Colorado Springs, Colorado; Hillsboro, Oregon; and Taiwan. The Company also has a sales representative in Korea.

The Company supports international customers through both its domestic and foreign facilities and has sub-contract manufacturing arrangements in Taiwan. The Company considers its presence in international markets important to attracting new customers, providing global solutions to its existing customers and serving customers that utilize manufacturing foundries outside of the United States, principally in Asia. For a statement of the amount of net sales, operating income or loss, and identifiable assets attributable to each of the Company's geographic areas of operations, see Note 12 of Notes to the Consolidated Financial Statements.

Related Sales and Services

In addition to the manufacture of photomasks, the Company, through its wholly-owned subsidiary, Beta Squared, services a wafer plasma etching system used in the processing of semiconductor wafers. The original system was developed by Texas Instruments which licensed to Beta Squared the right to manufacture and sell the system. Beta Squared also conducts research and development related to cleaning and etching processes. Prior to the sale of the Beta Lithography Equipment Division, Beta Squared also sold refurbished semiconductor manufacturing equipment, engineering services and replacement parts and field service for such equipment on a third-party basis. Such activities represented approximately 2% of the Company's net sales during fiscal 1999.

The Company's D2W division offers mask-related technology consulting and data processing services to the semiconductor industry. D2W's activities represented less than 1% of the Company's net sales during fiscal 1999.

Customers

The Company primarily sells its products to leading semiconductor manufacturers. The Company's largest customers during fiscal 1999 included the following:

| | |
|---|------------------------------|
| Analog Devices, Inc. | Lucent Technologies, Inc. |
| Atmel Corporation | Motorola, Inc. |
| Chartered Semiconductor Manufacturing, Ltd. | National Semiconductor Corp. |
| Cirrus Logic, Inc. | Philips Electronics NV |
| Compaq Computer Corp. | Raytheon Company |
| Cypress Semiconductor Corp. | ST Microelectronics |
| Fairchild Semiconductor Corp. | Texas Instruments, Inc. |
| Integrated Device Technology, Inc. | Triquint Semiconductor, Inc. |
| International Business Machines, Inc. | Vitesse Semiconductor Corp. |
| LSI Logic Corp. | VLSI Technology, Inc. |

The Company has continually expanded its customer base and, during fiscal 1999, sold its products and services to approximately 400 customers. During fiscal 1999, no single customer other than Texas Instruments or Motorola accounted for more than 10% of the Company's net sales. The Company's five largest customers, in the aggregate, accounted for approximately 40% of net sales in fiscal 1999. A significant decrease in the amount of sales to any of these customers could have a material adverse effect on the Company.

Research and Development

The Company conducts ongoing research and development programs intended to maintain the Company's leadership in technology and manufacturing efficiency. Since fiscal 1994, the Company has increased its investment in research and development activities and current efforts include deep ultraviolet, phase-shift and optical proximity correction photomasks for advanced semiconductor manufacturing as well as photomasks for next generation "post-optical" manufacturing technologies. Phase-shift and optical proximity correction photomasks use advanced lithography techniques for enhanced resolutions of images on a semiconductor wafer. Next generation "post-optical" manufacturing technologies use an exposure source other than light (such as an x-ray or electron beam source) for wafer patterning and are designed for the manufacture of integrated circuits with critical dimensions below that believed possible with currently utilized optical exposure methods. Post-optical manufacturing technologies are still under development and have not yet been adopted as standard production methods. Since July 1999, next generation lithography research and development has been conducted in connection with the

Company's research and development venture with IBM, described above. The Company incurred expenses of \$10.6 million, \$12.9 million and \$15.5 million for research and development in fiscal 1997, 1998 and 1999, respectively. While the Company believes that it possesses valuable proprietary information and has received licenses under certain patents, the Company does not believe that patents are a material factor in the photomask manufacturing business. The Company holds only two patents and has applications pending for three other patents.

Materials and Supplies

Raw materials utilized by the Company generally include high precision quartz plates, which are used as photomask blanks, primarily obtained from Japanese suppliers (including Toppan Printing Co., Ltd. ["Toppan"] and Hoya Corporation ["Hoya"]), pellicles (which are protective transparent cellulose membranes) and electronic grade chemicals used in the manufacturing process. Such materials are generally available from a number of suppliers and the Company is not dependent on any one supplier for its raw materials. The Company believes that its utilization of a broad range of suppliers enables it to access the most advanced material technology available. The Company has established purchasing arrangements with each of Toppan and Hoya and it is expected that the Company will purchase substantially all of its photomask blanks from Toppan and Hoya so long as their price, quality, delivery and service are competitive.

The Company relies on a limited number of equipment suppliers to develop and supply the equipment used in the photomask manufacturing process. Although the Company has been able to obtain equipment on a timely basis, the inability to obtain equipment when required could adversely affect the Company's business and results of operations. The Company also relies on these suppliers to develop future generations of manufacturing systems to support the Company's requirements.

Backlog

The first several levels of photomasks for a circuit sometimes are required to be shipped within 24 hours of receiving a customer's design. Because of the short period between order and shipment dates (typically from one day to two weeks) for the principal portion of the Company's sales, the dollar amount of current backlog is not considered to be a reliable indication of future sales volume.

