

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 December 31, 2004.
- ☐ 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 0-25236

**MICREL, INCORPORATED**

(Exact name of Registrant as specified in its charter)

California 94-2526744  
(State or other jurisdiction of incorporation or Organization) (I.R.S. Employer Identification No.)

2180 Fortune Drive, San Jose, CA 95131  
(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (408) 944-0800

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

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 February 28, 2005, the aggregate market value of the voting stock held by non-affiliates of the Registrant was approximately \$837,252,602 based upon the closing sales price of the Common Stock as reported on the Nasdaq National Market on such date. Shares of Common Stock held by officers, directors and holders of more than ten percent of the outstanding Common Stock have been excluded from this calculation because such persons may be deemed to be affiliates. The determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of February 28, 2005, the Registrant had outstanding 88,962,610 shares of Common Stock.

**DOCUMENTS INCORPORATED BY REFERENCE:**

Portions of the Registrant's Proxy Statement for its Annual Meeting of Shareholders to be held on May 26, 2005 are incorporated by reference in Part III of this Report.

This Report on Form 10-K includes 76 pages with the Index to Exhibits located on page 71.

**MICREL, INCORPORATED**

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**ANNUAL REPORT ON FORM 10-K**

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## **PART I**

### **ITEM 1. BUSINESS**

#### **General**

The Company was incorporated in California in July 1978. References to the "Company" and "Micrel" refer to Micrel, Incorporated and subsidiaries, which also does business as Micrel Semiconductor. The Company's principal executive offices are located at 2180 Fortune Drive, San Jose, California 95131. The Company's telephone number is (408) 944-0800. We maintain a corporate website located at [www.micrel.com](http://www.micrel.com). Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports are made available, free of charge, on the website noted above as soon as reasonably practicable after filing with or furnished to the Securities and Exchange Commission.

Micrel designs, develops, manufactures and markets a range of high-performance analog power integrated circuits ("ICs"), mixed-signal and digital ICs. The Company currently ships over 2,500 standard products and has derived the majority of its product revenue for the year ended December 31, 2004 from sales of standard analog and high speed communications ICs. These products address a wide range of end markets including cellular handsets, portable computing, enterprise and home networking, wide area and metropolitan area networks and industrial equipment. For the years ended December 31, 2004, 2003, and 2002, the Company's standard products accounted for 96%, 90%, and 88%, respectively, of the Company's net revenues. The Company also manufactures custom analog and mixed-signal circuits and provides wafer foundry services for customers who produce electronic systems for communications, consumer and military applications.

Micrel develops and manufactures high performance power management analog products which are characterized by high speed, low noise and maximum efficiency in the smallest package. Continuing trends to lower voltages and higher currents in the communications, networking and computing markets have created demand for high performance analog products to accurately control, regulate, convert and route voltage and current in electronic systems. The demand for high performance power management circuits has been further fueled by the growth of portable communications and computing devices (e.g. cellular telephones, personal digital assistants ("PDA"), MP3 players and notebook computers). The Company also has an extensive power management offering for the networking and communications infrastructure markets including single-board and enterprise servers, network switches and routers, storage area networks and wireless base stations. In addition, the Company offers standard analog products that address other markets, including industrial, defense and automotive electronics.

In addition to power and thermal management products, Micrel also offers two families of highly integrated radio frequency ("RF") products. Micrel's QwikRadio® devices enable customers to develop wireless control systems significantly improving the consumer experience of their products. Applications for the QwikRadio® products include remote keyless entry for automobiles, garage door openers and remote controls.

The Company's high bandwidth communications circuits are used primarily for enterprise networks, storage area networks, and metropolitan area networks. With form factor, size reductions, and ease of use critical for system designs, Micrel utilizes innovative packaging and proprietary process technology to address these challenges.

In 2001, Micrel acquired Kendin Communications, Inc. ("Kendin"), a privately held fabless semiconductor company that designs, develops and markets high performance ICs for the communications and networking markets. This acquisition enabled Micrel to enter the Ethernet market

with a family of Ethernet switch products targeting the small office, home office ("SOHO") and enterprise networking markets. This product portfolio consists of transceiver and switch devices that support various Ethernet protocols supporting communication transmission speeds from 10 Megabits per second to 100 Megabits per second.

In addition to standard analog and mixed signal products, Micrel offers customers various combinations of design, process and foundry services.

## **Industry Background**

### *Analog Circuit, Mixed-Signal and Digital ICs Markets*

ICs may be divided into three general categories — digital, analog (also known as "linear") and mixed-signal. Digital circuits, such as memories and microprocessors, process information in the form of on-off electronic signals and are capable of implementing only two values, "1" or "0." Analog circuits, such as regulators, converters and amplifiers, process information in the form of continuously varying voltages and currents that have an infinite number of values or states. Analog circuits condition, process, and measure or control real world variables such as current, sound, temperature, pressure or speed. Mixed-signal ICs combine analog and digital functions on one chip.

Analog circuits are used in virtually every electronic system, and the largest markets for such circuits are computers, telecommunications and data communications, industrial equipment, military, consumer and automotive electronics. Because of their numerous applications, analog circuits have a wide range of operating specifications and functions. For each application, different users may have unique requirements for circuits with specific resolution, linearity, speed, power and signal amplitude capability.

Mixed-signal and digital ICs may be divided into six general categories, LSI/MSI logic, data processing, signal processing, memory, FPGA and application specific.

Mixed-signal and digital ICs are used in computer and communication systems and in industrial products. The primary markets for such circuits are consumer, communications, personal and enterprise computer systems, networking and industrial.

As compared with the digital integrated circuit industry, the analog integrated circuit industry has the following important characteristics:

- *Dependence on Individual Design Teams.* The design of analog circuits involves the complex and critical placement of various circuits. Analog circuit design has traditionally been highly dependent on the skills and experience of individual design engineers.
- *Interdependence of Design and Process.* Analog designers, especially at companies having their own wafer fabrication facility, are able to select from several wafer fabrication processes in order to achieve higher performance and greater functionality from their designs.
- *Longer Product Cycles and More Stable Pricing.* Analog circuits generally have longer product cycles as compared to digital circuits.

Analog, mixed-signal and digital ICs are sold to customers as either standard products or custom products.

### *Recent Trends in Analog Power Management, Mixed-Signal and Digital ICs*

Most electronic systems utilize analog circuits to perform power management functions ("power analog circuits") such as the control, regulation, conversion and routing of voltages and current. The computer and communications markets have emerged as two of the largest markets for power analog circuits. In particular, the recent growth and proliferation of portable, battery-powered devices, such as cellular telephones, PDAs and notebook computers, continue to increase demand and create new technological challenges for power analog circuits.

Cellular telephones, which are composed of components and subsystems that utilize several different voltage levels and require multiple power analog circuits to precisely regulate and control voltage. Manufacturers continue to pack more processing power and functionality into smaller form factors placing severe demands on the battery. To maintain or extend talk times, high performance power management products are required.

The rapid adoption of the Internet for information exchange, in business and consumer markets, has led to a significant increase in the need for broadband communications technology. In 2004, there was a significant expansion in the number of broadband subscribers for both DSL, cable modem and fiber to the home technologies. The increased bandwidth demand of these users will continue to consume the installed capacity in the metropolitan and wide area networks. The additional demand of new wireless services utilizing the transmission of video will further consume this installed capacity. It is anticipated these trends will continue in 2005.

In the networking market, Ethernet has been widely adopted as a communication standard. Ethernet ports are now being provided on equipment ranging from PCs and PC peripherals such as printers, media converters, set-top boxes, internet protocol ("IP") phones and game consoles. This is driving rapid growth in the SOHO market to connect multiple PCs and peripherals.

### **Micrel's Strategy**

Micrel seeks to capitalize on the growth opportunities within the high-performance analog, mixed-signal and digital semiconductor markets. The Company's core competencies are its analog design and process technology, its large, in-house wafer fabrication capability and manufacturing expertise. The Company also seeks to capitalize on growth opportunities within the communications and networking markets and has successfully acquired companies serving these market segments. The Company intends to build a leadership position in its targeted markets by pursuing the following strategies:

- *Focus on Standard Products for High Growth Markets.* Currently, Micrel ships over 2,500 standard products, with net revenues from standard products generating 96% of the Company's net revenues for the year ended December 31, 2004. The Company, however, will pursue additional custom and foundry business as opportunities arise.
- *Target Power Analog, High-Speed Mixed-signal and Digital Markets.* Micrel has leveraged its expertise in power analog circuits by addressing market opportunities in cellular telephones, battery-powered computers, set-top boxes and desktop personal computers.
- *Maintain Technological Leadership.* The Company seeks to utilize its design strengths and its process

expertise to enhance what the Company believes are its competitive advantages in linear and switching regulators, MOSFET drivers, USB power switches, hot-swap-power controllers, high-speed interface, and communications devices.

- *Develop/Acquire New Complementary Businesses.* The Company seeks to identify complementary business opportunities building on its core strengths in the analog and mixed signal area.
- *Capitalize on In-house Wafer Fabrication Facility.* The Company believes that its in-house six-inch wafer fabrication facility provides a significant competitive advantage because it facilitates close collaboration between design and process engineers in the development of the Company's products.
- *Maintain a Strategic Level of Custom and Foundry Products Revenue.* Micrel believes that its custom and foundry products business complements its standard products business by generating a broader revenue base and lowering overall per unit manufacturing costs through greater utilization of its manufacturing facilities.

## Products and Markets

### Overview

The following table sets forth the net revenues attributable to the Company's two segments, standard products and custom and foundry products expressed in dollars and as a percentage of total net revenues.

#### Net Revenues by Segment (Dollars in thousands)

	<u>Years Ended December 31,</u>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
<b>Net Revenues:</b>			
Standard Products .....	\$ 246,580	\$ 191,134	\$ 180,407
Custom and Foundry Products.....	<u>10,971</u>	<u>20,592</u>	<u>24,297</u>
Total net revenues .....	<u>\$ 257,551</u>	<u>\$ 211,726</u>	<u>\$ 204,704</u>
<b>As a Percentage of Total Net Revenues:</b>			
Standard Products .....	96%	90%	88%
Custom and Foundry Products.....	<u>4</u>	<u>10</u>	<u>12</u>
Total net revenues .....	<u>100%</u>	<u>100%</u>	<u>100%</u>

The Company's products address a wide range of end markets. The following table presents the Company's revenues by end market as a percentage of total net revenues.

	<u>Years Ended December 31,</u>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
<b>As a Percentage of Total Net Revenues:</b>			
High-Speed Communications .....	24%	24%	27%
Wireless Handsets .....	25	21	17
Computer.....	23	29	34
Industrial .....	25	24	19
Military & Consumer .....	<u>3</u>	<u>2</u>	<u>3</u>
Total net revenues .....	<u>100%</u>	<u>100%</u>	<u>100%</u>

For a discussion of the changes in net revenues from period to period, see "Management's Discussion and Analysis of Financial Condition and Results of Operations."

## ***Standard Products***

In recent years, the Company has directed a majority of its development, sales and marketing efforts towards standard products in an effort to address the larger markets for these products and to expand its customer base. The Company offers a broad range of high performance analog, mixed signal, and digital ICs that address high growth markets including cellular telephones, portable computers, set-top boxes, desktop personal computers, networking and communications. The majority of the Company's revenue is derived from power management standard products that, in addition to the above markets, are also used in the industrial, defense, and automotive electronics markets.

*Portable Battery-Powered Computer Market.* The Company makes power analog circuits for notebook computers, pocket PCs, and PDAs. Products in this growing market are differentiated on the basis of power efficiency, weight, small size and battery life.

*Cellular Telephone Market.* Micrel offers a range of power control and regulating analog circuits to address the demand for cellular telephones with longer battery lives. Micrel supplies high performance low dropout ("LDO") regulators and higher efficiency switching regulators that convert, regulate, switch and control the DC voltages used in cellular telephones. In addition, Micrel offers switch mode power supply ("SMPS") regulators that convert AC to useable DC power in battery chargers and cellular base stations.

*Universal Serial Bus Market.* USB has become the standard way of connecting computers with computer peripherals. In addition to implementing data communications between the connected devices, USB also provides a power source capable of powering the peripheral.

*PCMCIA Card and Socket Markets.* Micrel has been a leader in the design and manufacture of ICs for power control in PCMCIA and CardBus sockets and is involved in the creation of next generation PC card standards, including Express Card.

*Power Supply Market.* Most electronic equipment includes a power supply that converts and regulates the electrical power source into usable current for the equipment. Micrel has several families of high voltage switching controllers for the networking, telecommunications and computing markets. These devices offer high efficiency to minimize power loss through heat, and high switching frequencies to provide a minimal solution size. In addition to SMPS controllers and single chip SMPS regulators, Micrel offers a full line of MOSFET drivers, smart switches, voltage supervisors and LDOs.

*General Purpose Analog.* Micrel sells a variety of general purpose analog products including high-speed operational amplifiers, low-power operational amplifiers, comparators and intelligent protected power switches. Most of these general purpose devices focus on low-voltage and low-current applications.

*Thermal Management.* Micrel's thermal management products address the need to accurately measure temperature in several system locations and control cooling fans. Applications for these products include notebook computers, servers, enterprise storage, printers, copiers and set-top boxes.

*Hot Swap Power Controllers.* Micrel's hot swap power controllers support the requirement for 24/7 operation in high-performance enterprise servers, enterprise storage, and telecommunication infrastructure equipment. These products allow customers to upgrade or replace system boards without having to power down the system. This portfolio offers the industry's most integrated, dual-slot hot swap solutions for CompactPCI™, PCI-X, and PCI Express applications. The Company also offers other low-voltage and high-voltage (+/- 48V) controllers for the telecommunications and networking equipment

markets.

*Radio Frequency Data Communications.* Micrel's QwikRadio® family of RF receivers and transmitters are designed for use in any system requiring a cost-effective, low-data-rate wireless link. Typical examples include garage door openers, lighting and fan controls, automotive keyless entry and remote controls. Micrel's RadioWire® transceivers provide a higher level of performance for more demanding applications such as remote metering, security systems and factory automation.

*Networking and High-Speed Communications Circuits Market.* The Company's High Bandwidth division develops and produces communications products targeted at fiber optic modules as well as clock recovery, clock distribution and level translation circuits.

Micrel's Ethernet division offers a broad range of physical layer ("PHY"), media access controllers ("MAC") and switch products for the 10/100 Megabit Ethernet standard. The primary applications for the switch products are SOHO computer networks, Voice Over Internet Protocol ("VOIP") phones and media converters, used to convert signals transmitted optically over fiber to standard cable (copper) and vice versa.

The Company's future success will depend in part upon the timely completion, introduction, and market acceptance of new standard products. The standard products business is characterized by generally shorter product lifecycles, greater pricing pressure, larger competitors and more rapid technological change as compared to the Company's custom and foundry products business.

### ***Custom and Foundry Products***

Micrel offers various combinations of design, process and foundry services in order to provide customers with the following alternatives:

*Full Service Custom.* Based on a customer's specification, Micrel designs and then manufactures ICs.

*Custom and Semicustom.* Based on a customer's high level or partial circuit design, Micrel uses varying combinations of its design and process technologies to complete the design and then manufactures ICs for the customer.

*R&D Foundry.* Micrel modifies a process or develops a new process for a customer. Using that process and mask sets provided by the customer, Micrel manufactures fabricated wafers for the customer.

*Foundry.* Micrel duplicates a customer's process to manufacture fabricated wafers designed by the customer.

Micrel's full service custom, custom and semicustom products primarily address high bandwidth communications, consumer, automotive and military applications and use both analog and digital technologies. Military applications include communications and transport aircraft.

### **Sales, Distribution and Marketing**

The Company sells its products through a worldwide network of independent sales representative, independent distributor and stocking representative firms and through a direct sales staff.

The Company sells its products in Europe through a direct sales staff in England and France as well

as independent sales representative firms, independent distributors and independent stocking representative firms. Asian sales are handled through Micrel sales offices in Korea, Japan, Taiwan, China and Singapore and independent stocking representative firms. The stocking representative firms may buy and stock the Company's products for resale or may act as the Company's sales representative in arranging for direct sales from the Company to an OEM customer.

Sales to customers in North America, Asia and Europe accounted for 24%, 66% and 10% respectively, of the Company's net revenues for the year ended December 31, 2004 compared to 30%, 60% and 10%, respectively, of the Company's net revenues for the year ended December 31, 2003 and 31%, 60% and 9%, respectively, of the Company's net revenues for 2002. The Company's standard products are sold throughout the world, while its custom and foundry products are primarily sold to North American customers. The Company's net revenues by country, including the United States, are included in Note 12 of Notes to Consolidated Financial Statements.

The Company's international sales are primarily denominated in U.S. currency. Consequently, changes in exchange rates that strengthen the U.S. dollar could increase the price in local currencies of the Company's products in foreign markets and make the Company's products relatively more expensive than competitors' products that are denominated in local currencies, leading to a reduction in sales or profitability in those foreign markets. The Company has not taken any protective measures against exchange rate fluctuations, such as purchasing hedging instruments with respect to such fluctuations.

## **Customers**

For the year ended December 31, 2004 three customers, an Asian based original equipment manufacturer, a worldwide distributor and an Asian based stocking representative, accounted for 13%, 12% and 12%, respectively, of the Company's net revenues. For the year ended December 31, 2003 two customers, a worldwide distributor and an Asian based stocking representative, each accounted for 13% of the Company's net revenues. For the year ended December 31, 2002 an Asian based stocking representative accounted for 13% of the Company's net revenues.

## **Design and Process Technology**

Micrel's analog proprietary design technology depends on the skills of its analog design team. The Company has experienced analog design engineers who utilize an extensive macro library of analog and mixed-signal circuits and computer simulation models.

Micrel can produce ICs using a variety of manufacturing processes, some of which are proprietary and provide enhanced product features. Designers at companies that do not have in-house fabs or have a limited selection of available processes often have to compromise design methodology in order to match process parameters.

The Company utilizes the following process technologies:

- *Bipolar*
- *High Speed Bipolar*
- *Super $\beta$  PNP<sup>TM</sup>*
- *CMOS*
- *BiCMOS — Bipolar/CMOS ("BiCMOS")*
- *BCD — Bipolar/CMOS/DMOS ("BCD")*
- *ASSET — All Spacer Separated Element Transistor ("ASSET").*
- *Silicon Germanium — Silicon Germanium ("SiGe")*

The Company continues to develop process technologies to improve both the performance and cost of its new products. Micrel is also developing new process technologies to support its own product development and the needs of its foundry customers.

The Company utilizes third-party wafer fabrication foundries for advanced CMOS fabrication processes and other advanced processes that are not available in-house. For the year ended December 31, 2004, 13% of Micrel's wafer requirements were fabricated at third-party foundry suppliers, which includes all of Micrel's Ethernet networking products.

## **Research and Development**

The ability of the Company to compete will substantially depend on its ability to define, design, develop and introduce on a timely basis new products offering design or technology innovations. Research and development in the analog and mixed-signal integrated circuit industry is characterized primarily by circuit design and product engineering that enables new functionality or improved performance. The Company's research and development efforts are also directed at its process technologies and focus on cost reductions to existing manufacturing processes and the development of new process capabilities to manufacture new products and add new features to existing products. With respect to more established products, the Company's research and development efforts also include product redesign, shrinkage of device size and the reduction of mask steps in order to improve die yields per wafer and reduce per device costs.

The Company's analog design engineers principally focus on developing next generation standard products. The Company's new product development strategy emphasizes a broad line of standard products that are based on customer input and requests.

The Company's mixed-signal design engineers principally focus in two areas. The first is high-speed, low-noise media driving and clock/data recovery devices used in communication and advanced computer systems.

In 2004, 2003, and 2002 the Company spent \$41.8 million, \$47.0 million, and \$53.3 million, respectively, on research and development. The Company expects that it will continue to spend substantial funds on research and development activities.

## **Patents and Intellectual Property Protection**

The Company seeks patent protection for those inventions and technologies for which such protection is suitable and is likely to provide a competitive advantage to the Company. The Company currently holds 124 United States patents on semiconductor devices and methods, with various expiration dates through 2023. The Company has applications for 92 United States patents pending. The Company holds 40 issued foreign patents and has applications for 15 foreign patents pending.

## **Supply of Materials and Purchased Components**

Micrel currently purchases certain components from a limited group of vendors. The packaging of the Company's products is performed by, and certain of the raw materials included in such products are obtained from, a limited group of suppliers. The wafer supply for the Company's Ethernet products is primarily dependent upon a single large third-party wafer foundry supplier. The Company has rarely experienced delays in obtaining raw materials which have adversely affected production.

## **Manufacturing**

The Company produces the majority of its wafers at the Company's wafer fabrication facility located in San Jose, California while a small percentage of wafer fabrication is subcontracted to outside foundries, including 100% of Micrel's Ethernet product wafer requirements. The San Jose facility includes a 57,000 square foot office and manufacturing facility containing a 28,000 square foot clean room facility, which provides production processes. The San Jose facility is classified as a Class 10 facility, which means that the facility achieves a clean room level of fewer than 10 foreign particles larger than 0.5 microns in size in each cubic foot of space. The facility uses six-inch wafer technology. The Company also owns approximately 63,000 square feet of additional adjacent space in San Jose that is used as a testing facility.

Generally, each die on the Company's wafers is electrically tested for performance, and most of the wafers are subsequently sent to independent assembly and final test contract facilities in Malaysia and certain other Asian countries. At such facilities, the wafers are separated into individual circuits and packaged. The Company's reliance on independent assemblers may subject the Company to longer manufacturing cycle times. The Company from time to time has experienced competition with respect to these contractors from other manufacturers seeking assembly of circuits by independent contractors.

## **Competition**

The semiconductor industry is highly competitive and subject to rapid technological change. Significant competitive factors in the market for standard products include product features, performance, price, the timing of product introductions, the emergence of new technological standards, quality and customer support. The Company believes that it competes favorably in all of these areas.

Because the standard products market for analog ICs is diverse and highly fragmented, the Company encounters different competitors in its various market areas. The Company's principal analog circuit competitors include Linear Technology Corporation, Maxim Integrated Products, Inc., and National Semiconductor Corp. in one or more of its product areas. Other competitors include Texas Instruments, Freescale Semiconductor (formerly Motorola), Intersil, Fairchild Semiconductor, Semtech and ON Semiconductor. Each of these companies has substantially greater technical, financial and marketing resources and greater name recognition than the Company. The Company's principal competitors for

products targeted at the high bandwidth communications market are ON Semiconductor, Analog Devices, Maxim Integrated Products, Inc., Vitesse Semiconductor Corp., Integrated Circuit Systems, and Mindspeed. The primary competitors for Micrel's Ethernet products are Broadcom Corp., Marvell Technology Group Ltd. and a number of Taiwanese companies.

With respect to the custom and foundry products business, significant competitive factors include product quality and reliability, established relationships between customers and suppliers, timely delivery of products and price. The Company believes that it competes favorably in all these areas.

## **Backlog**

At December 31, 2004, the Company's backlog was approximately \$27 million, all of which was scheduled to be shipped during the first six months of 2005. At December 31, 2003, the Company's backlog was approximately \$40 million. Orders in backlog are subject to cancellation or rescheduling by the customer, generally with a cancellation charge in the case of custom and foundry products. The Company's backlog consists of distributor and customer released orders requesting shipment within the next six months. Shipments to United States, Canadian and certain other international distributors who receive significant return rights and price adjustments from the Company are not recognized as revenue by the Company until the product is sold from the distributor stock and through to the end-users. Because of possible changes in product delivery schedules and cancellation of product orders and because an increasing percentage of the Company's sales are shipped in the same quarter that the orders are received, the Company's backlog at any particular date is not necessarily indicative of actual sales for any succeeding period.

## **Environmental Matters**

Federal, state and local regulations impose various environmental controls on the storage, handling, discharge and disposal of chemicals and gases used in the Company's manufacturing process. The Company believes that its activities conform to present environmental regulations.

## **Employees**

As of December 31, 2004, the Company had 877 full-time employees. The Company's employees are not represented by any collective bargaining agreements, and the Company has never experienced a work stoppage. The Company believes that its employee relations are good.

## **ITEM 2. PROPERTIES**

The majority of the Company's manufacturing operations are located in San Jose, California in a 57,000 square foot facility and an adjacent 63,000 square foot facility which are owned by the Company. The Company fabricates the majority of its wafers at this location in a 28,000 square foot clean room facility, which provides all production processes. In addition to wafer fabrication, the Company also uses this location as a testing facility. The Company's main executive, administrative, and technical offices are located in another 57,000 square foot facility in San Jose, California under a lease agreement that expires in April 2011.

Associated with the acquisition of ETC, the company owns a 12,175 square foot design facility in Huxley, Iowa.

The Company also leases small sales and technical facilities located in Medford, NJ; Coppell, TX; Seattle, WA; Irvine, CA; Raleigh, NC; Seoul, Korea; Taipei, Taiwan; Shenzhen, P.R. China; Hong Kong; Tokyo, Japan; Newbury, U.K.; Livingston, Scotland; Oder, Germany; Oslo, Norway and Courtaboeuf Cedex, France.

The Company believes that its existing and planned facilities are adequate for its current manufacturing needs. The Company believes that if it should need additional space, such space would be available at commercially reasonable terms.

### **ITEM 3. LEGAL PROCEEDINGS**

The information included in Note 11 of Notes to Consolidated Financial Statements under the caption "Litigation" in Item 15 of Part III is incorporated herein by reference.

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

In the fourth quarter of 2004, no matters were submitted to a vote of security holders.

## **PART II**

### **ITEM 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY AND RELATED SHAREHOLDER MATTERS**

The Company did not sell any unregistered securities during the period covered by this Annual Report on Form 10-K.

The Company's Common Stock is listed on the Nasdaq National Market under the Symbol "MCRL." The range of daily closing sales prices per share for the Company's Common Stock from January 1, 2003 to December 31, 2004 was:

<b>Year Ended December 31, 2004:</b>	<b><u>High</u></b>	<b><u>Low</u></b>
Fourth quarter	\$ 11.89	\$ 9.65
Third quarter	\$ 10.85	\$ 8.40
Second quarter	\$ 14.77	\$ 11.99
First quarter	\$ 19.20	\$ 12.51
 <b>Year Ended December 31, 2003:</b>	 <b><u>High</u></b>	 <b><u>Low</u></b>
Fourth quarter	\$ 18.02	\$ 12.75
Third quarter	\$ 14.44	\$ 9.54
Second quarter	\$ 12.55	\$ 8.06
First quarter	\$ 11.12	\$ 8.02

The reported last sale price of the Company's Common Stock on the Nasdaq National Market on December 31, 2004 was \$11.02. The approximate number of holders of record of the shares of the Company's Common Stock was 570 as of February 28, 2005. This number does not include shareholders whose shares are held in trust by other entities. The actual number of shareholders is greater than this number of holders of record. The Company estimates that the number of beneficial shareholders of the shares of the Company's Common Stock as of February 28, 2005 was approximately 7,000.

The Company has authorized Common Stock, no par value and Preferred Stock, no par value. The Company has not issued any Preferred Stock.

The information required by this item regarding securities authorized for issuance under equity compensation plans is incorporated by reference to the information set forth in Item 12 of the Annual Report on Form 10-K.

### Dividend Policy

The Company has not paid any cash dividends on its capital stock. The Company currently intends to retain its earnings to fund the development and growth of its business and, therefore, does not anticipate paying any cash dividends in the foreseeable future. In addition, the Company's existing credit facilities prohibit the payment of cash or stock dividends on the Company's capital stock without the lender's prior written consent. See Item 7 - "Management's Discussion and Analysis of Financial Condition and Results of Operations - Liquidity and Capital Resources" and Note 6 of Notes to Consolidated Financial Statements contained in Item 8.

### Issuer Purchases of Equity Securities

<u>Period</u>	<u>Total Number of Shares Purchased</u>	<u>Average Price Paid Per Share</u>	<u>Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs</u>	<u>Maximum Dollar Value of Shares that May Yet be Repurchased Under the Plans or Programs (\$000)</u>
January 2004	42,550	\$ 16.70	42,550	\$ 8,670
February 2004	75,350	\$ 15.91	75,350	\$ 7,471
March 2004	167,150	\$ 13.75	167,150	\$ 20,792
April 2004	138,850	\$ 13.11	138,850	\$ 18,972
May 2004	96,600	\$ 12.83	96,600	\$ 17,733
June 2004	482,600	\$ 13.03	482,600	\$ 11,447
July 2004	501,600	\$ 10.31	501,600	\$ 6,274
August 2004	581,100	\$ 9.44	581,100	\$ 50,790
September 2004	476,100	\$ 10.11	476,100	\$ 45,976
October 2004	444,900	\$ 10.15	444,900	\$ 41,462
November 2004	249,800	\$ 10.25	249,800	\$ 38,653
December 2004	281,400	\$ 10.81	281,400	\$ 35,612
Total	<u>3,538,000</u>	\$ 11.13	<u>3,538,000</u>	

In February 2002, the Company's Board of Directors approved a plan to repurchase shares of the Company's common stock in the open market. Shares of common stock purchased pursuant to the repurchase program are cancelled upon repurchase, and are intended to offset dilution from the Company's stock option plans, employee stock purchase plans and 401(k) plan. In August, 2004 the Board of Directors amended the repurchase program and authorized the repurchase of common stock up to a maximum value of \$75 million during the period from January 1, 2004 through June 30, 2005. In March of 2005 the Board of Directors approved a \$75 million share repurchase program for calendar year 2005. The action supercedes the Company's previously approved authorization to repurchase Micrel common stock announced on August 30, 2004.

## ITEM 6. SELECTED FINANCIAL DATA

The selected consolidated financial data below should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes thereto.

### Income Statement Data:

(in thousands, except per share amounts)

	Years Ended December 31,				
	2004 <sup>(1)</sup>	2003	2002 <sup>(2)</sup>	2001 <sup>(3)</sup>	2000
Net revenues .....	\$ 257,551	\$ 211,726	\$ 204,704	\$ 217,808	\$ 346,335
Cost of revenues* .....	134,854	128,007	139,554	126,242	149,083
Gross profit .....	122,697	83,719	65,150	91,566	197,252
Operating expenses:					
Research and development .....	41,750	46,953	53,308	51,306	42,201
Selling, general and administrative .....	37,327	28,987	32,160	32,862	45,319
Amortization of deferred stock compensation* .....	1,986	3,034	22,535	9,572	6,060
Manufacturing facility impairment .....	—	(624)	23,357	—	—
Restructuring expense .....	584	286	5,536	—	—
Acquisition expenses* .....	—	—	—	8,894	—
Purchased in-process technology .....	303	—	—	—	—
Total operating expenses .....	81,950	78,636	136,896	102,634	93,580
Income (loss) from operations .....	40,747	5,083	(71,746)	(11,068)	103,672
Other income, net .....	1,712	619	1,056	6,086	4,739
Income (loss) before income taxes .....	42,459	5,702	(70,690)	(4,982)	108,411
Provision (benefit) for income taxes .....	11,206	855	(29,690)	(5,534)	35,104
Net income (loss) .....	\$ 31,253	\$ 4,847	\$ (41,000)	\$ 552	\$ 73,307
Net income (loss) per share:					
Basic .....	\$ 0.34	\$ 0.05	\$ (0.44)	\$ 0.01	\$ 0.82
Diluted .....	\$ 0.34	\$ 0.05	\$ (0.44)	\$ 0.01	\$ 0.75
Shares used in computing per share amounts:					
Basic .....	91,498	92,215	92,600	91,888	89,242
Diluted .....	93,083	93,786	92,600	98,092	98,186

\*Amortization of deferred stock compensation related to:

Cost of revenues .....	\$ 535	\$ 1,104	\$ 7,354	\$ 3,141	\$ 2,202
Operating expenses:					
Research and development .....	\$ 723	\$ 1,604	\$ 11,430	\$ 5,047	\$ 3,347
Selling, general and administrative .....	1,263	1,430	11,105	4,525	2,713
Amortization of deferred stock compensation .....	1,986	3,034	22,535	9,572	6,060
Acquisition expenses .....	—	—	—	2,007	—
Total operating expenses .....	\$ 1,986	\$ 3,034	\$ 22,535	\$ 11,579	\$ 6,060

### Balance Sheet Data:

(in thousands)

	December 31,				
	2004	2003	2002	2001	2000
Working capital .....	\$ 196,606	\$ 195,026	\$ 182,155	\$ 196,940	\$ 172,768
Total assets .....	334,267	337,439	330,675	354,813	359,748
Long-term debt and other obligations .....	2,168	8,179	19,237	5,200	9,211
Total shareholders' equity .....	284,887	283,609	273,619	313,330	281,835

(1) Net income for the year ended December 31, 2004, includes \$6.3 million in net reversals of accrued income and payroll tax liabilities as a result of the completion of a federal tax audit (see Note 8 of Notes to Consolidated Financial Statements)

(2) Operating results for the year ended December 31, 2002, includes \$17.1 million in accelerated amortization of deferred stock compensation associated with options cancelled pursuant to the employee option exchange program (see Note 7 of Notes to Consolidated Financial Statements). In addition, related to the closure of the Company's Santa Clara, California wafer fabrication facility, the Company recorded \$5.5 million in restructure expense and \$23.4 million in Manufacturing facility impairment expense (see Note 13 of Notes to Consolidated Financial Statements)

(3) Operating results for the year ended December 31, 2001, includes \$8.9 million in acquisition expenses related to the acquisition of Kendin Communications.

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

### Overview

*The statements contained in this Report on Form 10-K that are not purely historical are 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, as amended, including statements regarding the Company's expectations, hopes, intentions or strategies regarding the future. Forward-looking statements include, but are not limited to: statements regarding future products or product development; statements regarding future research and development spending and the Company's product development strategy; statements regarding the levels of international sales; statements regarding future expansion or utilization of manufacturing capacity; statements regarding future expenditures; and statements regarding current or future acquisitions. In some cases, forward-looking statements can be identified by the use of forward-looking terminology such as "believe," "estimate," "may," "can," "will," "intend," "objective," "plan," "expect" or "anticipate" or the negative of these terms or other comparable terminology. All forward-looking statements included in this document are based on information available to the Company on the date hereof, and the Company assumes no obligation to update any such forward-looking statements. These statements are subject to risks and uncertainties that could cause actual results and events to differ materially from those expressed or implied by such forward-looking statements. Some of the factors that could cause actual results to differ materially are set forth in Item 1 ("Business"), Item 3 ("Legal Proceedings") and Item 7 ("Management's Discussion and Analysis of Financial Condition and Results of Operations").*

Micrel designs, develops, manufactures and markets a range of high-performance analog power ICs, mixed-signal and digital ICs. These circuits are used in a wide variety of electronics products, including those in the computer, telecommunications, industrial and networking markets. In addition to standard products, the Company manufactures custom analog and mixed-signal circuits and provides wafer foundry services.

Following the most severe downturn in the history of the semiconductor industry in 2001, customer demand for the Company's products remained weak in 2002 as customers reacted to slow economic growth and high inventory levels of semiconductor components throughout the supply chain. Lead times for semiconductor components were short resulting in poor visibility into future customer demand. The Company's gross profit and net income declined in 2002 due to lower unit volume, declining selling prices for the Company's products and an increased level of unabsorbed fixed costs due to lower utilization levels of the Company's wafer fabrication lines. In response to this environment of uncertain demand the Company focused on reducing costs.

The Company's objective was to align its cost structure with the reduced revenue levels while retaining sufficient manufacturing capacity, and sustaining a level of research and development investment that should facilitate future growth. In addition to reducing discretionary spending and payroll costs, the Company sought to significantly reduce its manufacturing costs. One of the Company's most significant cost reduction actions was the consolidation of its Santa Clara, California wafer fabrication operation into its San Jose, California wafer fabrication facility. This action commenced in 2002 and was completed in 2003 (see Note 13 of Notes to Consolidated Financial Statements). By the end of 2003, the Company's manufacturing cost reduction efforts had offset a substantial portion of the erosion in gross profit resulting from the decline in average selling prices. The Company continued to invest in research and development at a rate in excess of 20% of revenues while

## **MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (CONTINUED)**

selling, general and administrative spending was reduced to a level in 2003 which approached 1999 spending.