Competition

The photomask industry is highly competitive and most of the Company's customers utilize more than one photomask supplier. The Company's ability to compete depends primarily upon the consistency of product quality and timeliness of delivery, as well as pricing, technical capability and service. The Company also believes that proximity to customers is an important factor in certain markets. Certain competitors have considerably greater financial and other resources than the Company.

The Company believes that it is able to compete effectively because of its dedication to customer service, its investment in state-of-the-art photomask equipment and facilities and its experienced technical employees.

Since the mid-1980s there has been a decrease in the number of independent manufacturers as a result of independents being acquired or discontinuing operations. The Company believes that entry into the market by a new independent manufacturer would require a major investment of capital, a significant period of time to establish a commercially viable operation and additional time to attain meaningful market share and achieve profitability. In the past, competition and relatively flat demand led to pressure to reduce prices which the Company believes contributed to the decrease in the number of independent manufacturers. Although independent photomask manufacturers experienced increased demand since late 1993, demand softened and pricing pressures re-emerged, particularly in 1998. Although demand has been increasing since late 1998 as a part of a cyclical upturn in the semiconductor industry, intense competition has continued to pressure pricing for photomasks.

Based upon available market information, the Company believes that it has a larger share of the United States market than any other photomask manufacturer and that it is one of the largest photomask manufacturers in the world. Competitors in the United States include DuPont Photomasks and Align-Rite; and in international markets, Dai Nippon Printing, Toppan, Hoya, DuPont, Taiwan Mask Corp., Innova, Precision Semiconductor Mask Corp., Align-Rite and Compugraphics. In addition, some of the Company's customers possess their own captive facilities for manufacturing photomasks and certain semiconductor manufacturers market their photomask manufacturing services to outside customers as well as to their internal organization.

Employees

As of October 31, 1999, the Company employed approximately 1,200 persons on a full-time basis. The Company believes that it offers competitive compensation and other benefits and that its employee relations are good. Except for employees in the United Kingdom, none of the Company's employees is represented by a union.

ITEM 1A. EXECUTIVE OFFICERS OF REGISTRANT

The names of the executive officers of the Company are set forth below, together with the positions held by each person in the Company. All executive officers are elected annually by the Board of Directors and serve until their successors are duly elected and qualified.

| NAME AND AGE ----- | POSITION ----- | SERVED AS AN OFFICER SINCE ----- |
|--------------------------------|---|--|
| Constantine S. Macricostas, 64 | Chairman of the Board, Member of the Office of the Chief Executive and Director | 1974 |

| | | |
|------------------------|---|------|
| Michael J. Yomazzo, 57 | Vice Chairman, Member of the Office of the Chief Executive and Director | 1977 |
| James R. Northup, 39 | President and Member of the Office of the Chief Executive | 1994 |
| Jeffrey P. Moonan, 43 | Executive Vice President - Finance and Administration, Member of the Office of the Chief Executive, General Counsel and Secretary | 1988 |
| Robert J. Bollo, 55 | Vice President/Finance and Chief Financial Officer | 1994 |

For the past five years each of the executive officers of the Company held the office shown, except as follows:

Constantine S. Macricostas served as Chief Executive Officer until August 1997. Mr. Macricostas also serves as a Director of Nutmeg Federal Savings and Loan Association and the DII Group, Inc., a supplier of integrated electronic manufacturing products and services.

Michael J. Yomazzo has been Vice Chairman since January 1, 1999. From August 1997 until January 1999, he served as President and Chief Executive Officer, from January 1994 until August 1997 he served as President and Chief Operating Officer and from November 1990 until January 1994, he served as Executive Vice President and Chief Financial Officer. Mr. Yomazzo is a member of the Board of Directors of NMBT Corp., the bank holding company of New Milford Bank and Trust Company.

James R. Northup has been President since January 1, 1999. From November 1996 until January, 1999, he served as Senior Vice President - North American Operations, from January 1996 to November 1996, he served as Vice President - Operations, and from January 1994 to January 1996, he served as Director of Connecticut Operations.

Jeffrey P. Moonan has been Executive Vice President since January 1, 1999. From January 1994 until January 1999, he served as Senior Vice President. He has also served as General Counsel and Secretary since July 1988. From July 1989 until January 1994, he also served as Vice President/Administration.

Robert J. Bollo has been Vice President/Finance and Chief Financial Officer since November 1994. From August 1994 to November 1994, he served as Director of Finance.

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

Results of Operations for the
Years Ended October 31, 1999, November 1, 1998 and November 2, 1997

OVERVIEW

A significant portion of the changes in Photronics, Inc. ("Photronics") results of operations over the course of the three years ended October 31, 1999 are attributable to expansion of the Company's international operations in Europe and Asia. In fiscal 1996, Photronics established its first operations outside of the United States by acquiring operations in the U.K., and in Switzerland, opening a new manufacturing facility in Singapore and acquiring a minority interest in an independent photomask manufacturer in Korea. In addition, during fiscal 1997 the company acquired an independent photomask manufacturer in Germany. These facilities, together with the Company's U.S. facilities, comprise a global manufacturing network supporting semiconductor fabricators in the Asian, European and North American markets. As a result of the Company's globalization, revenues from foreign operations have grown to approximately 22% in 1999 compared to 20% in 1998 and 19% in 1997. Management believes that this trend will continue. Substantially all of the Company's consolidated Asian sales have been denominated in U.S. Dollars resulting in minimal foreign currency exchange risk on transactions in that region.

In addition to its international expansion, on December 31, 1997, the Company acquired the internal photomask manufacturing operations of Motorola, Inc. in Mesa, Arizona, and in February 1998, commenced operations in its newly constructed Austin, Texas facility. The Company's growth has also been affected by the rapid technological changes taking place in the semiconductor industry resulting in a greater mix of high-end photomask requirements for more complex integrated circuit designs.

A cyclical slow-down experienced by the semiconductor industry began impacting the release of new integrated circuit designs to photomask manufacturers in the middle of fiscal 1998. As a result, the Company experienced weakness in photomask demand and accentuated competitive pressures, especially for more mature technologies, during the second half of fiscal 1998. During fiscal 1999, the Company continued to see a weakness in selling prices for more mature technologies, but began experiencing an increase in unit volumes and a better mix of orders for high-end technology products. The Company cannot predict the duration of such cyclical industry conditions or their impact on its future operating results.

Both revenues and costs have been affected by the increased demand for higher technology photomasks which require more advanced manufacturing capabilities but generally command higher average selling prices. To meet the technological demands of its customers and position the Company for future growth, the Company continues to make substantial investments in high-end manufacturing capability both at existing and new facilities. The Company's capital expenditures for new facilities and equipment to support its customers requirements for high technology products exceeded \$235 million for the three years ended October 31, 1999, resulting in significant increases in operating expenses. Based on the anticipated technological changes in the industry, the Company expects those trends to continue.

RESULTS OF OPERATIONS

Net Sales

Net sales for the fiscal year ended October 31, 1999 increased 1% to \$223.7 million, compared to \$222.6 million in 1998. The increase was due to an increase in sales from Photronics' European operations, partially offset by a decrease in sales domestically and in Asia. European sales increased as a result of higher unit volume. Sales in Asia decreased primarily as a result of certain orders for Asian customers being manufactured in the United States. The domestic decrease was primarily attributable to a decrease in average selling prices on mature technologies, offset by higher unit volumes and a better mix of high-end products.

Net sales for the fiscal year ended November 1, 1998 increased 13% to \$222.6 million, compared with \$197.5 million in the prior year. Sales from Photronics' international manufacturing operations accounted for approximately 55% of the increase. The remaining portion of the growth resulted from the new Mesa and Austin operations and increased volume from the Company's other U.S. operations during the first six months of 1998. These increases were partially offset by pricing pressures and lower volumes in the second half of the year precipitated generally by the cyclical slow-down in the semiconductor industry.

Cost of Sales

Cost of sales for the year ended October 31, 1999 increased 10.3% to \$156.3 million compared with \$141.6 million in fiscal 1998. Gross margins decreased to 30.1% of sales compared to 36.4% in 1998 principally because of higher depreciation and other fixed costs incurred in anticipation of the industry's rapid move to higher-end technologies. Depreciation and amortization increased 21.0% in 1999 to \$35.7 million from \$29.5 million in 1998. In addition, the Company experienced higher equipment maintenance, materials and labor costs in fiscal 1999.

Cost of sales for the year ended November 1, 1998 increased 16.6% to \$141.6 million compared with \$121.5 million in fiscal 1997. Gross margins decreased to 36.4% of sales compared to 38.5% in 1997 because of the lower sales in the second half of 1998 and higher fixed costs resulting from the strategic investments in new facilities and capital equipment. Depreciation and amortization increased 58% in 1998 to \$29.5 million from \$18.6 million in 1997. In addition, the Company experienced lower margins in the formerly captive Mesa, Arizona operation that was acquired earlier in the year.

Selling, General and Administrative Expenses

Selling, general and administrative expenses increased 7.9% during 1999 to \$31.1 million or 13.9% of sales, from \$28.8 million, or 12.9% of sales in 1998. The increase was primarily due to growth related expenses including information systems and communications costs which were expended to ensure an infrastructure commensurate with Photronics' expansion. Other growth related costs, including compensation and travel, also increased in 1999.

Selling, general and administrative expenses increased 15.4% during 1998 to \$28.8 million or 12.9% of sales, from \$24.9 million or 12.6% of sales in 1997 due to higher staffing costs associated with the Company's growth, including the expansion into Austin, Texas and Mesa, Arizona, as well as the full year impact of additions made in 1997, especially in Europe and Asia. Such increases were partially offset by lower incentive compensation expenses in fiscal 1998, and reduction in discretionary spending, especially in the second half of the year in response to the semiconductor industry slow-down.

Research and Development

Research and development expenses for the year ended October 31, 1999 increased by 20.5% to \$15.5 million, or 6.9% of sales, from \$12.9 million or 5.8% of sales in 1998. The increase reflects continued work on advanced photomasks utilizing optical enhancement features, as well as expenses incurred in connection with our Next Generation Lithography Mask Center of Competency, a joint effort with IBM which was established in July 1999.