In 2003 the Company returned to profitability after recording a loss on an annual basis for the first time in its history in 2002. The first half of 2003 was characterized by the continuation of limited visibility into, and uncertainty of, customer demand. The uncertainty of demand was compounded in the first half of 2003 by events such as the war in Iraq and the outbreak of severe acute respiratory syndrome in Asia ("SARS"). The Company's quarterly revenues remained relatively flat, averaging \$50 million per quarter for the first half of 2003. The Company recorded a small net loss for this period. In the second half of 2003, customer demand increased as the United States' and Asian economies began to grow more rapidly. The Company's new order rates, or bookings, grew faster than revenue in the third and fourth quarter of 2003, resulting in sequential growth in both revenues and order backlog. The growth in new orders and revenues in the second half of 2003 was driven by demand for the Company's standard products from customers serving the communications, computing, industrial and wireless handset end markets. Gross margins and net income increased in the second half of 2003. The Company continued to generate positive cash flows from operations on a quarterly basis throughout 2003.

The Company's financial results continued to improve in 2004. Revenues grew to the highest level since 2000, increasing 22 percent over 2003. The strength in customer order rates that began in the second half of 2003 continued through most of the first half of 2004. The increase in customer demand caused lead times for semiconductor components, including Micrel's, to expand during the first and second quarters of 2004 as customers and distributors became concerned about availability of supply. The Company's revenues continued to grow in the first half of the year and gross margin, operating margin and net income increased on a sequential basis in both the first and second quarters. By the end of the second quarter, customers began to perceive that the supply of semiconductor components was generally sufficient and lead times for certain components began to shrink.

In the third and fourth quarter of 2004, demand was below normal seasonal levels as customers reacted quickly to uncertain demand for their products, decreasing semiconductor lead times and uncertain economic conditions by reducing their order rates. Because of the lessons learned from the painful excess inventory situation that occurred in 2001, the Company's customers appear to be more sensitive to change in end demand for their products and supplier lead times. Customers in certain end markets such as networking, enterprise computing and high speed communications experienced lower demand for their end products than they had anticipated. This factor, combined with rapidly shrinking lead times from most semiconductor suppliers, led to lower order rates for the Company's products in the second half of 2004 as customers attempted to control their inventory levels. Semiconductor distributors also reacted to decreasing lead times by reducing order rates. Inventories at the Company's distributors, after increasing during the first half of 2004, declined throughout the second half of the year and ending 2004 levels were slightly higher than 2003 ending inventories. Inventory levels at the Company's stocking representatives, after growing significantly during the first nine months of 2004, remained flat during the fourth quarter of 2004 and ended 2004 with levels significantly higher than 2003 ending inventories. The proportion of the Company's total sales to China, Taiwan and Southeast Asia, which are primarily served by stocking representatives, continued to grow in 2004 due to the continued shift in electronics manufacturing to China and Southeast Asia from North America and Europe. The Company's level of on hand inventory remained above prior year levels to provide a high level of customer service in response to shorter customer lead times. As a result of lower order rates, the Company's backlog and revenues declined in both the third and fourth quarter of 2004. At the end of 2004, lead times for the Company's products remained low, at approximately two to three weeks, and visibility into customer demand was poor.

## **MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (CONTINUED)**

Despite reduced revenues in the second half of 2004 the Company's gross margin declined only slightly and operating margins remained above 10% in both the third and fourth quarter. For the year, gross margin improved by over 8% to 48%, operating margin increased to 16% in 2004 from 2% in 2003, and the Company's net income per diluted share increased substantially to \$0.34 in 2004 from \$0.05 in 2003. Included in net income for 2004 were \$6.3 million in reversals of income and payroll tax liabilities associated with the conclusion of a tax audit (see Note 8 of Notes to Consolidated Financial Statements). The Company generated the second highest level of operating cash flow in the Company's history in 2004 and repaid almost all of its outstanding debt during the year. Operating cash flow less cash used for the purchase of property, plant and equipment (commonly referred to as "free cash flow") was the highest in the Company's history.

In 2004, Micrel completed the acquisition of BlueChip Communications AS ("BlueChip") of Oslo, Norway. BlueChip is a fabless semiconductor company that designs, develops and markets high performance RF ICs and modules for the actuation and connectivity markets. The acquisition was accounted for as a purchase under SFAS 141 "Business Combinations" and, accordingly, the results of operations of BlueChip from the date of acquisition forward have been included in the Company's consolidated financial statements. (see Note 2 of Notes to Consolidated Financial Statements).

The Company derives a substantial portion of its net revenues from standard products. For 2004, 2003 and 2002 the Company's standard products sales accounted for 96%, 90%, and 88%, respectively, of the Company's net revenues. The Company believes that a substantial portion of its net revenues in the future will depend upon standard products sales, although such sales as a proportion of net revenues may vary as the Company adjusts product output levels to correspond with varying economic conditions and demand levels in the markets which it serves. The standard products business is characterized by short-term orders and shipment schedules, and customer orders typically can be canceled or rescheduled without significant penalty to the customer. Since most standard products backlog is cancelable without significant penalty, the Company typically plans its production and inventory levels based on internal forecasts of customer demand, which is highly unpredictable and can fluctuate substantially. In addition, the Company is limited in its ability to reduce costs quickly in response to any revenue shortfalls.

The Company may experience significant fluctuations in its results of operations. Factors that affect the Company's results of operations include the volume and timing of orders received, changes in the mix of products sold, the utilization level of manufacturing capacity, competitive pricing pressures and the successful development of new products. These and other factors are described in further detail later in this discussion. As a result of the foregoing or other factors, there can be no assurance that the Company will not experience material fluctuations in future operating results on a quarterly or annual basis, which could materially and adversely affect the Company's business, financial condition, results of operations or cash flows.

### **Critical Accounting Policies and Estimates**

The financial statements included in this Form 10-K and discussed within this Management's Discussion and Analysis of Financial Condition and Results of Operations have been prepared in accordance with accounting principles generally accepted in the United States of America. Preparation of these financial statements 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 period. On an on-going basis, management evaluates its estimates and judgments. Management bases its estimates and judgments on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (CONTINUED)

form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. For a detailed discussion of the Company's significant accounting policies, see Note 1 of Notes to Consolidated Financial Statements. The Company considers certain accounting policies related to revenue recognition, inventory valuation, income taxes, and litigation to be critical to the fair presentation of its financial statements.

*Revenue Recognition and Receivables.* Micrel generates revenue by selling products to original equipment manufacturers ("OEM"s), distributors and stocking representatives. Stocking representative firms may buy and stock the Company's products for resale or may act as the Company's sales representative in arranging for direct sales from the Company to an OEM customer. The Company's policy is to recognize revenue from sales to customers when the rights and risks of ownership have passed to the customer, when persuasive evidence of an arrangement exists, the product has been delivered, the price is fixed or determinable and collection of the resulting receivable is reasonably assured.

Micrel allows certain distributors, primarily located in North America and Europe, and in certain countries in Asia, significant return rights, price protection and pricing adjustments subsequent to the initial product shipment. As these returns and price concessions have historically been significant, and future returns and price concessions are difficult to reliably estimate, the Company defers recognition of revenue and related cost of sales (in the balance sheet line item "deferred income on shipments to distributors") derived from sales to these distributors until they have resold the Company's products to their customers. Although revenue recognition and related cost of sales are deferred, the Company records an accounts receivable and relieves inventory at the time of initial product shipment. As standard terms are FOB shipping point, payment terms are enforced from shipment date and legal title and risk of inventory loss passes to the distributor upon shipment. In addition, the Company may offer to its distributors, where revenue is deferred upon shipment and recognized on a sell-through basis, price adjustments to allow the distributor to price the Company's products competitively for specific resale opportunities. The Company estimates and records an allowance for distributor price adjustments for which the specific resale transaction has been completed, but the price adjustment claim has not yet been received and recorded by the Company.

Sales to OEM customers and Asian based stocking representatives are recognized upon shipment. The Company does not grant return rights, price protection or pricing adjustments to OEM customers. The Company offers limited contractual stock rotation rights to stocking representatives. In addition, the Company is not contractually obligated to offer, but may infrequently grant, price adjustments or price protection to certain stocking representatives on an exception basis. At the time of shipment to OEMs and stocking representatives, an allowance for returns and price adjustments is established based upon historical return rates. Actual future returns and price adjustments could be different than the allowance established.

The Company also maintains an allowance for doubtful accounts for estimated uncollectible accounts receivable. This estimate is based on an analysis of specific customer creditworthiness and historical bad debts experience. Actual future uncollectible amounts could exceed the doubtful accounts allowance established.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (CONTINUED)

*Inventory Valuation.* Inventories are stated at the lower of cost (first-in, first-out method) or market. The Company records adjustments to write down the cost of obsolete and excess inventory to the estimated market value based on historical and forecasted demand for its products. If actual future demand for the Company's products is less than currently forecasted, additional inventory adjustments may be required. Once a reserve is established, it is maintained until the product to which it relates is sold or otherwise disposed of. This treatment is in accordance with Accounting Research Bulletin 43 and SEC Staff Accounting Bulletin 100 "Restructuring and Impairment Charges."

*Income Taxes.* Deferred tax assets and liabilities result primarily from temporary timing differences between book and tax valuation of assets and liabilities, state and federal research and development credit carryforwards and state manufacturers credit carryforwards.

The Company must assess the likelihood that future taxable income levels will be sufficient to ultimately realize the tax benefits of these deferred tax assets. As of December 31, 2004, the Company believes that future taxable income levels will be sufficient to realize the tax benefits of these deferred tax assets and has not established a valuation allowance. Should the Company determine that future realization of these tax benefits is not likely, a valuation allowance would be established, which would increase the Company's tax provision in the period of such determination.

In addition, the calculation of the Company's tax liabilities involves dealing with uncertainties in the application of complex tax regulations. The Company records liabilities for anticipated tax audit issues based on its estimate of whether, and the extent to which, additional taxes may be due. Actual tax liabilities may be different than the recorded estimates and could result in an additional charge or benefit to the tax provision in the period when the ultimate tax assessment is determined.

During the second quarter of 2004, the Company reversed \$3.8 million of accrued income tax liabilities as a result of the completion of a federal income tax audit. In addition, related to the federal tax audit completion, the Company also reversed \$3.9 million in accrued payroll tax liabilities. This reduction in accrued payroll tax liabilities has been recorded as a \$1.1 million reduction in cost of revenues, a \$1.7 million reduction in research and development expense and a \$1.1 million reduction in selling, general and administrative expense in the second quarter of 2004 (see Note 8 of Notes to Consolidated Financial Statements).

*Litigation.* The semiconductor industry is characterized by frequent litigation regarding patent and other intellectual property rights. The Company is currently involved in such intellectual property litigation (see Note 11 of Notes to Consolidated Financial Statements) and has not accrued a liability for such litigation. The Company regularly evaluates current information available to determine whether such accruals should be made. An estimated liability would be accrued when it is determined to be probable that a liability has been incurred and the amount of loss can be reasonably estimated. If the Company were to determine that such a liability was probable and could be reasonably estimated, the adjustment would be charged to income in the period such determination was made.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (CONTINUED)

### Results of Operations

The following table sets forth certain operating data as a percentage of total net revenues for the periods indicated.

	<b>Years Ended December 31,</b>		
	<u><b>2004</b></u>	<u><b>2003</b></u>	<u><b>2002</b></u>
Net revenues .....	100.0%	100.0%	100.0%
Cost of revenues.....	<u>52.4</u>	<u>60.5</u>	<u>68.2</u>
Gross profit .....	<u>47.6</u>	<u>39.5</u>	<u>31.8</u>
Operating expenses:			
Research and development.....	16.2	22.2	26.0
Selling, general and administrative .....	14.5	13.7	15.7
Amortization of deferred stock compensation .....	0.8	1.4	11.0
Manufacturing facility impairment .....	—	(0.3)	11.4
Restructuring expense .....	0.2	0.1	2.7
Acquisition expenses .....	<u>0.1</u>	<u>—</u>	<u>—</u>
Total operating expenses.....	<u>31.8</u>	<u>37.1</u>	<u>66.8</u>
Income (loss) from operations .....	15.8	2.4	(35.0)
Other income, net.....	<u>0.7</u>	<u>0.3</u>	<u>0.5</u>
Income (loss) before income taxes.....	16.5	2.7	(34.5)
Provision (benefit) for income taxes .....	<u>4.4</u>	<u>0.4</u>	<u>(14.5)</u>
Net income .....	<u>12.1%</u>	<u>2.3%</u>	<u>(20.0)%</u>

*Net Revenues.* Net revenues increased 22% to \$257.6 million for the year ended December 31, 2004 from \$211.7 million in 2003 primarily due to increased standard product revenues, which were partially offset by decreased custom and foundry revenues.

Standard product revenues increased 29% to \$246.6 million, which represented 96% of net revenues for the year ended December 31, 2004, compared to \$191.1 million and 90% of net revenues for 2003. These increases resulted primarily from increased unit shipments of standard products to the telecommunications, computer, industrial, high speed communications and networking end markets.

Custom and foundry revenues decreased 47% to \$11.0 million, which represented 4% of net revenues for the year ended December 31, 2004, compared to \$20.6 million and 10% of net revenues for 2003. Such decreases were due primarily to decreased unit shipments of foundry products principally due to the cessation of manufacturing for a single customer, Lexmark, at the end of 2003.

Customer demand for semiconductors can change quickly and unexpectedly. From the middle of 2001 through 2003, customers perceived that semiconductor components were readily available and ordered only for their short-term needs, resulting in historically low order backlog levels. The Company's revenue levels have been highly dependent on the amount of new orders that are received for which product is requested to be delivered to the customer within the same quarter. Within the semiconductor industry these orders that are booked and shipped within the quarter are called "turns fill" orders. When the turns fill level exceeds approximately 35% of quarterly revenue, it makes it very difficult to predict near term revenues and income. Because of the long cycle time to build its products,

## **MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (CONTINUED)**

the Company's lack of visibility into demand when turns fill is high makes it difficult to predict what product to build to match future demand. The Company averaged approximately 55% turns fill per quarter during 2003.

As lead times and backlog increased during the first half of 2004 the turns fill requirement declined to 35% by the second quarter. After experiencing an increase in order rates and backlog in the first six months of 2004, order rates in the second half declined as customers quickly reduced new orders in an attempt to control their inventories in response to uncertain demand for their end products and declining supplier lead times. The Company's lead times decreased during the fourth quarter to less than four weeks at the end of December, compared with average lead times of seven to eight weeks during the first half of 2004. This resulted in an increased turns fill requirement in the fourth quarter to approximately 45%. Although overall semiconductor industry channel inventories appear to be equal to or below long term historical trends, customers perceive semiconductor components are readily available. Customers are cautious in committing new orders, relying instead on short lead times and the willingness of semiconductor manufacturers to hold inventory and react quickly to supply their short term needs. The slowing of global economic growth rates, the aversion to holding inventory and the hope of negotiating lower prices has caused many customers to reduce order backlog on their suppliers. The Company's backlog at December 31, 2004 declined on a sequential basis and was 32% below the backlog level of December 31, 2003. The lower backlog level, increased reliance on turns fill orders, unseasonable weakness in order rates and the uncertain growth rate of the world economy make it difficult to predict near term demand. Although the Company has reduced production levels in response to lower order rates, the uncertainty in demand arising from these factors, together with the uncertainty of product mix and pricing, make it difficult to predict future levels of sales and profitability and may require the Company to continue to carry higher levels of inventory.

For the year ended December 31, 2003, net revenues increased 3% to \$211.7 from \$204.7 million in 2002 primarily due to increased standard product revenues, which were partially offset by decreased custom and foundry revenues. Standard product revenues increased 6% to \$191.1 million, which represented 90% of net revenues for the year ended December 31, 2003, compared to \$180.4 million and 88% of net revenues for 2002. This increase resulted primarily from increased unit shipments of industrial, telecommunications, computer and communications products, which was partially offset by decreased average selling prices across all significant standard product lines. Custom and foundry revenues decreased 15% to \$20.6 million, which represented 10% of net revenues for the year ended December 31, 2003, compared to \$24.3 million and 12% of net revenues for 2002. Such decreases were due primarily to decreased unit shipments of foundry products.

International sales represented 76%, 70%, and 69% of net revenues for the years ended December 31, 2004, 2003 and 2002, respectively. On a dollar basis, international sales increased 33% to \$196.9 million for the year ended December 31, 2004 from \$147.8 million for the comparable period in 2003. These increases resulted primarily from increased shipments of telecommunications, networking communications and high speed communications products, primarily in Asia and to a lesser extent Europe.

The trend for the Company's customers to move their electronics manufacturing to Asian countries has brought increased pricing pressure for Micrel and other semiconductor manufacturers. Asian based manufacturers are typically more concerned about cost and less concerned about the capability of the integrated circuits they purchase. This can make it more difficult for United States based companies to differentiate themselves except by price. The increased concentration of electronics procurement and manufacturing in the Asia Pacific region has led, and may continue to lead, to continued price pressure for the Company's products in the future.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (CONTINUED)

*Gross Profit.* Gross profit is affected by a variety of factors including the volume of product sales, product mix, manufacturing capacity utilization, product yields and average selling prices. The Company's gross margin increased to 48% for the year ended December 31, 2004 from 40% for the year ended December 31, 2003. The increase in gross margin resulted primarily from a greater sales mix of higher margin products, decreased wafer fabrication costs, and decreased external assembly and test costs. During the year ended December 31, 2004, the company reduced sales of low margin foundry products and increased sales of higher margin analog and high speed communications standard products as compared to the same periods in 2003. In addition, during 2004, the Company benefited from decreased wafer fabrication costs resulting from the Company's wafer fabrication consolidation project (see Note 13 of Notes to Consolidated Financial Statements) and lower costs for external assembly and test manufacturing services. The Company's gross profit margin has also benefited from spreading fixed costs over a higher sales volume. In addition, gross profit for the year ended December 31, 2004 includes the reversal of \$1.1 million of accrued payroll tax liabilities, recorded in the second quarter of 2004, associated with the conclusion of a tax audit (see Note 8 of Notes to Consolidated Financial Statements). Depreciation and amortization (excluding amortization of deferred stock compensation) as a percent of sales declined to 10% for the year ended December 31, 2004 from 14% for the same period in 2003.