Research and development expense for 1998 increased by 21.6% to \$12.9 million, or 5.8% of sales from \$10.6 million in 1997, or 5.4% of sales in 1997. The increase is the result of the continued work on advanced photomask engineering projects including phase shift, optical proximity correction and deep ultra-violet applications.

Non-Recurring Restructuring Charge

The Company recorded a non-recurring restructuring charge of \$3.8 million in the second quarter of fiscal 1998 in connection with the optimization of its North American operations. The Company reorganized its two California operations, dedicating its Milpitas facility to the production of high-end technology photomasks and its Sunnyvale facility to the production of mature technology photomasks. In addition, it consolidated its Colorado Springs, Colorado photomask manufacturing operations into its other North American manufacturing facilities. The Company determined that its Large Area Mask (LAM) Division, which was also located in Colorado Springs, did not represent a long-term strategic fit with its core photomask business, and, accordingly, announced plans to sell the LAM Division. The major component of the non-recurring charge related to a reduction in the value of equipment. After tax, the charge amounted to \$2.4 million, or \$.08 per share on a diluted basis. The LAM division was sold in 1999 without any additional effect on results of operations.

Other Income and Expense

Net other expenses increased \$1.5 million to a net expense of \$3.9 million in 1999 as a result of higher interest expense, due primarily to utilization of the Company's unsecured revolving line of credit, as well as lower investment income due to a decrease in short-term investment balances throughout the year.

Interest income in 1998 increased as a result of higher average short-term investment balances. Interest expense increased to \$6.1 million in 1998 from \$2.5 million in 1997, primarily due to the effect of a full year of interest expense on the convertible notes in 1998 compared to only five months of interest expense on the convertible notes, which were issued in fiscal 1997.

Foreign currency transaction gains or losses were not significant in fiscal 1999, 1998 or 1997.

Income Taxes

The Company provided federal, state and foreign income taxes at a combined effective annual tax rate of 37.1% in 1999 as compared to 38.1% in 1998 and 1997. The lower rate in 1999 was primarily due to higher available research and development expense credits.

Net Income

Net income for the year ended October 31, 1999 decreased 47.9% to \$10.7 million, or \$0.45 per diluted share, compared to \$20.5 million, or \$0.84 per diluted share in the prior year. Net income for the year ended November 1, 1998 decreased 20.1% to \$20.5 million, or \$0.84 per diluted share, compared with \$25.6 million or \$1.03 per diluted share in the prior year.

Fiscal 1998 included a non-recurring after tax charge of \$2.4 million, \$0.08 per diluted share. All share and earnings per share amounts reflect a two-for-one stock split effected in November 1997 (see Note 5 of Notes to the Consolidated Financial Statements).

LIQUIDITY AND CAPITAL RESOURCES

The Company's cash, cash equivalents and short-term investments decreased \$15.1 million during fiscal 1999 to \$16.3 million. The decrease is attributable to capital expenditures for facilities and equipment of \$72.4 million. In addition, \$6.9 million of cash was utilized to repurchase 500,000 shares of the Company's common stock. The decrease was partially offset by positive cash flows generated by operations of more than \$55.0 million and borrowings of \$12.8 million.

Accounts receivable increased 31.0% to \$41.3 million because of stronger sales in the fourth quarter of 1999 compared to the fourth quarter of 1998.

Other current assets increased to \$9.3 million in 1999 from \$4.5 million in 1998, primarily due to refundable income taxes.

Property, plant and equipment increased to \$282.2 million at October 31, 1999 from \$249.4 million at November 1, 1998. Deposits on and purchases of equipment aggregated \$72.4 million during the year ended November 1, 1999. These increases were reduced by depreciation expense totalling \$37.9 million in fiscal 1999. The increase in intangible assets to \$28.4 million at October 31, 1999 from \$24.4 million at November 2, 1998, was primarily due to the costs incurred to develop our manufacturing and financial software systems.

Investments and other non-current assets increased to \$13.6 million at October 31, 1999 from \$10.3 million at November 1, 1998 due to the increase in the market value of investments available for sale.

Accounts payable and other accrued liabilities increased at October 31, 1999 to \$51.6 million compared to \$41.6 million at November 1, 1998 primarily due to the timing of payments related to capital equipment. Accrued salaries and wages decreased to \$2.5 million as of October 31,

1999 from \$4.2 million as of November 1, 1998, largely as a result of lower incentive compensation accruals in 1999.

Total amounts due on borrowings of \$117.0 million at October 31, 1999 increased from \$106.3 million as of November 1, 1998 principally due to the borrowings in 1999 of \$12.8 million under the Company's revolving credit facility.

Deferred income taxes and other liabilities increased to \$28.9 million at October 31, 1999 compared to \$16.4 million at November 1, 1998, largely due to increases in deferred income taxes resulting from the differences between the carrying amounts of assets and liabilities for financial reporting and the amounts used for income tax purposes.

The Company's commitments represent on-going investments in additional manufacturing capacity, as well as advanced equipment for research and development of the next generation of higher technology and more complex photomasks. At November 1, 1999, the Company had commitments outstanding for capital expenditures of approximately \$20 million. Additional commitments are expected to be incurred during 2000.