In response to the decline in order rates during the second half of the year and the uncertainty of end demand, the Company reduced its level of production in the fourth quarter of 2004 and will reduce production activity further in the first quarter of 2005. The Company is acting to reduce the effect on gross margin from lower factory utilization by reducing the number of days worked in the quarter and controlling expenses. Should global economic growth remain strong and demand for the Company's products rebound, the Company has the ability to rapidly increase manufacturing output.

For the year ended December 31, 2003, the Company's gross margin increased to 40% from 32% for the year ended December 31, 2002. The increase in gross margin primarily reflected decreased wafer fabrication costs resulting from the Company's wafer fabrication consolidation plan, lower costs for external assembly and test manufacturing services and lower amortization of deferred stock compensation costs, which were partially offset by a reduction in average selling prices as compared to the same periods in 2002.

*Research and Development Expenses.* Research and development expenses as a percentage of net revenues represented 16% and 22% for the years ended December 31, 2004 and 2003, respectively. On a dollar basis, research and development expenses decreased \$5.2 million or 11% to \$41.8 million for the year ended December 31, 2004 from \$47.0 million in 2003. This decrease was primarily due to decreased prototype fabrication costs and the reversal of \$1.7 million of accrued payroll tax liabilities in the second quarter of 2004, associated with the conclusion of a tax audit (see Note 8 of Notes to Consolidated Financial Statements). The Company believes that the development and introduction of new products is critical to its future success and expects to continue significant investment in research and development activities in the future.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (CONTINUED)

For the years ended December 31, 2003 and 2002, research and development represented 22% and 26% of net revenues, respectively. On a dollar basis, research and development expenses decreased \$6.4 million or 12% to \$47.0 million for the year ended December 31, 2003 from \$53.3 million in 2002. The decrease was primarily due to decreased prototype fabrication costs combined with reduced staffing costs and reduced mask costs.

*Selling, General and Administrative Expenses.* As a percentage of net revenues, selling, general and administrative expenses represented 15% and 14% for the years ended December 31, 2004 and 2003, respectively. On a dollar basis, selling, general and administrative expenses increased \$8.3 million or 29% to \$37.3 million for the year ended December 31, 2004 from \$29.0 million for the comparable period in 2003. The increase was principally attributable to increased commissions related to higher revenues, increased staffing costs and profit sharing accruals, increased accounting and auditing fees associated with implementation of the requirements of Section 404 of the Sarbanes-Oxley Act and increased outside legal costs which were partially offset by the reversal of \$1.1 million of accrued payroll tax liabilities in the second quarter of 2004, associated with the conclusion of a tax audit (see Note 8 of Notes to Consolidated Financial Statements).

For the years ended December 31, 2003 and 2002, selling, general and administrative expenses represented 14% and 16% of net revenues, respectively. On a dollar basis, selling, general and administrative expenses decreased \$3.2 million or 10% to \$29.0 million for the year ended December 31, 2003 from \$32.2 million for the comparable period in 2002. The decrease was principally attributable to decreased outside legal costs combined with decreased advertising expenses.

*Amortization of Deferred Stock Compensation.* The Company accounts for stock-based awards to employees using the intrinsic value method in accordance with Accounting Principles Board Opinion ("APB") No. 25, "Accounting for Stock Issued to Employees". During the years 1996 through December 2001, certain of the Company's option pricing practices resulted in stock compensation expense under APB 25 (see "Stock Based Awards" included in Note 1 of Notes to Consolidated Financial Statements). In addition, the Company assumed certain stock options granted to employees of Kendin Communications in connection with the acquisition of Kendin Communications in 2001 which were compensatory under APB 25. As of December 31, 2004 total unamortized stock compensation was \$1.1 million with a future amortization schedule of \$822,000 in 2005 and \$296,000 in 2006.

For the year ended December 31, 2004, total amortization of deferred stock compensation was \$2.5 million compared to \$4.1 million in 2003. This decrease resulted from decreased deferred compensation balances. For the year ended December 31, 2003, total amortization of deferred stock compensation was \$4.1 million compared to \$29.9 million in 2002. This decrease resulted primarily from \$17.1 million in accelerated amortization in 2002 which resulted from options cancelled pursuant to an employee option exchange program (see Note 7 of Notes to Consolidated Financial Statements).

In December 2004, the Financial Accounting Standards Board ("FASB" or the "Board") issued Statement of Accounting Standards ("SFAS") No. 123R, "Share-Based Payment". SFAS No. 123R is a revision of SFAS No. 123, and supersedes APB 25 (see more discussion of SFAS No. 123R under the caption "New Accounting Standards" included in Note 1 of Notes to Consolidated Financial Statements).

*Purchased in-process technology.* In 2004, Micrel acquired 100% of the outstanding common stock and options to purchase common stock of BlueChip, in a cash-for-stock transaction. Micrel paid approximately \$2 million in cash and incurred approximately \$300,000 in direct acquisition costs for the outstanding BlueChip securities and options. The fair value of the acquired assets exceeded the purchase

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (CONTINUED)

price by \$1.3 million. The Company deferred \$1.0 million of this excess amount as potential contingent consideration of \$1.0 million was payable, under the terms of the agreement, if certain revenue and gross profit targets were met by the BlueChip operations during calendar year 2004. As of December 31, 2004, it was determined that the additional contingent consideration of \$1.0 million, which was initially recorded in the first quarter of 2004, would not be payable as certain revenue and gross profit targets were not achieved by the BlueChip operation. As a result, the additional contingent consideration was reversed in the fourth quarter of 2004 and the purchase cost allocation was adjusted accordingly (See Note 2 of Notes to Consolidated Financial Statements).

The purchase cost allocation, as adjusted for the final determination of the contingent consideration, resulted in \$1.7 million of the purchase cost allocated to intangible assets. Of that amount, \$303,000 was expensed during the year ended December 31, 2004 to purchased in-process technology, which had not reached technological feasibility and had no alternative future. The remaining intangible assets of \$1.4 million, consisting of \$1.1 million in existing technology and \$282,000 in customer relationships, are included in intangible assets in the accompanying condensed consolidated balance sheets and are being amortized on a straight line basis over their useful lives of three to five years.

*Manufacturing Facility Impairment and Restructuring Expense.* In September 2002, the Company approved a plan to close its Santa Clara, California wafer fabrication facility to reduce costs and improve operating efficiencies. The Company accrued \$5.5 million in restructuring expenses associated with the facility closure which consisted of \$1.0 million for equipment disposal costs and \$4.5 million in net contractual building lease costs, excluding estimated sublease income, that will provide no future benefit.

During 2003, the Company ceased all manufacturing processes within the Santa Clara facility and completed the relocation of all employees to its San Jose, CA facilities. During 2003, the Company paid \$1.3 million in restructuring costs that reduced the previous restructuring accrual and recorded an additional \$286,000 in net restructuring accrual adjustments which were charged to restructuring expense in 2003.

During 2004, the Company paid \$1.7 million in restructuring costs that reduced the previous restructuring accrual. The Company also increased its accrued restructuring expenses for contractual building lease costs by \$584,000 to eliminate remaining estimated future sub-lease income as efforts to sub-lease the facility have been unsuccessful to-date and the estimated probability of future sub-lease has been reduced to less than probable.

As of December 31, 2004, the remaining restructuring accrual was \$3.4 million (see Note 13 of Notes to Consolidated Financial Statements). Actual future costs may be different than these estimates and would require an adjustment to restructuring expense in the period such determination is made.

Also related to the facility closure, in September 2002, the Company recorded a \$23.4 million impairment of long-lived assets to reduce the net book value of the facility's leasehold improvements and equipment to fair value. The fair value was based on a third-party estimate of the current net sales value. During 2003, the Company sold previously impaired equipment resulting in a \$624,000 gain which has been recorded as a credit to the manufacturing facility impairment expense. As of December 31, 2003, there was no remaining book value for equipment previously impaired during the 2002 restructuring actions.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (CONTINUED)

*Other Income, Net.* Other income, net reflects interest income from investments in short-term and long-term investment grade securities and money market funds and other non-operating income, offset by interest expense incurred on term notes. Other income, net increased by \$1.1 million to \$1.7 million in 2004 from \$619,000 in 2003. The increase was primarily due to increased interest income rate of returns on increased cash and investment balances and decreased interest expense resulting from a decrease in average debt as compared to the prior year.

For the year ended December 31, 2003, other income, net decreased by \$437,000 to \$619,000 from \$1.1 million in 2002. The decrease was primarily due to decreased rates of return on cash, cash equivalents and short-term investments as compared to the prior year. In addition, the 2002 results included a \$947,000 expense for the settlement of a patent dispute and a credit of \$490,000 in other income.

*Provision (benefit) for Income Taxes.* For the year ended December 31, 2004, the provision for income taxes was \$11.2 million or 26% of income before taxes. The income tax provision for 2004 is based on the Company's estimated annual statutory tax rate of 35% of pretax income, reduced by a \$3.8 million reversal of accrued income tax liabilities in the second quarter of 2004, as a result of the completion of a federal income tax audit (see Note 8 of Notes to Consolidated Financial Statements). The 2004 provision for income taxes differs from taxes computed at the federal statutory rate primarily due to the effect of federal export tax credits, state income taxes and state research and development credits. For the year ended December 31, 2003, the provision for taxes was 15% of income before taxes. For the year ended December 31, 2002, the benefit for taxes was 42% of loss before taxes. The 2003 and 2002 income tax provision or benefit differ from taxes computed at the federal statutory rate due to the effect of state taxes, state research and development credits and state manufacturing credits.

### Liquidity and Capital Resources

Since inception, the Company's principal sources of funding have been its cash from operations, bank borrowings and sales of common stock. Principal sources of liquidity at December 31, 2004, consisted of cash and short-term investments of \$148 million and a \$5 million revolving line of credit from a commercial bank (see Note 6 of Notes to Consolidated Financial Statements).

In September 2002, the Company borrowed \$10.7 million through a commercial mortgage financing agreement which was associated with the purchase of its previously leased manufacturing facilities in San Jose, CA. Borrowings under this agreement bear interest, at the Company's election, at the daily floating prime rate, or adjustable monthly LIBOR plus 1.5%. The principal balance of the loan is to be repaid in 59 consecutive monthly installments of \$16,890 and one final installment in the amount necessary to pay in full the remaining outstanding principal balance, with no early payment penalty. In December 2003, the company repaid \$7.0 million of the loan. In October 2004, the Company repaid the remaining loan balance of \$3.3 million resulting in no balance outstanding at December 31, 2004.

Associated with the acquisition of BlueChip, the Company has \$247,000 outstanding in term notes payable to the Norwegian Industrial and Regional Development Fund.

The Company generated \$66.4 million in cash flows from operating activities for the year ended December 31, 2004 compared to \$50.7 million for the year ended December 31, 2003. The \$15.7 million increase in cash flows provided by operating activities in 2004 compared with 2003 was primarily due to a \$30.0 million increase to net income adjusted for non-cash activities (\$31.3 million net income plus

## **MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (CONTINUED)**

\$39.4 million in non-cash activities in 2004 compared to a \$4.8 million net income plus \$35.9 million in non-cash activities in 2003) which was partially offset by a \$12.9 million cash flow decrease due to increased inventory levels in 2004 as compared to 2003 (2004 inventory increase used \$4.5 million in cash flow as compared to cash provided in 2003 by a decrease in inventory of \$8.4 million.)

For the year ended December 31, 2004, cash flows provided by operating activities of \$66.4 million were primarily attributable to net income after adding back non-cash activities of \$70.7 million combined with a \$1.7 million decrease in accounts receivable, a \$3.0 million increase in accounts payable and a \$1.3 million increase in deferred income on shipments to distributors, which were partially offset by a \$4.4 million increase in inventory, a \$2.9 million decrease in other accrued liabilities and a \$2.5 million decrease in income taxes payable.

For the year ended December 31, 2003, cash flows provided by operating activities of \$50.7 million were primarily attributable to net income after adding back non-cash activities of \$40.7 million combined with a \$8.4 million decrease in inventory, a \$2.4 million increase in deferred income, a \$4.2 million increase in income taxes payable, which were partially offset by a \$3.5 million increase in accounts receivable and \$2.0 million decrease in all other accrued liabilities.

The Company's investing activities during the year ended December 31, 2004, used cash of \$68.5 million compared to \$21.1 million used in 2003. This increase in cash used for investing activities was primarily due to a \$48.5 million increase in net investment purchases and \$2.0 million used for the purchase of BlueChip during 2004, which was partially offset by decreased capital expenditures in 2004. Cash used for investing activities during the year ended December 31, 2004 of \$68.5 million resulted from net \$48.5 million in net investment purchases, \$ 16.9 million in purchases of property, plant and equipment, \$2.0 million used for the purchase of BlueChip and \$1.0 for the purchase of intangible assets.

The Company's investing activities during the year ended December 31, 2003, used cash of \$21.1 million, \$7.4 million less than in 2002. This decrease in cash used for investing activities was primarily due to an \$18.0 million facility purchase included in 2002, which was partially offset by increased capital expenditures in 2003. Cash used for investing activities during the year ended December 31, 2003 of \$21.1 million resulted from net purchases of property, plant and equipment.

The Company's financing activities during the year ended December 31, 2004, used cash of \$36.6 million as compared to cash used of \$6.9 million during the year ended December 31, 2003. This increase in cash flow used primarily resulted from an increase in cash used to repurchase shares of the Company's common stock.

Cash used by financing activities during the year ended December 31, 2004 of \$36.6 million was the result of \$39.4 million used to repurchase 3,538,000 shares of common stock combined with \$4.0 million in repayments of long-term debt, which was partially offset by proceeds from the issuance of common stock through employee stock transactions of \$6.8 million.

Cash used by financing activities during the year ended December 31, 2003 of \$6.9 million was the result of \$7.9 million in repayments of long-term debt combined with \$6.5 million to repurchase 492,450 shares of common stock, which was partially offset by proceeds from the issuance of common stock through employee stock transactions of \$7.5 million.

The Company currently intends to spend approximately \$18 million to \$25 million to purchase capital equipment and make facility improvements during the next twelve months primarily for manufacturing equipment for wafer fabrication and product testing and additional research and

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (CONTINUED)

development related software and equipment. The Company is currently authorized by its Board of Directors to repurchase an additional \$75.0 million of its common stock through December 31, 2005. Since inception, the Company's principal sources of funding have been its cash from operations, bank borrowings and sales of common stock. The Company believes that its cash from operations, existing cash balances and short-term investments, and its credit facility will be sufficient to meet its cash requirements for 2005. In the longer term, the Company believes future cash requirements will continue to be met by its cash from operations, and future debt or equity financings as required.

### Recently Issued Accounting Standards

Please refer to the caption "New Accounting Standards" within Note 1 of Notes to Consolidated Financial Statements for a discussion of the expected impact of recently issued accounting standards.

### Contractual Obligations and Commitments

As of December 31, 2004, the Company had the following contractual obligations and commitments (in thousands):

		<u>Payments Due By Period</u>			
	<u>Total</u>	<u>Less than 1 Year</u>	<u>1-3 Years</u>	<u>4-5 Years</u>	<u>After 5 Years</u>
Long-term debt (see Note 6 of Notes to Consolidated Financial Statements)	\$ 247	\$ 164	\$ 83	\$ —	\$ —
Operating leases (see Note 9 of Notes to Consolidated Financial Statements)	11,539	3,305	4,107	2,526	1,601
Other long-term liabilities (see Note 14 of Notes to Consolidated Financial Statements)	2,000	2,000	—	—	—
Open purchase orders	<u>22,000</u>	<u>22,000</u>	<u>—</u>	<u>—</u>	<u>—</u>
Total	<u>\$35,786</u>	<u>\$27,469</u>	<u>\$ 4,190</u>	<u>\$ 2,526</u>	<u>\$ 1,601</u>

Open purchase orders are defined as agreements to purchase goods or services that are enforceable and legally binding and that specify all significant terms, including: fixed or minimum quantities to be purchased; fixed, minimum or variable pricing provisions; and the approximate timing of the transactions (see Note 9 of Notes to Consolidated Financial Statements).

Borrowing agreements consisted of a \$5 million revolving line of credit from a commercial bank. The revolving line of credit agreement includes a provision for the issuance of commercial or standby letters of credit by the bank on behalf of the Company. The value of all letters of credit outstanding reduces the total line of credit available. There were no borrowings under the revolving line of credit at December 31, 2004 and there were \$875,000 in standby letters of credit outstanding. The letters of credit are issued to guarantee payments for the Company's workers compensation program.

The Company has no other off-balance sheet arrangements and has not entered into any transactions involving unconsolidated, limited purpose entities or commodity contracts.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (CONTINUED)

### Factors That May Affect Operating Results

If a company's operating results are below the expectations of public market analysts or investors, then the market price of its Common Stock could decline. Many factors that can affect a company's quarterly and annual results are difficult to control or predict. Some of the factors which can affect a multinational semiconductor business such as the Company are described below.

### Geopolitical and Macroeconomic Risks That May Affect Multinational Enterprises

*Demand for semiconductor components is increasingly dependent upon the rate of growth of the global economy.* If the rate of global economic growth slows, or contracts, customer demand for products could be adversely affected, which in turn could negatively affect revenues, results of operations and financial condition. Many factors could adversely affect regional or global economic growth. Some of the factors that could slow global economic growth include: rising interest rates in the United States, increased price inflation for goods, services or materials, a slowdown in the rate of growth of the Chinese economy, a significant act of terrorism which disrupts global trade or consumer confidence, geopolitical tensions including war and civil unrest. Reduced levels of economic activity, or disruptions of international transportation, could adversely affect sales on either a global basis or in specific geographic regions

*The Company has generated a substantial portion of its net revenues from export sales.* The Company believes that a substantial portion of its future net revenues will depend on export sales to customers in international markets, including Asia. In 2004, 66% of the Company's revenues were derived from shipments to customers in Asia, up from 32% in 2000 and 60% in 2003. International markets are subject to a variety of risks, including changes in policy by foreign governments, acts of terrorism, social conditions such as civil unrest, economic conditions including high levels of inflation, fluctuation in the value of foreign currencies and currency exchange rates and trade restrictions or prohibitions. Changes in exchange rates that strengthen the U.S. dollar could increase the price of the Company's products in the local currencies of the foreign markets it serves. This would result in making the Company's products relatively more expensive than its competitors' products that are denominated in local currencies, leading to a reduction in sales or profitability in those foreign markets. The Company has not taken any protective measures against exchange rate fluctuations, such as purchasing hedging instruments. In addition, the Company sells to domestic customers that do business worldwide and cannot predict how the businesses of these customers may be affected by economic or political conditions elsewhere in the world. Such factors could adversely affect the Company's future revenues, financial condition, results of operations or cash flows.

*The Company is reliant on certain key suppliers for wafer fabrication, circuit assembly and testing services.* Most of these suppliers are based outside of the U.S. The Company's supply could be interrupted as a result of any of the previously mentioned risk factors relating to international markets.

*Market conditions may lead the Company to initiate additional cost reduction plans, which may negatively affect near term operating results.* Weak customer demand, competitive pricing pressures, excess capacity, weak economic conditions or other factors, may cause the Company to initiate additional actions to reduce the Company's cost structure and improve the Company's future operating results. The cost reduction actions may require incremental costs to implement, which could negatively affect the Company's operating results in periods when the incremental costs or liabilities are incurred.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (CONTINUED)

### **Semiconductor Industry Specific Risks**

*The volatility of customer demand in the semiconductor industry limits a company's ability to predict future levels of sales and profitability.* Semiconductor suppliers can rapidly increase production output, leading to a sudden oversupply situation and a subsequent reduction in order rates and revenues as customers adjust their inventories to true demand rates. A rapid and sudden decline in customer demand for products can result in excess quantities of certain products relative to demand. Should this occur the Company's operating results may be adversely affected as a result of charges to reduce the carrying value of the Company's inventory to the estimated demand level or market price. The Company's quarterly revenues are highly dependent upon turns fill orders (orders booked and shipped in the same quarter). The short-term and volatile nature of customer demand makes it extremely difficult to predict near term revenues and profits.

*The short lead time environment in the semiconductor industry has allowed many end consumers to rely on stocking representatives and distributors to carry inventory to meet short term requirements and minimize their investment in on-hand inventory.* Since the end of 2003 some of the Company's stocking representatives and distributors have increased their inventory levels to service the volatile short-term demand of the end customer. Should the relationship with a distributor or stocking representative be terminated, the future level of product returns could be higher than the returns allowance established, which could negatively affect the Company's revenues and results of operations.

*The semiconductor industry is highly competitive and subject to rapid technological change, price-erosion and increased international competition.* Significant competitive factors include product features, performance and price; timing of product introductions; emergence of new computer and communications standards; quality and customer support.

*During a period when economic growth and customer demand have been less certain, both the semiconductor industry and the Company have experienced significant price erosion since the beginning of 2001.* If price erosion continues, it will have the effect of reducing revenue levels and gross margins in future periods. Furthermore, the trend for the Company's customers to move their electronics manufacturing to Asian countries has brought increased pricing pressure for Micrel and the semiconductor industry. Asian based manufacturers are typically more concerned about cost and less concerned about the capability of the integrated circuits they purchase. The increased concentration of electronics procurement and manufacturing in the Asia Pacific region may lead to continued price pressure and additional product advertising costs for the Company's products in the future.

*An important part of the Company's strategy is to continue to focus on the market for high-speed communications ICs.* If the recovery in the telecommunications infrastructure and wire line networking markets is not sustainable, resulting in reduced demand for the Company's high bandwidth products, the Company's future revenue growth and profitability could be adversely affected.

*The markets that the Company serves frequently undergo transitions in which products rapidly incorporate new features and performance standards on an industry-wide basis.* If the Company's products are unable to support the new features or performance levels required by OEMs in these markets, it would likely lose business from existing or potential customers and would not have the opportunity to compete for new design wins until the next product transition. If the Company fails to develop products with required features or performance standards, or experiences even a short delay in bringing a new product to market, or if its customers fail to achieve market acceptance of their products, its revenues could be significantly reduced for a substantial period of time.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (CONTINUED)

*Because the standard products market for ICs is diverse and highly fragmented, the Company encounters different competitors in various market areas.* Most of these competitors have substantially greater technical, financial and marketing resources and greater name recognition than the Company. There can be no assurance that the Company will be able to compete successfully in either the standard products or custom and foundry products business in the future or that competitive pressures will not adversely affect the Company's financial condition, results of operations, or cash flows.

*The significant investment in semiconductor manufacturing capacity and the rapid growth of circuit design centers in China may present a competitive threat to established semiconductor companies due to the current low cost of labor and capital in China.* The emergence of low cost competitors in China could reduce the revenues and profitability of established semiconductor manufacturers.

*Many semiconductor companies face risks associated with a dependence upon third parties that manufacture, assemble or package certain of its products.* These risks include reduced control over delivery schedules and quality; inadequate manufacturing yields and excessive costs; the potential lack of adequate capacity during periods of excess demand; difficulties selecting and integrating new subcontractors; potential increases in prices; disruption in supply due to civil unrest, terrorism or other events which may occur in the countries in which the subcontractors operate; and potential misappropriation of the Company's intellectual property. Any of these risks may lead to increased costs or delay delivery of the Company's products, which would harm its profitability and customer relationships. Additionally, the Company's wafer and product requirements typically represent a relatively small portion of the total production of the third-party foundries and outside assembly, testing and packaging contractors. As a result, Micrel is subject to the risk that a foundry will provide delivery or capacity priority to other larger customers at the expense of Micrel, resulting in an inadequate supply to meet customer demand or higher costs to obtain the necessary product supply.

*There is intense competition for qualified personnel in the semiconductor industry, in particular design engineers.* The Company may not be able to continue to attract and train engineers or other qualified personnel necessary for the development of its business or to replace engineers or other qualified personnel who may leave its employ in the future. Loss of the services of, or failure to recruit, key design engineers or other technical and management personnel could be significantly detrimental to the Company's product and process development programs.

*Compliance with corporate governance regulations such as the Sarbanes-Oxley Act, which requires the Company's management to conduct an evaluation of the effectiveness of its internal control over financial reporting, has increased the Company's cost.* Compliance with Section 404 of the Sarbanes-Oxley Act and other recent corporate governance and internal control regulations resulted in a tripling of audit and accounting fees in 2004 as well as increased costs for internal auditing and third party consultants. The increased expense in 2004 associated with this compliance effort was approximately \$1 million, reducing net income per diluted share by approximately \$0.01. Although the Company expects the cost of compliance to decrease in 2005, the cost will remain significantly above years prior to 2004 and new regulations, or changes to existing regulations, could cause expenses to be higher than anticipated in the future.

*The success of companies in the semiconductor industry depends in part upon intellectual property, including patents, trade secrets, know-how and continuing technology innovation.* There can be no assurance that the steps taken by the Company to protect its intellectual property will be adequate to prevent misappropriation or that others will not develop competitive technologies or products. There can be no assurance that any patent owned by the Company will not be invalidated, circumvented or challenged, that the rights granted thereunder will provide competitive advantages or that any of its

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (CONTINUED)

pending or future patent applications will be issued with the scope of the claims sought, if at all. Furthermore, there can be no assurance that others will not develop technologies that are similar or superior to the Company's technology, duplicate technology or design around the patents owned by the Company. Additionally, the semiconductor industry is characterized by frequent litigation regarding patent and other intellectual property rights. There can be no assurance that existing claims or any other assertions or claims for indemnity resulting from infringement claims will not adversely affect the Company's business, financial condition, results of operations, or cash flows.

*The recently issued Statement of Accounting Standards ("SFAS") No. 123R, "Share-Based Payment" will require the Company to recognize the cost of employee services received in exchange for awards of equity instruments, based on the grant date fair value of those awards, in the financial statements. As discussed in Note 1 of Notes to Consolidated Financial Statements, the ultimate impact from the adoption of this accounting standard is uncertain but it is expected to significantly increase stock based compensation expense in future periods after adoption. The pro forma effect to net income and earnings per share had the Company applied the fair value method to stock-based awards has been disclosed in the Company's previous Form 10-K filings and is contained in Note 1 of the Notes to Consolidated Financial Statements of this Form 10-K. However, a reduction in net income and earnings per share from the expensing of stock option awards in the Company's future results of operation may have an adverse affect on the value of the Company's common stock. If the Company reduces the number of stock option grants to employees to minimize the cost associated with share based incentive awards, it will most likely make it more difficult for the Company to hire and retain employees.*

*Our customers are requiring that the Company offer its products in lead-free packages. Governmental regulations in certain countries and our customers' intention to produce products that are less harmful to the environment has resulted in a requirement from many of the Company's customers to purchase integrated circuits that do not contain lead. The Company has responded by offering its products in lead-free versions. While the lead-free versions of the Company's products are expected to be more friendly to the environment, the ultimate impact is uncertain. In addition, the quality, cost and manufacturing yields of the lead free products may be less favorable compared to the products packaged using more traditional materials which may result in higher costs to the Company.*

*Companies in the semiconductor industry are subject to a variety of federal, state and local governmental regulations related to the use, storage, discharge and disposal of toxic, volatile or otherwise hazardous chemicals used in its manufacturing process. Any failure to comply with present or future regulations could result in the imposition of fines, the suspension of production, alteration of manufacturing processes or a cessation of operations. In addition, these regulations could restrict the Company's ability to expand its facilities at their present locations or construct or operate a new wafer fabrication facility or could require the Company to acquire costly equipment or incur other significant expenses to comply with environmental regulations or clean up prior discharges. The Company's failure to appropriately control the use of, disposal or storage of, or adequately restrict the discharge of, hazardous substances could subject it to future liabilities and could have a material adverse effect on its business.*

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (CONTINUED)

### Company-Specific Risks

**In addition to the risks that affect multinational semiconductor companies listed above, there are additional risks which are more specific to the Company such as:**

*The Company's gross margin, operating margin and net income are highly dependent on the level of revenue and capacity utilization that the Company experiences.* Semiconductor manufacturing is a capital-intensive business resulting in high fixed costs. If the Company is unable to utilize its installed wafer fabrication or test capacity at a high level, the costs associated with these facilities and equipment would not be fully absorbed, resulting in higher average unit costs and lower profit margins.

*The cellular telephone (wireless handset) market comprises a significant portion of the Company's standard product revenues.* The proportion of the Company's annual revenues from customers serving the cellular telephone market has been increasing over the last three years, growing from less than 20% of worldwide sales in 2001 to approximately 25% in 2004. Due to the highly competitive and fast changing environment in which the Company's cellular telephone customers operate, demand for the product the Company sells into this end market can change rapidly and unexpectedly. If the Company's cellular telephone customers lose market share, or accumulate too much inventory of completed handsets, the demand for the Company's products can decline sharply which could adversely affect the Company's revenues and results of operations.

*The Company derives a significant portion of its revenues from customers located in certain geographic regions or countries.* Three of the Company's top ten direct customers are located in South Korea. In the event that political tensions surrounding North Korea evolve into military or social conflict, or other factors disrupt the Korean economy, the Company's revenues, results of operations, cash flow and financial condition could be adversely affected. A significant portion of the Company's revenues come from customers located in Taiwan and China. In the event that economic activity in these two countries declines, or is disrupted by geopolitical events, the Company's revenues and results of operations could be adversely affected.

*The Company manufactures most of its semiconductors at its San Jose, California fabrication facilities.* The Company's existing wafer fabrication facility, located in Northern California, may be subject to natural disasters such as earthquakes. A significant natural disaster, such as an earthquake or prolonged drought, could have a material adverse impact on the Company's business, financial condition and operating results. Furthermore, manufacturing semiconductors requires manufacturing tools that are unique to each product being produced. If one of these unique manufacturing tools was damaged or destroyed, the Company's ability to manufacture the related product would be impaired and its business would suffer until the tool was repaired or replaced. Additionally, the fabrication of ICs is a highly complex and precise process. Small impurities, contaminants in the manufacturing environment, difficulties in the fabrication process, defects in the masks used to print circuits on a wafer, manufacturing equipment failures, wafer breakage or other factors can cause a substantial percentage of wafers to be rejected or numerous die on each wafer to be nonfunctional. The Company maintains approximately two to three months of inventory that has completed the wafer fabrication manufacturing process. This inventory is generally located offshore at third party subcontractors and can act to buffer some of the adverse impact from a disruption to the Company's San Jose wafer fabrication activity arising from a natural disaster such as an earthquake.

## **ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

At December 31, 2004, the Company held \$46.5 million in short-term investments and \$2.0 million in long-term investments. Short-term and long-term investments consist primarily of liquid debt instruments and are classified as available-for-sale securities. Investments purchased with remaining maturity dates of greater than three months and less than 12 months are classified as short-term. Investments purchased with remaining maturity dates of 12 months or greater are classified as long-term. These available-for-sale securities are subject to interest rate risk and will fall in value if market interest rates increase. If market interest rates were to increase immediately and uniformly by 10 percent from levels at December 31, 2004, the fair value of the short-term investments would decline by an immaterial amount. The Company generally expects to have the ability to hold its fixed income investments until maturity and therefore would not expect operating results or cash flows to be affected to any significant degree by the effect of a sudden change in market interest rates on short-term investments.

At December 31, 2004, the Company held an insignificant amount of fixed-rate long-term debt subject to interest rate risk.

## **ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

The Company's financial statements and supplementary data are set forth on pages 41 through 78, which follow Item 15.

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

Not applicable.

## **ITEM 9A. CONTROLS AND PROCEDURES**

### **Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures**

The Company maintains disclosure controls and procedures, as such term is defined under Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended (the Exchange Act). In designing and evaluating the disclosure controls and procedures, management recognizes that any disclosure controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management necessarily is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Under the supervision and with the participation of the Company's management, including its principal executive officer and principal financial officer, the Company conducted an evaluation of the effectiveness of its disclosure controls and procedures as of the end of the period covered by this report. Based on this evaluation, the Company's principal executive officer and principal financial officer have concluded that the Company's disclosure controls and procedures were effective at the reasonable assurance level as of December 31, 2004.

## **Management's Report on Internal Control Over Financial Reporting**

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Internal control over financial reporting cannot provide absolute assurance of achieving financial reporting objectives because of its inherent limitations. Internal control over financial reporting is a process that involves human diligence and compliance and is subject to lapses in judgment and breakdowns resulting from human failures. Internal control over financial reporting also can be circumvented by collusion or improper management override. Because of such limitations, there is a risk that material misstatements may not be prevented or detected on a timely basis by internal control over financial reporting. However, these inherent limitations are known features of the financial reporting process. Therefore, it is possible to design into the process safeguards to reduce, though not eliminate, this risk. Under the supervision and with the participation of the Company's management, including its principal executive officer and principal financial officer, the Company conducted an evaluation of the effectiveness of its internal control over financial reporting based on the criteria set forth in the report entitled "Internal Control - Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on its evaluation under the criteria set forth in "Internal Control — Integrated Framework," management has concluded that the Company's internal control over financial reporting was effective as of December 31, 2004. Management's assessment of the effectiveness of the Company's internal control over financial reporting as of December 31, 2004, has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears herein.

## **Changes in Internal Control Over Financial Reporting**

There has been no change in the Company's internal controls over financial reporting that occurred during the quarter ended December 31, 2004 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

## **ITEM 9B. OTHER INFORMATION**

None.

## **PART III**

### **ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT**

The information concerning the directors and officers of the Company is included in the Company's Proxy Statement to be filed in connection with the Company's 2005 Annual Meeting of Shareholders under the captions "Election of Directors" and "Certain Information with Respect to Executive Officers," respectively, and is incorporated herein by reference.

The Company has an Audit Committee composed of independent directors. The information required by this item with respect to the Audit Committee and "audit committee financial experts" is incorporated by reference from the Company's Proxy Statement to be filed in connection with the Company's 2005 Annual Meeting of Shareholders under the caption, "Committees and Meetings of the Board of Directors."

The information concerning compliance with Section 16(a) of the Exchange Act is included in the Company's Proxy Statement to be filed in connection with the Company's 2005 Annual Meeting of Shareholders under the caption "Section 16(A) Beneficial Ownership Reporting Compliance," and is incorporated herein by reference.

The Company has adopted a code of ethics that applies to the principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. The Company's code of ethics has been filed as Exhibit 14 to the Company's Annual Report on Form 10-K for the year ended December 31, 2003 and is incorporated herein by reference.

### **ITEM 11. EXECUTIVE COMPENSATION**

The information required by this item is included under the captions "Executive Compensation" and "Stock Option Grants and Exercise" in the Company's Proxy Statement to be filed in connection with the Company's 2005 Annual Meeting of Shareholders and is incorporated herein by reference.

### **ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED SHAREHOLDER MATTERS**

The information required by this item is included under the caption "Security Ownership of Certain Beneficial Owners and Management" and "Equity Compensation Plan Information" in the Company's Proxy Statement to be filed in connection with the Company's 2005 Annual Meeting of Shareholders and is incorporated herein by reference.

### **ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS**

The information required by this item is included under the caption "Certain Transactions" in the Company's Proxy Statement to be filed in connection with the Company's 2005 Annual Meeting of Shareholders and is incorporated herein by reference.

## ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this item is included under the caption "Independent Auditors" in the Company's Proxy Statement to be filed in connection with the Company's 2005 Annual Meeting of Shareholders and is incorporated herein by reference.

## ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

The following documents are filed as part of this Report:

1. Financial Statements. The following financial statements of the Company and the Reports of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm, are included in this Report on the pages indicated:

	<u>Page</u>
Report of Independent Registered Public Accounting Firm .....	38
Consolidated Balance Sheets as of December 31, 2004 and 2003 .....	40
Consolidated Statements of Operations for the Years Ended December 31, 2004, 2003 and 2002 .....	41
Consolidated Statements of Shareholders' Equity and Comprehensive Income for the Years Ended December 31, 2004, 2003 and 2002.....	42
Consolidated Statements of Cash Flows for the Years Ended December 31, 2004, 2003 and 2002 .....	43
Notes to Consolidated Financial Statements .....	44
Supplemental Quarterly Financial Summery .....	68

2. Financial Statement Schedule. The following financial statement schedule of the Company for the years ended December 31, 2004, 2003 and 2002, is filed as part of this report on Form 10-K and should be read in conjunction with the financial statements.

<u>Schedule</u>	<u>Title</u>	<u>Page</u>
II	Valuation and Qualifying Accounts .....	69

Schedules not listed above have been omitted because they are not applicable, not required, or the information required to be set forth therein is included in the Consolidated Financial Statements or notes thereto.