The Company maintains an unsecured, \$125 million committed revolving credit facility available at any time through the end of fiscal year 2003. This facility was amended in September 1999 to waive a default and to relax certain financial covenants. The default resulted from the Company's failure to meet the interest coverage ratio, due to earnings being less than anticipated when the facility was established in November 1998. The facility was not otherwise amended and the Company continued to borrow under it. The Company believes that its currently available resources, together with its capacity for substantial growth and its accessibility to other debt and equity financing sources, are sufficient to satisfy its cash requirements for the foreseeable future.

YEAR 2000

As of the date of this filing, the Company has not experienced any Year 2000 problems that have affected its operations, the realization of financial assets, or the Company's results of operations. The Company will continue to monitor its operations for non-compliant components. The Company is also monitoring its open transactions with customers and vendors to ensure that there are no undetected problems that could have a future impact. As of the date of this filing, the Company believes there are no remaining significant risks or exposure as a result of the Year 2000 issue.

EFFECT OF NEW ACCOUNTING STANDARDS

In April 1998, the American Institute of Certified Public Accountants (AICPA) issued Statement of Position 98-5, "Reporting on the Costs of Start-Up Activities." In June 1998, the FASB issued SFAS No. 133 "Accounting for Derivative Instruments and Hedging Activities." In September 1999, the AICPA issued Statement of Position 99-3, "Accounting and Reporting of Certain Defined Contribution Plan Investments and Other Disclosure Matters." Each of these statements establish new standards for financial statement reporting and disclosure of certain information effective for the Company in future fiscal years. The Company does not expect these new standards to have a material impact on its financial position, results of operations or cash flows.

"SAFE HARBOR" STATEMENT UNDER THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

Except for historical information, the matters discussed above may be considered forward-looking statements and may be subject to certain risks and uncertainties that could cause the actual results to differ materially from those projected, including uncertainties in the market, pricing, competition, procurement and manufacturing efficiencies, and other risks.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

The information as to directors and director nominees required by Item 401 and 405 of Regulation S-K is set forth below. The information as to executive officers is included in Part I, Item 1a of this report under the caption "Executive Officers of Registrant."

The names of, and certain information with respect to, directors and the nominees for election as directors at the Company's 2000 annual shareholders meeting are set forth below and were furnished to the Company by the nominees.

Nominees to be elected by the shareholders for a one year term:

| Name and (Age) ----- | Director Since ----- | Position with the Company ----- |
|---|----------------------------|------------------------------------|
| Walter M. Fiederowicz(1)..... (53 years) | 1984 | Director |
| Joseph A. Fiorita, Jr.(1)..... (55 years) | 1987 | Director |
| Constantine S. Macricostas..... (64 years) | 1974 | Chairman of the Board |
| Willem D. Maris (60 years) | (2) | Director Nominee |
| Michael J. Yomazzo..... (57 years) | 1977 | Vice Chairman of the Board |

(1) Member of the Audit Committee and the Compensation Committee.
(2) Mr. Maris has been nominated for the first time for election as a director.

In addition to the information set forth in the table above, the following provides certain information about each director and nominee for election, including his principal occupation for at least the past five years.

Walter M. Fiederowicz has been a private investor and consultant since August 1997. From April 1997 until August 1997, he served as the President and Chief Executive Officer of WorldCorp., Inc., the holding company of World Airways, Inc., a provider of long-range passenger and cargo air transportation services to major airlines, and of IntelliData

Technologies Corporation, a provider of caller identification based telecommunications devices, smart telephones and on-line electronics information services. Mr. Fiederowicz served as Chairman of Colonial Data Technologies Corp., a distributor of telecommunications equipment which subsequently merged into IntelliData Technologies Corporation, from August 1994 to March 1996. From January 1991 until July 1994, he held various positions, including Executive Vice President and Chairman and served as a director of Conning and Company (the parent company of an investment firm). He also serves as Chairman of the Board of Meacock Capital, PLC, an investment vehicle for the Lloyd's insurance market. Mr. Fiederowicz serves as a director of First Albany Companies, Inc., the parent of a broker-dealer, and of Compensation Value Alliance, Inc., a provider of workers' compensation-related services.

Joseph A. Fiorita is a partner in Fiorita, Kornhaas and Van Houten, P.C., the independent certified public accountants for the Company from May 1973 through October 1984.

Constantine S. Macricostas is Chairman of the Company, and served as Chief Executive Officer of the Company from 1974 until August 1997. Mr. Macricostas also serves as a director of Nutmeg Federal Savings and Loan Association, and the DII Group, Inc., a provider of integrated electronic manufacturing products and services.

Willem D. Maris was President and Chief Executive Officer of ASM Lithography Holding N.V. ("ASML") from June 1990 until his retirement in January 2000. Headquartered in the Netherlands, ASML develops, manufactures, markets and services advanced lithography projection systems for the fabrication of integrated circuits. Mr. Maris has an extensive background in the semiconductor industry, having served in management and other positions in the integrated circuit division of Koninklijke Philips Electronics N.V. from 1964 until joining ASML in 1990. He is a director of MEMC Electronic Materials, Inc., a company that produces silicon wafers used to manufacture semiconductors, and he is a member of the supervisory board of Detron Group N.V., a telecommunications company in the Netherlands.

Michael J. Yomazzo has served as Vice Chairman of the Company since January 1, 1999. He served as Chief Executive Officer of the Company from August 1997 until December 31, 1998 and as President from January 1994 until December 31, 1998. From November 1990 until January 1994, he served as Executive Vice President and from July 1989 until November 1990, he served as Senior Vice President - Finance and Planning. Mr. Yomazzo is a director of NMBT Corp., the bank holding company of New Milford Bank and Trust Company.

ITEM 11. EXECUTIVE COMPENSATION

The information required by Item 402 of Regulation S-K is set forth below.

The following table sets forth certain information regarding compensation paid by the Company for services rendered for each of the three fiscal years during the period ended October 31, 1999 to each of the individuals who served (i) as the Chief Executive Officer, or in a similar capacity, during the 1999 fiscal year, and (ii) each executive officer of the Company who served as of October 31, 1999 and whose cash compensation exceeded \$100,000 (such executives are collectively referred to as the "Named Executives").

SUMMARY COMPENSATION TABLE

| Name/Principal Position | Year | Annual Compensation | | Long-Term Compensation | | All Other Compensation |
|--|------|---------------------|------------|------------------------|------------------------------|------------------------|
| | | Salary (\$) | Bonus (\$) | Stock Awards (\$) | Restricted Stock Options (#) | |
| Constantine S. Macricostas Chairman (2) | 1999 | 181,836 | 0 | 0 | 0 | 78,200 |
| | 1998 | 295,000 | 5,673 | 0 | 5,000 | 79,992 |
| | 1997 | 329,250 | 354,250 | 0 | 0 | 79,750 |
| Michael J. Yomazzo Vice Chairman (2) | 1999 | 189,529 | 0 | 0 | 0 | 57,841 |
| | 1998 | 325,000 | 31,250 | 0 | 165,000 | 60,042 |
| | 1997 | 277,290 | 302,290 | 0 | 0 | 60,196 |
| James R. Northup President (2) (3) | 1999 | 253,470 | 0 | 0 | 0 | 25,729 |
| | | | | | | |
| Jeffrey P. Moonan Executive Vice President, General Counsel and Secretary (2) | 1999 | 232,171 | 0 | 0 | 0 | 25,915 |
| | 1998 | 176,283 | 23,393 | 0 | 25,000 | 26,035 |
| | 1997 | 169,628 | 189,628 | 0 | 0 | 25,890 |
| Robert J. Bollo Vice President/Finance and Chief Financial Officer | 1999 | 150,939 | 0 | 0 | 7,500 | 3,019 |
| | 1998 | 150,480 | 22,896 | 0 | 0 | 3,010 |
| | 1997 | 133,421 | 126,673 | 0 | 0 | 2,663 |
| | | | | | | |

- (1) Represents (i) premiums paid on life insurance policies owned by each of the Named Executives or his designee, except for Mr. Bollo, as to which the Company shall be entitled to be repaid unless the respective individual satisfies certain length of service requirements; and (ii) matching contributions made by the Company pursuant to the Company's 401(k) Savings and Profit Sharing Plan. The amount of premiums paid in the 1999 fiscal year were as follows: Mr. Macricostas \$75,000; Mr. Yomazzo \$55,000; Mr. Northup \$22,500; and Mr. Moonan \$22,500. The matching 401(k) contributions made during fiscal year 1999 were as follows: Mr. Macricostas, \$3,200; Mr. Yomazzo, \$2,841; Mr. Northup, \$3,229; Mr. Moonan, \$3,415; and Mr. Bollo, \$3,019.
- (2) Mr. Macricostas served as Chief Executive Officer until August 15, 1997 and Mr. Yomazzo served as Chief Executive Officer from August 15, 1997 until December 31, 1998. Effective January 1, 1999, the Board of Directors created the Office of the Chief Executive. In connection with this, Mr. Yomazzo was elected Vice Chairman, and Messrs. Northup and Moonan were promoted to President and Executive Vice President, respectively. Prior to this Mr. Northup served as Senior Vice President of North American Operations, and Mr. Moonan served as Senior Vice President, General Counsel and Secretary. The Office of the Chief Executive is comprised of Messrs. Macricostas, Yomazzo, Northup and Moonan, each of who performs certain executive management functions.
- (3) Mr. Northup has served as President since January, 1999 and prior to that, he was not an executive officer of the Company. Therefore, amounts paid to Mr. Northup prior to fiscal 1999 are not reported in the above table.

STOCK OPTIONS

The Company maintains stock option plans which allow for the grant of stock options and restricted stock awards to directors and executive officers of the Company as well as other employees of the Company. The Company's stock option plans do not provide for the issuance of stock appreciation rights ("SAR'S"). The following table sets forth certain information with respect to (i) options granted to the Named Executives during the 1999 fiscal year, and (ii) the value of such options at assumed annual rates of stock price appreciation.