3. Exhibits. Those exhibits required by Item 601 of Regulation S-K to be filed or incorporated by reference as a part of this Report are listed on the Exhibit Index immediately preceding the exhibits filed herewith.

## **Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Shareholders of Micrel, Incorporated:

We have completed an integrated audit of Micrel, Incorporated's 2004 consolidated financial statements and of its internal control over financial reporting as of December 31, 2004 and audits of its 2003 and 2002 consolidated financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Our opinions, based on our audits, are presented below.

### Consolidated financial statements and financial statement schedule

In our opinion, the consolidated financial statements listed in the index appearing under Item 15(a)(1) present fairly, in all material respects, the financial position of Micrel, Incorporated and its subsidiaries at December 31, 2004 and 2003, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2004 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15(a)(2) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit of financial statements includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

### Internal control over financial reporting

Also, in our opinion, management's assessment, included in Management's Report on Internal Control Over Financial Reporting appearing under Item 9A, that the Company maintained effective internal control over financial reporting as of December 31, 2004 based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), is fairly stated, in all material respects, based on those criteria. Furthermore, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2004, based on criteria established in *Internal Control - Integrated Framework* issued by the COSO. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express opinions on management's assessment and on the effectiveness of the Company's internal control over financial reporting based on our audit. We conducted our audit of internal control over financial reporting in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we

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

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

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

/s/ PricewaterhouseCoopers LLP  
San Jose, California  
March 10, 2005

**MICREL, INCORPORATED**  
**CONSOLIDATED BALANCE SHEETS**  
**AS OF DECEMBER 31, 2004 AND 2003**  
(In thousands, except share amounts)

	<u>2004</u>	<u>2003</u>
<b>ASSETS</b>		
<b>CURRENT ASSETS:</b>		
Cash and cash equivalents	\$ 101,282	\$ 140,059
Short-term investments	46,503	—
Accounts receivable, less allowances: 2004, \$3,978; 2003, \$2,836	32,055	33,084
Inventories	35,744	31,108
Prepaid expenses and other	2,488	2,132
Deferred income taxes	<u>25,746</u>	<u>34,294</u>
Total current assets	243,818	240,677
LONG-TERM INVESTMENTS	2,012	—
PROPERTY, PLANT AND EQUIPMENT, NET	81,605	87,993
INTANGIBLE ASSETS, NET	6,375	5,771
DEFERRED INCOME TAXES	—	2,483
OTHER ASSETS	<u>457</u>	<u>515</u>
<b>TOTAL</b>	<u>\$ 334,267</u>	<u>\$ 337,439</u>
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
<b>CURRENT LIABILITIES:</b>		
Accounts payable	\$ 16,275	\$ 12,897
Accrued compensation	4,899	5,240
Accrued commissions	1,292	1,302
Income taxes payable	4,960	7,627
Other accrued liabilities	5,974	5,610
Deferred income on shipments to distributors	13,648	12,272
Current portion of long-term debt	<u>164</u>	<u>703</u>
Total current liabilities	47,212	45,651
LONG-TERM DEBT	83	3,280
OTHER LONG-TERM OBLIGATIONS	1,389	4,310
DEFERRED RENT	575	589
DEFERRED INCOME TAXES	121	—
COMMITMENTS AND CONTINGENCIES (Notes 9 and 11)		
<b>SHAREHOLDERS' EQUITY:</b>		
Preferred stock, no par value – authorized: 5,000,000 shares; issued and outstanding: none	—	—
Common stock, no par value – authorized: 250,000,000 shares; issued and outstanding: 2004 – 89,825,994; 2003 – 92,522,513	127,264	160,015
Deferred stock compensation	(1,118)	(3,954)
Accumulated other comprehensive loss	(85)	(25)
Retained earnings	<u>158,826</u>	<u>127,573</u>
Total shareholders' equity	<u>284,887</u>	<u>283,609</u>
<b>TOTAL</b>	<u>\$ 334,267</u>	<u>\$ 337,439</u>

The accompanying notes are an integral part of these consolidated financial statements

**MICREL, INCORPORATED**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
**YEARS ENDED DECEMBER 31, 2004, 2003 AND 2002**  
(In thousands, except per share amounts)

	<u>2004</u>	<u>2003</u>	<u>2002</u>
NET REVENUES	\$ 257,551	\$ 211,726	\$ 204,704
COST OF REVENUES*	<u>134,854</u>	<u>128,007</u>	<u>139,554</u>
GROSS PROFIT	<u>122,697</u>	<u>83,719</u>	<u>65,150</u>
OPERATING EXPENSES:			
Research and development	41,750	46,953	53,308
Selling, general and administrative	37,327	28,987	32,160
Amortization of deferred stock compensation*	1,986	3,034	22,535
Purchased in-process technology	303	—	—
Restructuring expense	584	286	5,536
Manufacturing facility impairment	<u>—</u>	<u>(624)</u>	<u>23,357</u>
Total operating expenses	<u>81,950</u>	<u>78,636</u>	<u>136,896</u>
INCOME (LOSS) FROM OPERATIONS	<u>40,747</u>	<u>5,083</u>	<u>(71,746)</u>
OTHER INCOME (EXPENSE):			
Interest income	2,167	1,337	2,014
Interest expense	(313)	(660)	(499)
Other expense, net	<u>(142)</u>	<u>(58)</u>	<u>(459)</u>
Total other income, net	<u>1,712</u>	<u>619</u>	<u>1,056</u>
INCOME (LOSS) BEFORE INCOME TAXES	42,459	5,702	(70,690)
PROVISION (BENEFIT) FOR INCOME TAXES	<u>11,206</u>	<u>855</u>	<u>(29,690)</u>
NET INCOME (LOSS)	<u>\$ 31,253</u>	<u>\$ 4,847</u>	<u>\$ (41,000)</u>
NET INCOME (LOSS) PER SHARE:			
Basic	<u>\$ 0.34</u>	<u>\$ 0.05</u>	<u>\$ (0.44)</u>
Diluted	<u>\$ 0.34</u>	<u>\$ 0.05</u>	<u>\$ (0.44)</u>
WEIGHTED-AVERAGE SHARES USED IN COMPUTING PER SHARE AMOUNTS:			
Basic	<u>91,498</u>	<u>92,215</u>	<u>92,600</u>
Diluted	<u>93,083</u>	<u>93,786</u>	<u>92,600</u>
*Amortization of deferred stock compensation:			
Included in cost of revenues	<u>\$ 535</u>	<u>\$ 1,104</u>	<u>\$ 7,354</u>
Amortization of deferred stock compensation included in operating expenses related to:			
Research and development	\$ 723	\$ 1,604	\$ 11,430
Selling, general and administrative	<u>1,263</u>	<u>1,430</u>	<u>11,105</u>
Total operating expenses	<u>\$ 1,986</u>	<u>\$ 3,034</u>	<u>\$ 22,535</u>

The accompanying notes are an integral part of these consolidated financial statements

**MICREL, INCORPORATED**  
**CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY**  
**AND COMPREHENSIVE INCOME (LOSS)**  
**YEARS ENDED DECEMBER 31, 2004, 2003 AND 2002**  
(In thousands, except share amounts)

	<u>Common Stock</u>		<u>Deferred</u>	<u>Accumulated</u>	<u>Retained</u>	<u>Total</u>	<u>Comprehensive</u>
	<u>Shares</u>	<u>Amount</u>	<u>Stock</u>	<u>Other</u>	<u>Earnings</u>	<u>Shareholders'</u>	<u>Income (Loss)</u>
			<u>Compensation</u>	<u>Comprehensive</u>		<u>Equity</u>	
				<u>Income (Loss)</u>			
Balances, December 31, 2001	92,823,677	\$ 194,384	\$ (44,755)	\$ (25)	\$ 163,726	\$ 313,330	
Net loss	—	—	—	—	(41,000)	(41,000)	<u>\$ (41,000)</u>
Comprehensive loss							<u>\$ (41,000)</u>
Deferred stock compensation, net	—	(4,895)	34,784	—	—	29,889	
Repurchase of common stock	(2,274,300)	(29,127)	—	—	—	(29,127)	
Employee stock transactions	1,457,194	8,943	—	—	—	8,943	
Tax effect of employee stock transactions	—	(8,416)	—	—	—	(8,416)	
Balances, December 31, 2002	92,006,571	160,889	(9,971)	(25)	122,726	273,619	
Net income	—	—	—	—	4,847	4,847	<u>\$ 4,847</u>
Comprehensive income							<u>\$ 4,847</u>
Deferred stock compensation, net	—	(1,879)	6,017	—	—	4,138	
Repurchase of common stock	(492,450)	(6,493)	—	—	—	(6,493)	
Employee stock transactions	1,008,392	7,541	—	—	—	7,541	
Tax effect of employee stock transactions	—	(43)	—	—	—	(43)	
Balances, December 31, 2003	92,522,513	160,015	(3,954)	(25)	127,573	283,609	
Net income	—	—	—	—	31,253	31,253	\$ 31,253
Other comprehensive loss, Change in net unrealized losses from investments				(60)		(60)	<u>(60)</u>
Comprehensive income							<u>\$ 31,193</u>
Deferred stock compensation, net	—	(315)	2,836	—	—	2,521	
Repurchase of common stock	(3,538,000)	(39,388)	—	—	—	(39,388)	
Employee stock transactions	841,481	6,779	—	—	—	6,779	
Tax effect of employee stock transactions	—	173	—	—	—	173	
Balances, December 31, 2004	<u>89,825,994</u>	<u>\$ 127,264</u>	<u>\$ (1,118)</u>	<u>\$ (85)</u>	<u>\$ 158,826</u>	<u>\$ 284,887</u>	

The accompanying notes are an integral part of these consolidated financial statements

**MICREL, INCORPORATED**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
**YEARS ENDED DECEMBER 31, 2004, 2003 AND 2002**  
(In thousands)

	<u>2004</u>	<u>2003</u>	<u>2002</u>
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>			
Net income (loss)	\$ 31,253	\$ 4,847	\$ (41,000)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation and amortization	24,828	28,649	33,910
Stock based compensation	2,521	4,138	29,889
Purchased in-process technology	303	—	—
Manufacturing facility impairment	—	(624)	23,357
(Gain) loss on disposal of assets	283	56	(1)
Deferred rent	(14)	22	(453)
Deferred income taxes	11,592	3,657	(15,948)
Changes in operating assets and liabilities, net of effects of acquisition:			
Accounts receivable	1,703	(3,507)	(1,368)
Inventories	(4,456)	8,423	(4,137)
Prepaid expenses and other assets	(156)	418	4,157
Accounts payable	2,967	(129)	289
Accrued compensation	(388)	(163)	(3,093)
Accrued commissions	(10)	357	137
Income taxes payable	(2,494)	4,178	(3,120)
Other accrued liabilities	18	1,313	1,859
Other non-current accrued liabilities	(2,921)	(3,377)	4,121
Deferred income on shipments to distributors	1,376	2,440	55
Net cash provided by operating activities	<u>66,405</u>	<u>50,698</u>	<u>28,654</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>			
Purchases of property, plant and equipment	(16,917)	(21,139)	(29,532)
Purchase of intangible assets	(1,030)	—	(2,054)
Purchases of investments	(57,575)	—	—
Proceeds from sales and maturities of investments	9,000	—	3,093
Purchase of BlueChip Communications, net of cash acquired	(2,033)	—	—
Net cash used in investing activities	<u>(68,555)</u>	<u>(21,139)</u>	<u>(28,493)</u>
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>			
Proceeds from long-term borrowings	—	—	10,736
Repayments of long-term debt	(4,018)	(7,911)	(3,756)
Proceeds from the issuance of common stock	6,779	7,541	8,943
Repurchase of common stock	(39,388)	(6,493)	(29,127)
Net cash used in financing activities	<u>(36,627)</u>	<u>(6,863)</u>	<u>(13,204)</u>
<b>NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>	<u>(38,777)</u>	<u>22,696</u>	<u>(13,043)</u>
<b>CASH AND CASH EQUIVALENTS - Beginning of year</b>	<u>140,059</u>	<u>117,363</u>	<u>130,406</u>
<b>CASH AND CASH EQUIVALENTS - End of year</b>	<u>\$ 101,282</u>	<u>\$ 140,059</u>	<u>\$ 117,363</u>
<b>SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:</b>			
Cash paid during the year for:			
Interest	<u>\$ 313</u>	<u>\$ 660</u>	<u>\$ 286</u>
Income taxes	<u>\$ 2,184</u>	<u>\$ 661</u>	<u>\$ 91</u>
Non-cash transactions:			
Acquisition of intangible asset under patent cross license and settlement agreement	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 5,154</u>
Deferred stock compensation reversal	<u>\$ (315)</u>	<u>\$ (1,879)</u>	<u>\$ (4,895)</u>

The accompanying notes are an integral part of these consolidated financial statements

**MICREL, INCORPORATED**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**Years Ended December 31, 2004, 2003 and 2002**

**1. SIGNIFICANT ACCOUNTING POLICIES**

**Nature of Business** — Micrel, Incorporated and its wholly-owned subsidiaries (the “Company”) develops, manufactures and markets analog, mixed-signal and digital semiconductor devices. The Company also provides custom and foundry services which include silicon wafer fabrication, integrated circuit (“IC”) assembly and testing. The Company’s standard ICs are sold principally in North America, Asia, and Europe for use in a variety of products, including those in the computer, communication, and industrial markets. The Company’s custom circuits and wafer foundry services are provided to a wide range of customers that produce electronic systems for communications, consumer, automotive and military applications. The Company produces the majority of its wafers at the Company’s wafer fabrication facilities located in San Jose, California. After wafer fabrication, the completed wafers are then separated into individual circuits and packaged at independent assembly and final test contract facilities primarily located in Malaysia.

**Principles of Consolidation** — The accompanying consolidated financial statements include the accounts of Micrel, Incorporated and its wholly-owned subsidiaries. All significant intercompany accounts and transactions have been eliminated.

**Use of Estimates** — In accordance with accounting principles generally accepted in the United States of America, management utilizes certain 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 period. On an on-going basis, management evaluates its estimates and judgments. Management bases its estimates and judgments on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. The primary estimates underlying the Company's financial statements include allowances for doubtful accounts receivable, reserves for product returns and price adjustments, reserves for obsolete and slow moving inventory, income taxes, litigation and accrual for other liabilities. Actual results could differ from those estimates.

**Cash Equivalents** — The Company considers all liquid debt instruments purchased with remaining maturities of three months or less to be cash equivalents.

**Investments** — Short-term and long-term investments consist primarily of liquid debt instruments and are classified as available-for-sale securities and are stated at market value with unrealized gains and losses included in shareholders’ equity. Unrealized losses are charged against income when a decline in the fair market value of an individual security is determined to be other than temporary. Realized gains and losses on investments are included in other income or expense. Investments purchased with remaining maturity dates of greater than three months and less than 12 months are classified as short-term. Investments purchased with remaining maturity dates of 12 months or greater are classified either as short-term or as long-term based on maturities and the Company's intent with regards to those securities (expectations of sales and redemptions). A summary of investments at December 31, 2004 is as follows (in thousands):

	<u>Amortized Cost</u>	<u>Market Value</u>	<u>Unrealized Holding Gains</u>	<u>Unrealized Holding Losses</u>
Short-term investments	\$ 46,573	\$ 46,503	\$ —	\$ 70
Long-term investments	\$ 2,027	\$ 2,012	\$ —	\$ 15

**MICREL, INCORPORATED**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**  
**Years Ended December 31, 2004, 2003 and 2002**

As of December 31, 2004, all investments with unrealized loss positions have been in such positions for twelve months or less.

***Certain Significant Risks and Uncertainties*** — Financial instruments that potentially subject the Company to concentrations of credit risk consist of cash and cash equivalents, investments and accounts receivable. Risks associated with cash are mitigated by banking with creditworthy institutions. Cash equivalents and investments consist primarily of commercial paper, bank certificates of deposit, money market funds and auction rate securities and are regularly monitored by management. Credit risk with respect to the trade receivables is spread over geographically diverse customers. The Company performs ongoing credit evaluations of its customers and maintains an allowance for potential credit losses. At December 31, 2004, two customers accounted for 18% and 15% of total accounts receivable. At December 31, 2003, two customers accounted for 19% and 13% of total accounts receivable. For the year ended December 31, 2004 three customers, an Asian based original equipment manufacturer, a worldwide distributor and an Asian based stocking representative, accounted for 13%, 12% and 12%, respectively, of the Company's net revenues. For the year ended December 31, 2003 two customers, a worldwide distributor and an Asian based stocking representative, each accounted for 13% of the Company's net revenues. For the year ended December 31, 2002 an Asian based stocking representative accounted for 13% of the Company's net revenues.

Micrel currently purchases certain components from a limited group of vendors. The packaging of the Company's products is performed by, and certain of the raw materials included in such products are obtained from, a limited group of suppliers. The wafer supply for the Company's Ethernet products is currently dependent upon a single large third-party wafer foundry supplier. Although the Company seeks to reduce its dependence on its sole and limited source suppliers, disruption or termination of any of these sources could occur and such disruptions could have an adverse effect on the Company's financial condition, results of operations, or cash flows.

The Company participates in a dynamic high technology industry and believes that changes in any of the following areas could have a material adverse effect on the Company's future financial position, results of operations, or cash flows: changes in the overall demand for products offered by the Company; competitive pressures in the form of new products or price reductions on current products; advances and trends in new technologies and industry standards; changes in product mix; changes in third-party manufacturers; changes in key suppliers; changes in certain strategic relationships or customer relationships; litigation or claims against the Company based on intellectual property, patents (Note 11), product, regulatory or other factors; risks associated with the ability to obtain necessary components; risks associated with the Company's ability to attract and retain employees necessary to support its growth.

***Inventories*** — Inventories are stated at the lower of cost (first-in, first-out method) or market. The Company records adjustments to write down the cost of obsolete and excess inventory to the estimated market value based on historical and forecasted demand for its products. Once a reserve is established, it is maintained until the product to which it relates is sold or otherwise disposed of. This treatment is in accordance with Accounting Research Bulletin 43 and Staff Accounting Bulletin 100 "Restructuring and Impairment Charges."