OPTION GRANTS IN LAST FISCAL YEAR

Individual Grants : Potential Realizable
: Value at Assumed Annual
: Rates of Stock Price
: Appreciation for Option
: Term (a)

| Name | :Number of :Securities :Underlying :Options :Granted | :% of Total :Options :Granted :to Employees :in Fiscal :Year | :Exercise :or Base :Price :(\$/Share) | :Expira- :tion :Date | : 5% / 10% :\$ |
|----------------------------|--|---|--|----------------------------|--------------------|
| Constantine Macricostas | 0 | N/A | N/A | N/A | N/A |
| Michael J. Yomazzo | 0 | N/A | N/A | N/A | N/A |
| James R. Northup | 0 | N/A | N/A | N/A | N/A |
| Jeffrey P. Moonan | 0 | N/A | N/A | N/A | N/A |
| Robert J. Bollo | 7,500(b) | 3.3 | 18.125 | 11-4-08 | 85,490/ 216,649 |

(a) No gain to the optionees is possible without appreciation in the price of the Common Stock which will benefit all shareholders. The dollar amounts under these columns are the result of calculations at the 5% and 10% assumption rates set by the SEC and, therefore, are not intended to forecast possible future appreciation of the Common Stock price or to establish any present value of the options.

(b) The option granted to Mr. Bollo was granted at an exercise price equal to the market price of the Common Stock on the date of grant and vests over four years in four equal annual installments. The Board of Directors may accelerate the vesting of the option if the Company merges or consolidates with another company or sells substantially all of its assets.

The following table sets forth certain information with respect to options exercised during the 1999 fiscal year by the Named Executives and the value of options held by the Named Executives on October 31, 1999.

Aggregated Option Exercises in Last Fiscal Year
and Fiscal Year-End Option Values

| Name | Shares Acquired on Exercise (#) | Value Realized (\$) | Number of Securities Underlying Unexercised Options at Fiscal Year End | Value of Unexercised In-the-money Options at Fiscal Year End (\$) |
|-------------------------|---|---------------------------|---|--|
| | | | Exercisable / Unexercisable | Exercisable / Unexercisable |
| Constantine Macricostas | -0- | -0- | 76,250/28,750 | 645,273/248,218 |
| Michael J. Yomazzo | -0- | -0- | 221,550/126,250 | 2,445,373/184,933 |
| James R. Northup | -0- | -0- | 88,500/34,500 | 1,026,870/325,861 |
| Jeffrey P. Moonan | -0- | -0- | 130,000/27,500 | 2,009,390/260,170 |
| Robert J. Bollo | -0- | -0- | 56,250/16,250 | 627,128/94,930 |

CERTAIN AGREEMENTS

The Company has agreed that if the employment of Messrs. Macricostas, Northup or Moonan is terminated under certain conditions, such officer will be entitled to continued salary and benefits for one year. In addition, the Company has entered into agreements providing that each of Messrs. Macricostas and Yomazzo will serve as a consultant to the Company upon their respective retirements for a period of up to three (3) years for a consulting fee of up to \$175,000 per year. Messrs. Macricostas and Yomazzo are also entitled to continued benefits until age 65.

DIRECTORS' COMPENSATION

Directors who are not employees of the Company receive a fee of \$2,500 for each directors' meeting attended and are granted a restricted stock award of 3,000 shares per year. The restrictions on these awards lapse quarterly over the year of service period. From time to time, non-employee directors may also be granted stock options. If Mr. Maris is elected to the Board at the Annual Meeting, he will receive an option to purchase 5,000 shares of Common Stock at an exercise price equal to the market value of the Common Stock on the date of grant, and a restricted stock award of 3,000 shares of Common Stock.

During fiscal 1999, the Company retained Joseph A. Fiorita, Jr., a director of the Company, as a consultant to perform certain accounting and tax services. Fees paid to Mr. Fiorita in this capacity aggregated \$36,000.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The information required by Item 403 of Regulation S-K is set forth below.

To the best knowledge of the Company based on information filed with the Securities and Exchange Commission and the Company's stock records, the following table sets forth the beneficial ownership of the Common Stock as of February 1, 2000, by (i) beneficial owners of more than five percent of the Common Stock, (ii) each director, (iii) each nominee for election as director, (iv) each executive officer named in the summary compensation table set forth below, and (v) all directors and executive officers of the Company as a group.

| Name and Address of Beneficial Owner ----- | Amount and Nature of Beneficial Ownership (1) ----- | Percentage of Class ----- |
|--|---|---------------------------------|
| Robert J. Bollo 1061 East Indiantown Road Jupiter, FL 33477 | 58,410 (2) | * |
| Walter M. Fiederowicz 39 Painter Hill Road Woodbury, CT 06798 | 61,580 (2) (3) | * |
| Joseph A. Fiorita, Jr. 146 Deer Hill Avenue Danbury, CT 06810 | 49,650 (2) (4) | * |
| Constantine S. Macricostas 1061 East Indiantown Road Jupiter, FL 33477 | 2,993,742 (2) (5) | 12.5 |
| Macricostas Partners, L.P. 1122 Bel Air Allen, Texas 75013 | 2,280,000 | 9.5 |

| Name and Address of Beneficial Owner ----- | Amount and Nature of Beneficial Ownership (1) ----- | Percentage of Class ----- |
|--|---|---------------------------------|
| Willem D. Maris De Run 1110 5503 La Veldhoven The Netherlands | 0 | |
| Jeffrey P. Moonan 1061 East Indiantown Road Jupiter, FL 33477 | 152,834 (2) | * |
| James R. Northup 1061 East Indiantown Road Jupiter, FL 33477 | 91,435 (2) | * |
| Michael J. Yomazzo 1061 East Indiantown Road Jupiter, FL 33477 | 454,584 (2) (6) | 1.8 |
| Massachusetts Financial Services Company 500 Boylston Street Boston, MA 02116 | 1,551,804 (7) | 6.4 |
| Directors and Executive Officers as a group (seven persons) | 3,862,235 (8) | 15.7 |

* Less than 1%

(1) Except as otherwise indicated, the named person has the sole voting and investment power with respect to the shares of Common Stock set forth opposite such person's name.