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**Property, Plant and Equipment** — Equipment, building and leasehold improvements are stated at cost and depreciated using the straight-line method. Equipment is depreciated over estimated useful lives of three to five years. Buildings are depreciated over an estimated useful life of thirty years. Building improvements are depreciated over estimated useful lives of fifteen to thirty years. Leasehold improvements are amortized over the shorter of the lease term or the useful lives of the improvements which is generally 3 to 5 years.

**Intangible Assets** — On January 1, 2002, the Company adopted SFAS No. 142, “Goodwill and Other Intangible Assets.” SFAS No. 142 supersedes Accounting Principles Board Opinion No. 17, “Intangible Assets,” and discontinues the amortization of goodwill. In addition, SFAS No. 142 includes provisions regarding: 1) reclassification of amounts between goodwill and identifiable intangible assets in accordance with the new definition of identifiable intangible assets set forth in Statement of Financial Accounting Standards No. 141, “Business Combinations;” 2) reassessment of the useful lives of existing recognized intangibles; and 3) testing for impairment of existing goodwill and other intangibles using the discounted cash flow method. In accordance with SFAS No. 142, beginning January 1, 2002, goodwill is no longer amortized, but is reviewed at least annually for impairment. The Company has no goodwill. The Company has determined that its intangible assets were not impaired at December 31, 2004 and 2003. Acquired technology, patents and other intangible assets continue to be amortized over their estimated useful lives of 3 to 7 years using the straight-line method. No changes were made to the useful lives of amortizable intangible assets or the classification of intangible assets to goodwill in connection with the adoption of SFAS No. 142. Components of intangible assets were as follows (in thousands):

	<u>As of December 31, 2004</u>			<u>As of December 31, 2003</u>		
	<u>Gross</u>		<u>Net</u>	<u>Gross</u>		<u>Net</u>
	<u>Carrying</u>	<u>Accumulated</u>	<u>Carrying</u>	<u>Carrying</u>	<u>Accumulated</u>	<u>Carrying</u>
	<u>Amount</u>	<u>Amortization</u>	<u>Amount</u>	<u>Amount</u>	<u>Amortization</u>	<u>Amount</u>
Developed and core technology	\$ 8,718	\$ 7,209	\$ 1,509	\$ 6,843	\$ 6,669	\$ 174
Patents and tradename	8,717	4,009	4,708	8,492	2,895	5,597
Customer relationships	1,455	1,297	158	1,172	1,172	—
	<u>\$ 18,890</u>	<u>\$ 12,515</u>	<u>\$ 6,375</u>	<u>\$ 16,507</u>	<u>\$ 10,736</u>	<u>\$ 5,771</u>

Total intangible amortization expense for the year ended December 31, 2004 was \$1.8 million and for the year ended 2003 was \$2.6 million. Estimated future intangible amortization expense for intangible assets as of December 31, 2004, is expected to be approximately \$1.5 million for each of the years 2005 through 2008 and \$527,000 in 2009.

**Impairment of Long-Lived Assets** — Pursuant to SFAS No. 144, “Accounting for the Impairment or Disposal of Long-Lived Assets,” the Company periodically assesses whether long-lived assets have been impaired. An asset is deemed to be impaired if its estimated future undiscounted cash flows are less than the carrying value recorded on the Company's balance sheet. The Company's estimate of fair value is based on either fair market value information if available or based on the net present value of expected future cash flows attributable to the asset. Predicting future cash flows attributable to a particular asset is difficult, and requires the use of significant judgment.

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***Revenue Recognition and Receivables*** — Micrel generates revenue by selling products to original equipment manufacturers ("OEM"s), distributors and stocking representatives. Stocking representative firms may buy and stock the Company's products for resale or may act as the Company's sales representative in arranging for direct sales from the Company to an OEM customer. The Company's policy is to recognize revenue from sales to customers when the rights and risks of ownership have passed to the customer, when persuasive evidence of an arrangement exists, the product has been delivered, the price is fixed or determinable and collection of the resulting receivable is reasonably assured.

Micrel allows certain distributors, primarily located in North America and Europe, and to a lesser extent Asia, significant return rights, price protection and pricing adjustments subsequent to the initial product shipment. As these returns and price concessions have historically been significant, and future returns and price concessions are difficult to reliably estimate, the Company defers recognition of revenue and related cost of sales (in the balance sheet line item "deferred income on shipments to distributors") derived from sales to these distributors until they have resold the Company's products to their customers. Although revenue recognition and related cost of sales are deferred, the Company records an accounts receivable and relieves inventory at the time of initial product shipment. As standard terms are FOB shipping point, payment terms are enforced from shipment date and legal title and risk of inventory loss passes to the distributor upon shipment. In addition, the Company may offer to its distributors, where revenue is deferred upon shipment and recognized on a sell-through basis, price adjustments to allow the distributor to price the Company's products competitively for specific resale opportunities. The Company estimates and records an allowance for distributor price adjustments for which the specific resale transaction has been completed, but the price adjustment claim has not yet been received and recorded by the Company.

Sales to OEM customers and Asian based stocking representatives are recognized upon shipment. The Company does not grant return rights, price protection or pricing adjustments to OEM customers. The Company offers limited contractual stock rotation rights to stocking representatives.

In addition, the Company is not contractually obligated to offer, but may infrequently grant, price adjustments or price protection to certain stocking representatives on an exception basis. At the time of shipment to OEMs and stocking representatives, an allowance for returns and price adjustments is established based upon historical return rates.

The Company's accounts receivables balances represent trade accounts receivables which have been recorded at invoiced amount and do not bear interest. The Company maintains an allowance for doubtful accounts for estimated uncollectible accounts receivable. This estimate is based on an analysis of specific customer creditworthiness and historical bad debts experience.

***Warranty Costs*** — The Company warrants products against defects for a period of up to 30 days. The majority of Micrel's product warranty claims are settled through the return of defective product and the reshipment of replacement product. Warranty returns are included in Micrel's allowance for returns, which is based on historical return rates. Actual future returns could be different than the returns allowance established. In addition, Micrel accrues a liability for specific warranty costs that are expected to be settled other than through product return and replacement. As of December 31, 2004 accrued warranty expense was \$131,000. Future actual warranty costs may be different from the accrued warranty expense.

***Research and Development Expenses*** — Research and development expenses are recognized as

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incurred and include costs associated with the development of new wafer fabrication processes and the definition, design and development of standard products. The Company also expenses prototype wafers and new production mask sets related to new products as research and development costs until products based on new designs are fully characterized by the Company and are demonstrated to support published data sheets and satisfy reliability tests.

**Self Insurance** — The Company typically utilizes third-party insurance subject to varying retention levels or self insurance. The Company is self insured for a portion of the losses and liabilities primarily associated with workers' compensation claims and health benefit claims. Losses are accrued based upon the Company's estimates of the aggregate liability for claims incurred using historical experience and certain actuarial assumptions followed in the insurance industry.

**Advertising Expenses** — The Company expenses advertising costs as incurred. Advertising expenses for fiscal 2004, 2003 and 2002 were \$1.6 million, \$1.0 and \$2.8 million respectively.

**Income Taxes** — Deferred tax assets and liabilities result primarily from temporary differences between book and tax bases of assets and liabilities, state and federal research and development credit carryforwards and state manufacturers credit carryforwards. The Company had net current deferred tax assets of \$25.7 million and net long-term deferred tax liabilities of \$121,000 as of December 31, 2004. The Company must assess the likelihood that future taxable income levels will be sufficient to ultimately realize the tax benefits of these deferred tax assets. The Company currently believes that future taxable income levels will be sufficient to realize the tax benefits of these deferred tax assets and has not established a valuation allowance.

In addition, the calculation of the Company's tax liabilities involves dealing with uncertainties in the application of complex tax regulations. The Company records liabilities for anticipated tax audit issues based on its estimate of whether, and the extent to which, additional taxes may be due.

**Stock-based Awards** — The Company accounts for stock-based awards to employees using the intrinsic value method in accordance with Accounting Principles Board Opinion ("APB") No. 25, "Accounting for Stock Issued to Employees".

Beginning in 1996, the Company began to follow a practice of granting employee stock options on the date with the lowest closing price within the thirty-day period subsequent to the employee's date of hire (the "Thirty-Day Method"). The Company continued to utilize this method generally but not uniformly, both for new hires and for replenishment grants to existing employees, until December 20, 2001. At that time, the Company determined that options granted using the Thirty-Day Method were compensatory under APB No 25, and discontinued use of the Thirty-Day Method thereafter. For financial reporting purposes, per APB No 25, the measurement date for determining compensation cost in stock option plans is the first date on which are known both (1) the number of shares that an individual is entitled to receive and (2) the option purchase price. Compensation cost is calculated for any difference between the option exercise price and the fair market value on the measurement date. When applying APB 25 to the Thirty-Day Method described above, the measurement date was the thirtieth day following a new-hire's commencement of employment, when the lowest price (the exercise price) within the first thirty days following employment commencement was known. Compensation expense related to options granted under the Thirty-Day Method was calculated based on the price difference between the exercise price and the closing price on the thirtieth day following a new-hire's commencement of employment multiplied by the number of options granted and recognized as expense over the vesting period (generally five years). The

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Company is continuing to recognize stock compensation expense for amortization of options granted under the Thirty-Day method.

In addition to the stock options granted using the Thirty-Day Method, Micrel assumed certain stock options granted to employees of Kendin Communications in connection with the acquisition of Kendin Communications in the second quarter of 2001. Because the fair market value of the shares subject to those options assumed in the Kendin acquisition exceeded their exercise prices as of the date Micrel assumed them, the Company recorded deferred stock compensation expense for the unvested portion of the assumed options.

Deferred stock compensation expense balances are recorded as a contra-equity amount and amortized as a charge to operating results over the applicable vesting periods. As of December 31, 2004 total unamortized stock compensation related to the Thirty-Day Method and the Kendin Communication acquisition noted above was \$1.1 million with an anticipated future amortization schedule of \$822,000 in 2005 and \$296,000 in 2006.

SFAS No. 123, "Accounting for Stock-Based Compensation," requires the disclosure of pro forma net income and earnings per share had the Company applied the fair value method as of the beginning of fiscal 1995. Under SFAS No. 123, the fair value of stock-based awards to employees is calculated through the use of option pricing models, even though such models were developed to estimate the fair value of freely tradable, fully transferable options without vesting restrictions, which significantly differ from the Company's stock option awards. These models also require subjective assumptions, including future stock volatility and expected time to exercise, which greatly affect the calculated values. The Company's calculations for the fair value of stock options were made using the Black-Scholes option pricing model. Calculations are based on a multiple option valuation approach with forfeitures recognized as they occur and the following weighted average assumptions:

	<u><b>Years Ended December 31,</b></u>		
	<u><b>2004</b></u>	<u><b>2003</b></u>	<u><b>2002</b></u>
Expected life (months)	60	60	60
Stock volatility	84.0%	85.4%	86.1%
Risk free interest rates	3.4%	2.9%	2.9%
Dividends during expected terms	none	none	none

The weighted average fair value of options granted under the stock option plans during 2004, 2003 and 2002 was \$8.45, \$11.39 and \$12.42 per share, respectively.

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The Company's calculations for the fair value of stock issued under the employee stock purchase plan were made using the Black-Scholes option pricing model with the following weighted average assumptions:

	<u>Years Ended December 31,</u>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
Expected life (months)	6	6	6
Stock volatility	84.0%	85.4%	86.1%
Risk free interest rates	1.8%	1.0%	2.9%
Dividends during expected terms	none	none	none

The weighted average fair value of stock issued under the employee stock purchase plan during 2004, 2003 and 2002 was \$4.90, \$3.87 and \$7.12 per share.

SFAS No. 148 was issued in December 2002 and requires that disclosures of the pro forma effect of using the fair value method of accounting for stock-based employee compensation be displayed more prominently and in a tabular format. The following table illustrates the effect on the Company's net income (loss) and net income (loss) per share if it had recorded compensation costs based on the estimated grant date fair value as defined by SFAS No. 123 for all granted stock-based awards (in thousands, except per share amounts):

	<u>Years Ended December 31,</u>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
Net income (loss) as reported	<u>\$ 31,253</u>	<u>\$ 4,847</u>	<u>\$ (41,000)</u>
Add: stock-based employee compensation expense included in reported net income (loss), net of tax effects	1,533	2,516	18,173
Deduct: stock-based employee compensation expense determined under fair value based method, net of tax effects	<u>(11,104)</u>	<u>(12,851)</u>	<u>(18,646)</u>
Pro forma net income (loss)	<u>\$ 21,682</u>	<u>\$ (5,488)</u>	<u>\$ (41,473)</u>
Net income (loss) per share as reported:			
Basic	<u>\$ 0.34</u>	<u>\$ 0.05</u>	<u>\$ (0.44)</u>
Diluted	<u>\$ 0.34</u>	<u>\$ 0.05</u>	<u>\$ (0.44)</u>
Pro forma net income (loss) per share:			
Basic	<u>\$ 0.24</u>	<u>\$ (0.06)</u>	<u>\$ (0.45)</u>
Diluted	<u>\$ 0.24</u>	<u>\$ (0.06)</u>	<u>\$ (0.45)</u>

**Net Income (Loss) per Share** — Basic earnings per share ("EPS") is computed by dividing net income (loss) by the number of weighted-average common shares outstanding. Diluted EPS reflects potential dilution from outstanding stock options, using the treasury stock method. The computation of diluted net loss per share, in 2002, excludes common equivalent shares since they are anti-dilutive in a loss period. Reconciliation of weighted-average shares used in computing earnings per share is as follows (in thousands):

	<u>Years Ended December 31,</u>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
Weighted-average common shares outstanding	91,498	92,215	92,600
Dilutive effect of stock options outstanding, using the treasury stock method	<u>1,585</u>	<u>1,571</u>	<u>—</u>
Shares used in computing diluted earnings per share	<u>93,083</u>	<u>93,786</u>	<u>92,600</u>

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For the years ended December 31, 2004, 2003 and 2002, 4.9 million, 3.9 million and 9.2 million stock options, respectively, have been excluded from the weighted-average number of common shares outstanding for the diluted net loss per share computations as they are anti-dilutive.

***Fair Value of Financial Instruments*** — Financial instruments included in the Company's consolidated balance sheets at December 31, 2004 and 2003, consist of cash, cash equivalents, accounts receivable and accounts payable, short-term and long-term investments and long-term debt. For cash, the carrying amount is the fair value. The carrying amount for cash equivalents, accounts receivable and accounts payable approximates fair value because of the short maturity of those instruments. The fair value of short-term and long-term investments are based on quoted market prices. The fair value of long-term debt approximates the carrying amount due to the variable interest rate.

***New Accounting Standards*** — In March 2004, the Financial Accounting Standards Board ("FASB") 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 FASB delayed the accounting provisions of EITF Issue No 03-01; however the disclosure requirements remain effective and have been adopted by the Company for the year ended December 31, 2004. The Company will evaluate the effect, if any, of EITF Issue No. 03-01 when final guidance is issued.

In April 2004, the Emerging Issues Task Force issued Statement No. 03-06 "Participating Securities and the Two-Class Method Under FASB Statement No. 128, Earnings Per Share" ("EITF 03-06"). EITF 03-06 addresses a number of questions regarding the computation of earnings per share by companies that have issued securities other than common stock that contractually entitle the holder to participate in dividends and earnings of the company when, and if, it declares dividends on its common stock. The issue also provides further guidance in applying the two-class method of calculating earnings per share, clarifying what constitutes a participating security and how to apply the two-class method of computing earnings per share once it is determined that a security is participating, including how to allocate undistributed earnings to such a security. EITF 03-06 became effective during the quarter ended June 30, 2004, the adoption of which did not have any impact on the Company's calculation of net income per share.

In November 2004, the FASB issued SFAS No. 151, "Inventory Costs," which clarifies the accounting for abnormal amounts of idle facility expense, freight, handling costs, and wasted material. SFAS No. 151 will be effective for inventory costs incurred during fiscal years beginning after June 15, 2005. The Company is currently evaluating the potential impacts, if any, that the adoption of SFAS No. 151 may have on the Company's consolidated financial statements.

In December 2004, the FASB issued SFAS 153, Exchanges of Nonmonetary Assets, an amendment of APB No. 29, Accounting for Nonmonetary Transactions. SFAS 153 requires exchanges of productive assets to be accounted for at fair value, rather than at carryover basis, unless (1) neither the asset received nor the asset surrendered has a fair value that is determinable within reasonable limits or (2) the transactions lack commercial substance. SFAS 153 is effective for nonmonetary asset exchanges occurring in fiscal periods beginning after June 15, 2005. We do not expect the

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adoption of this standard to have a material effect on the Company's consolidated financial statements.

In December 2004, the FASB issued SFAS No. 123R, "Share-Based Payment". SFAS No. 123R is a revision of SFAS No. 123, and supersedes APB 25. Among other items, SFAS 123R eliminates the use of APB 25 and the intrinsic value method of accounting, and requires companies to recognize the cost of employee services received in exchange for awards of equity instruments, based on the grant date fair value of those awards, in the financial statements. The effective date of SFAS 123R is the first reporting period beginning after June 15, 2005, which is third quarter 2005 for calendar year companies, although early adoption is allowed, SFAS 123R permits companies to adopt its requirements using either a "modified prospective" method, or a "modified retrospective" method. Under the "modified prospective" method, compensation cost is recognized in the financial statements beginning with the effective date, based on the requirements of SFAS 123R for all share-based payments granted after that date, and based on the requirements of SFAS 123 for all unvested awards granted prior to the effective date of SFAS 123R. Under the "modified retrospective" method, the requirements are the same as under the "modified prospective" method, but also permits entities to restate financial statements of previous periods based on proforma disclosures made in accordance with SFAS 123.

The Company currently utilizes a standard option pricing model (Black-Scholes) to measure the fair value of stock options granted to employees. While SFAS 123R permits entities to continue to use such a model, the standard also permits the use of a "lattice" model. The Company has not yet determined which model it will use to measure the fair value of employee stock options upon the adoption of SFAS 123R.

The Company currently expects to adopt SFAS 123R effective July 1, 2005; however, the Company has not yet determined which of the aforementioned adoption methods it will use. Subject to a complete review of the requirements of SFAS 123R, the Company expects that the adoption of SFAS 123R on July 1, 2005 will have an adverse impact on its results of operations.