(2) Includes shares of Common Stock subject to stock options exercisable as of April 1, 2000 as follows: Mr. Bollo (58,125); Mr. Fiederowicz (32,750); Mr. Fiorita (32,750); Mr. Macricostas (76,250); Mr. Northup (90,500); Mr. Yomazzo (236,550); and Mr. Moonan (130,000). Also includes shares subject to forfeiture under restricted stock award grants as follows: Mr. Fiederowicz (5,000) and Mr. Fiorita (5,000).

(3) Includes 12,050 shares owned by the wife of Mr. Fiederowicz and 800 shares owned by his child, as to which shares he disclaims beneficial ownership.

(4) Includes 300 shares owned by the wife of Mr. Fiorita, as to which shares he disclaims beneficial ownership.

(5) Includes 34,000 shares held by the wife of Mr. Macricostas as to which shares he disclaims beneficial ownership. Also includes 2,280,000 shares owned by Macricostas Partners, L.P., of which Mr. Macricostas is a limited partner and 50,618 shares owned by the corporate general partner of such partnership of which Mr. Macricostas is President and a Director and a significant shareholder. Mr. Macricostas disclaims beneficial ownership of those shares not represented by his ownership interests.

(6) Includes 46,000 shares held by the wife of Mr. Yomazzo as to which shares he disclaims beneficial ownership. Also includes 86,000 shares owned by Yomazzo Associates Limited Partnership of which Mr. Yomazzo is a general partner and a limited partner. Mr. Yomazzo disclaims beneficial ownership of those shares not represented by his ownership interests.

(7) In a schedule 13G dated February 11, 2000 filed with the SEC, Massachusetts Financial Services Company reported that of the 1,551,804 shares of Common Stock that it beneficially owns, it has sole voting power with respect to 1,233,104 shares and has sole dispositive power with respect to all shares.

(8) Includes the shares listed in notes (2), (3), (4), (5), and (6) above.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The information required by Item 404 of Regulation S-K is set forth below.

The Company continues to lease a building at one of its manufacturing facilities and a contiguous parcel of land from entities controlled by Constantine S. Macricostas, the Chairman and a director of the Company. The rent paid to these entities for the fiscal year ended October 31, 1999 was approximately \$135,000.

Financing for construction of such leased building and the acquisition of certain equipment was provided through the sale of industrial development bonds issued by the Connecticut Development Authority (the "CDA"). As lessee, the Company was obligated to serve as guarantor of certain of the bonds issued by the CDA. As of October 31, 1999 there was outstanding a total of approximately \$339,000 in principal amount of industrial development bonds for which the Company is a guarantor.

The Company and Toppan Printing Co., Ltd. ("Toppan"), have engaged in numerous ongoing commercial transactions for the purchase and sale of raw materials and finished goods based upon competitive terms and conditions, including market prices. Toppan was a beneficial owner of more than 5% of the Common Stock during the 1999 fiscal year. The total amount of sales by the Company to Toppan during fiscal year 1999 aggregated \$133,550, and Toppan's sales to the Company aggregated \$9,171,414.

In addition, in September 1998, the Company agreed to purchase from Toppan one million shares of Common Stock that the Company had issued to Toppan in 1993 as partial consideration for the Company's acquisition of Toppan's photomask operations in Texas. The purchase prices of the shares ranged from \$13.50 to \$13.90 per share, which prices were at or below the then approximate fair market value of the Common Stock. Of these shares, 750,000 were purchased during September and December 1998 and the balance were purchased during March 1999. The purchases during fiscal year 1999 aggregated approximately \$6,900,000.

The Company believes that the terms of the transactions described above with affiliated persons were negotiated at arm's-length and were no less favorable to the Company than the Company could have obtained from non-affiliated parties.

SIGNATURES

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

PHOTRONICS, INC.
(Registrant)

By /s/ JEFFREY P. MOONAN February 18, 2000
Jeffrey P. Moonan
Executive Vice President

Table of Exhibits

23 Consent of Deloitte & Touche LLP is filed herewith.

INDEPENDENT AUDITORS' CONSENT

We consent to the incorporation by reference in Registration Statements Nos. 333-02245, 333-50809, 33-17530, 33-28118, 33-47446 and 33-78102 of Photronics, Inc. on Form S-8 of our report dated December 6, 1999 (except as to Footnote 15, as to which the date is January 10, 2000) appearing in this Annual Report on Form 10-K/A (Amendment No. 1) of Photronics, Inc. for the year ended October 31, 1999.

DELOITTE & TOUCHE LLP
Hartford, Connecticut
February 16, 2000