## **2. ACQUISITION**

On March 3, 2004, Micrel acquired a controlling interest in BlueChip Communications AS ("BlueChip") of Oslo, Norway. BlueChip is a fabless semiconductor company that designs, develops and markets high performance Radio Frequency integrated circuits and modules for the actuation and connectivity markets. During 2004, Micrel acquired 100% of the outstanding BlueChip common stock and options to purchase BlueChip common stock in a cash-for-stock transaction. The acquisition was accounted for as a purchase under SFAS 141 "Business Combinations" and, accordingly, the results of operations of BlueChip from the date of acquisition forward have been included in the Company's consolidated financial statements. Under the terms of the agreement, Micrel paid approximately \$2 million and incurred approximately \$300,000 in direct acquisition costs for the outstanding BlueChip securities and options. The fair value of the acquired assets exceeded the purchase price by \$1.3 million. The Company deferred \$1.0 million of this excess amount as potential contingent consideration of \$1.0 million was payable, under the terms of the agreement, if certain revenue and gross profit targets were met by the BlueChip operations during calendar year 2004.

As of December 31, 2004, it was determined that the additional contingent consideration of \$1.0 million, which was initially recorded in the first quarter of 2004, would not be payable as certain

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revenue and gross profit targets were not achieved by the BlueChip operations and accordingly, has been reversed in the fourth quarter of 2004. A summary of the purchase price allocation recorded as of the acquisition date, and then as adjusted for the final determination of the contingent consideration is as follows (in thousands):

	Allocation of Purchase Price for BlueChip Communications	
	Initially Recorded at Acquisition Date	Adjusted for Final Determination of Contingent Consideration
Current assets	\$ 1,117	\$ 1,117
Equipment and other, net	44	28
Deferred tax assets	440	440
Intangible assets, purchased in-process technology	480	303
Intangible assets, core technology	1,714	1,075
Intangible assets, customer relationships	450	282
Liabilities assumed	(945)	(945)
Acquisition cost	<u>\$ 3,300</u>	<u>\$ 2,300</u>

Purchased in-process technology, which had not reached technological feasibility and had no alternative future use, has been recorded as a charge to the line item purchased in-process technology in the consolidated statement of operations for the year ended December 31, 2004. In-process technology costs consist of five research and development projects that had not yet reached technological feasibility at the time of acquisition. In addition, the amounts above which have been allocated to existing technology and customer relationships are included in intangible assets in the accompanying consolidated balance sheet. These intangible assets are expected to be amortized over their useful lives of five and three years, respectively. The amounts assigned to existing technology, customer relationships and purchased in-process technology were determined by management, based in part on a valuation by an independent appraisal firm based on management's forecast of future revenues, cost of revenues and operating expenses related to the purchased technologies. The calculation gave consideration to relevant market sizes and growth factors, expected industry trends, the anticipated nature and timing of new product introductions, individual product cycles, and the estimated lives of each of the products underlying the technology.

The Company has not presented supplemental pro-forma results of operations reflecting the impact of the BlueChip acquisition as the effect is not material.

In addition, Micrel has recorded an intangible asset of \$800,000 for the license of certain developed technology pursuant to a pre-acquisition development and license agreement which was entered into with BlueChip in 2001. This intangible asset is being amortized over its estimated useful life of five years.

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**3. INVENTORIES**

Inventories at December 31 consist of the following (in thousands):

	<u>2004</u>	<u>2003</u>
Finished goods	\$ 15,912	\$ 9,787
Work in process	18,585	20,425
Raw materials	<u>1,247</u>	<u>896</u>
	<u>\$ 35,744</u>	<u>\$ 31,108</u>

**4. PROPERTY, PLANT AND EQUIPMENT**

Property, plant and equipment at December 31 consist of the following (in thousands):

	<u>2004</u>	<u>2003</u>
Manufacturing equipment	\$ 170,364	\$ 165,406
Land	6,635	6,635
Buildings and improvements	41,721	40,165
Leasehold improvements	662	585
Office furniture and research equipment	<u>12,648</u>	<u>9,513</u>
	232,030	222,304
Accumulated depreciation and amortization	<u>(150,425)</u>	<u>(134,311)</u>
	<u>\$ 81,605</u>	<u>\$ 87,993</u>

**5. OTHER ACCRUED LIABILITIES**

Other accrued liabilities at December 31 consist of the following (in thousands):

	<u>2004</u>	<u>2003</u>
Accrued current liability under patent license agreement	\$ 1,852	\$ 1,714
Accrued current restructuring expenses	2,021	2,072
Accrued workers compensation and health insurance	1,555	760
Accrued royalties	—	211
All other current accrued liabilities	<u>546</u>	<u>853</u>
	<u>\$ 5,974</u>	<u>\$ 5,610</u>

**6. BORROWING ARRANGEMENTS**

Borrowing arrangements consist of a \$5 million revolving line of credit from a commercial bank. The revolving line of credit agreement includes a provision for the issuance of commercial or standby letters of credit by the bank on behalf of the Company. The value of all letters of credit outstanding reduces the total line of credit available. There were no borrowings under the revolving line of credit at December 31, 2004, and there were \$875,000 in standby letters of credit outstanding. The revolving line of credit agreement expires on June 30, 2005. Borrowings under the revolving line of credit bear interest rates of, at the Company's election, the prime rate (5.25% at December 31, 2004), or the bank's revolving offshore rate, which approximates LIBOR (2.6% at December 31, 2004) plus 2.0%. The agreement contains certain restrictive covenants that include a restriction on the declaration and payment of dividends without the lender's consent. The Company was in compliance with all such covenants at December 31, 2004.

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In September 2002, the Company borrowed \$10.7 million through a commercial mortgage financing agreement which was associated with the purchase of its previously leased manufacturing facilities in San Jose, CA. Borrowings under this agreement bear interest, at the Company's election, at the daily floating prime rate, or adjustable monthly LIBOR plus 1.5%. The principal balance of the loan is to be repaid in 59 consecutive monthly installments of \$16,890 and one final installment in the amount necessary to pay in full the remaining outstanding principal balance, with no early payment penalty. In December 2003, the company repaid \$7.0 million of the loan. In October 2004, the Company repaid the remaining loan balance of \$3.3 million resulting in no balance outstanding at December 31, 2004.

Associated with the acquisition of BlueChip Communications, the Company has \$247,000 outstanding in term notes payable to the Norwegian Industrial and Regional Development Fund.

Long-term debt at December 31 consists of the following (in thousands):

	<u>2004</u>	<u>2003</u>
Notes payable bearing interest at quarterly adjustable rate based on LIBOR plus 2.75%, payable in monthly installments through December 2004 and collateralized by equipment financed	\$ -	\$ 500
Notes payable bearing interest at prime. Balance repaid in full in October 2004.	-	3,483
Notes payable bearing interest at 9.5%, payable in quarterly installments through March 2006.	<u>247</u>	<u>-</u>
Total debt	247	3,983
Current portion	<u>(164)</u>	<u>(703)</u>
Long-term debt	<u>\$ 83</u>	<u>\$ 3,280</u>

Maturities of long-term debt subsequent to December 31, 2004 are as follows: \$164,000 in 2005 and \$83,000 in 2006.

## **7. SHAREHOLDERS' EQUITY**

### ***Preferred Stock***

The Company has authorized 5,000,000 shares of preferred stock, no par value, of which none were issued or outstanding at December 31, 2004. The preferred stock may be issued from time to time in one or more series. The Board of Directors is authorized to determine or alter the rights, preferences, privileges and restrictions of such preferred stock.

### ***Stock Repurchase Plan***

In August 2004, Micrel's Board of Directors amended the Company's common stock repurchase program and authorized the repurchase of common stock up to a maximum value of \$75 million during the period from January 1, 2004 through June 30, 2005. Shares of common stock purchased pursuant to the repurchase program are cancelled upon repurchase, and are intended to offset dilution from the Company's stock option plans, employee stock purchase plans and 401(k) plan. The Company repurchased 3,538,000 shares of its common stock for \$39.4 million during the year ended December 31, 2004 and 492,450 shares for \$6.5 million during the year ended December 31, 2003.

**MICREL, INCORPORATED**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**  
**Years Ended December 31, 2004, 2003 and 2002**

In March of 2005 the Board of Directors approved a \$75 million share repurchase program for calendar year 2005. The action supercedes the Company's previously approved authorization to repurchase Micrel common stock announced on August 30, 2004.

***Stock Option Exchange Program***

On November 8, 2002, the Company filed a Schedule TO with the Securities and Exchange Commission in order to initiate an offer to its employees to exchange certain of their outstanding options for new options to be granted six months and two days after expiration of the exchange offer. The Company's Directors, CEO and CFO were not eligible to participate in the stock option exchange program. This offer to exchange contemplated a grant of new options to eligible employees in a ratio equivalent to one new option granted for every two options elected for exchange and cancelled with respect to employees who held at the time of the offer the position of vice president or higher, and two new options granted for every three options elected for exchange and cancelled with respect to all other employees. The only options eligible to be exchanged were those outstanding employee stock options with an exercise price of \$13 or higher.

On December 11, 2002, options to purchase 3,330,401 shares, with a weighted-average exercise price of \$32.67, of the Company's common stock were surrendered, and were replaced on June 13, 2003 with options to purchase 1,901,769 shares at an exercise price of \$10.72 equal to the closing sales price of the Company's common stock as quoted on the Nasdaq National Market on the date preceding the replacement grant date.

As discussed in Note 1, the Company accounts for its stock-based awards using the intrinsic value method in accordance with APB No. 25, "Accounting for Stock Issued to Employees" and its related interpretations. Certain of the Company's practices in effect through December 2001, related to employee stock option pricing resulted in stock compensation expense under APB No. 25. During the fourth quarter of 2002, the Company recorded \$17.1 million in accelerated amortization of deferred stock compensation associated with options cancelled pursuant to the employee option exchange program discussed above.

***Stock Option Plans***

Under the Company's 2003 Incentive Award Plan, 1994 Stock Option Plan and its 2000 Non-Qualified Stock Incentive Plan (the "Option Plans"), 35,958,672 shares of Common Stock are authorized for issuance to employees. The Option Plans provide that the option price will be determined by the Board of Directors at a price not less than the fair value as represented by the closing price of the Company's Common Stock on the last market trading day before the date of grant. Certain shareholder/employees of the Company are granted options at 110% of the current fair market value. Options granted under the 2000 Non-Qualified Stock Incentive Plan are exercisable in 20% increments with the initial 20% vesting occurring six months after the date of grant and then in annual increments of 20% per year from the date of grant. Options granted under the 2003 Incentive Award Plan and 1994 Stock Option Plan typically become exercisable in not less than cumulative annual increments of 20% per year from the date of grant. At December 31, 2004, 14,258,970 total shares were reserved for future issuance, of which 2,161,887 shares were available for future grants under the Option Plans. Option activity under the Option Plans is as follows:

**MICREL, INCORPORATED**  
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**Years Ended December 31, 2004, 2003 and 2002**

	<u>Number of Shares</u>	<u>Weighted Avg. Exercise Price</u>
Outstanding, December 31, 2001 (5,102,650 exercisable at a weighted average price of \$12.39 per share)	14,191,340	\$ 17.96
Granted	1,069,620	18.36
Exercised	(1,199,771)	5.36
Canceled	<u>(4,839,695)</u>	30.79
Outstanding, December 31, 2002 (5,625,721 exercisable at a weighted average price of \$11.25 per share)	9,221,494	12.92
Granted	3,725,003	11.39
Exercised	(738,195)	7.11
Canceled	<u>(690,317)</u>	14.36
Outstanding, December 31, 2003 (7,353,219 exercisable at a weighted average price of \$11.94 per share)	11,517,985	12.72
Granted	1,665,000	12.43
Exercised	(607,989)	7.53
Canceled	<u>(477,913)</u>	15.04
Outstanding, December 31, 2004	<u>12,097,083</u>	\$ 12.85

Additional information regarding options outstanding as of December 31, 2004 is as follows:

<u>Stock Options Outstanding</u>				<u>Options Exercisable</u>	
		Weighted Avg.			Weighted Avg.
Range of Exercise Prices	Number Outstanding	Remaining Contractual Life (yrs)	Weighted Avg. Exercise Price	Number Exercisable	Exercise Price
\$ 0.47 to \$ 6.37	878,670	3.2	\$ 5.39	864,270	\$ 5.39
\$ 6.38 to \$ 12.75	6,376,866	6.3	9.73	4,196,344	9.37
\$ 12.76 to \$ 19.13	3,415,665	6.5	15.21	2,027,525	15.61
\$ 19.14 to \$ 25.52	1,020,324	5.3	21.42	840,023	21.07
\$ 25.53 to \$ 31.90	166,218	5.6	29.61	130,098	29.92
\$ 31.91 to \$ 38.28	68,200	5.6	34.41	58,060	34.39
\$ 38.29 to \$ 44.66	114,540	5.5	41.86	91,680	41.86
\$ 44.67 to \$ 51.05	<u>56,600</u>	5.4	49.50	<u>45,200</u>	49.50
\$ 0.47 to \$ 51.05	<u>12,097,083</u>	6.0	\$ 12.85	<u>8,253,200</u>	\$ 12.76

***Employee Stock Purchase Plan***

Under the 1994 Employee Stock Purchase Plan, amended and restated as of January 1, 1996, (the "Purchase Plan"), eligible employees are permitted to have salary withholdings to purchase shares of Common Stock at a price equal to 85% of the lower of the market value of the stock at the beginning or end of each six-month offer period, subject to an annual limitation. Shares of Common Stock issued under the Purchase Plan were 233,492 in 2004, 270,197 in 2003 and 257,423 in 2002, at weighted average prices of \$9.41, \$8.49 and \$9.59, respectively. At December 31, 2004, there were 2,076,021 shares of Common Stock issued under the Purchase Plan and 323,979 shares are reserved for future issuance under the Purchase Plan.

**MICREL, INCORPORATED**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**  
**Years Ended December 31, 2004, 2003 and 2002**

**8. INCOME TAXES**

The provision (benefit) for income taxes for the years ended December 31 consists of the following (in thousands):

	<u>2004</u>	<u>2003</u>	<u>2002</u>
Currently payable (receivable):			
Federal	\$ (27)	\$ (904)	\$ (15,177)
State	<u>81</u>	<u>(1,898)</u>	<u>1,435</u>
Total currently payable (receivable)	<u>54</u>	<u>(2,802)</u>	<u>(13,742)</u>
Deferred income taxes:			
Federal	10,775	5,780	(9,234)
State	<u>377</u>	<u>(2,123)</u>	<u>(6,714)</u>
Total deferred	<u>11,152</u>	<u>3,657</u>	<u>(15,948)</u>
Total provision (benefit)	<u>\$ 11,206</u>	<u>\$ 855</u>	<u>\$ (29,690)</u>

The calculation of the Company's tax liabilities involves dealing with uncertainties in the application of complex tax regulations. The Company records liabilities for anticipated tax audit issues based on its estimate of whether, and the extent to which, additional taxes may be due. Actual tax liabilities may be different than the recorded estimates and could result in an additional charge or benefit to the tax provision in the period when the ultimate tax assessment is determined.

During the second quarter of 2004, the Company reversed \$3.8 million of accrued income tax liabilities as a result of the completion of a federal income tax audit. In May 2004, the Company received an audit report from the Internal Revenue Service ("IRS") which recommended no changes to Micrel's federal tax return filings covering the tax years 1994 through 2001. In addition, the Company subsequently received a notice dated July 6, 2004 from the Joint Committee on Taxation which stated that the committee took no exceptions to conclusions in the IRS audit report. This reversal of accrued income tax liabilities was recorded as a reduction to provision for income taxes in the second quarter of 2004.

In addition, related to the federal tax audit completion, the Company also reversed in operating expenses \$3.9 million (offset in part by a \$1.4 million income tax effect) in accrued payroll tax liabilities, which were recorded in prior periods.

The effects of these accrued tax liability reversals on the below-noted items in the Company's statement of operations for the year ended December 31, 2004 is summarized as follows (in thousands):

Reversal of accrued payroll tax liabilities:	
Cost of revenues	\$ (1,111)
Research and development	(1,697)
Selling, general and administrative	<u>(1,140)</u>
Total reversed in operating expense	(3,948)
Income tax effect of payroll tax liability reversal	1,382
Reversal of accrued income tax liabilities	<u>(3,760)</u>
Net income (loss)	<u><u>\$ 6,326</u></u>

**MICREL, INCORPORATED**  
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**Years Ended December 31, 2004, 2003 and 2002**

A reconciliation of the statutory federal income tax rate to the effective tax rate for the years ended December 31 is as follows:

	<u>2004</u>	<u>2003</u>	<u>2002</u>
Statutory federal income tax rate	35%	35%	(35)%
State income taxes (net of federal income tax benefit)	1	(21)	(7)
Extraterritorial income exclusion	(3)	-	-
Effects of reversal of accrued income tax liabilities	(9)	-	-
Other	<u>2</u>	<u>1</u>	<u>-</u>
Effective tax rate	<u>26%</u>	<u>15%</u>	<u>(42)%</u>

Deferred tax assets and liabilities result primarily from temporary differences between book and tax bases of assets and liabilities, state and federal research and development credit carryforwards and state manufacturers credit carryforwards.

Deferred tax assets and liabilities at December 31 are as follows (in thousands):

	<u>2004</u>	<u>2003</u>
Deferred tax assets:		
Accruals and reserves not currently deductible	\$ 11,566	\$ 13,143
Deferred income	5,595	5,093
Tax net operating loss and credit carryforwards	20,181	25,928
Capitalized research and development	<u>2,749</u>	<u>4,412</u>
Total deferred tax asset	<u>40,091</u>	<u>48,576</u>
Deferred tax liabilities:		
Depreciation	(6,480)	(3,592)
State income taxes	(7,986)	(8,119)
Intangible assets	<u>--</u>	<u>(88)</u>
Total deferred tax liability	<u>(14,466)</u>	<u>(11,799)</u>
Net deferred tax asset (current and non-current)	<u>\$ 25,625</u>	<u>\$ 36,777</u>

The Company must assess the likelihood that future taxable income levels will be sufficient to ultimately realize the tax benefits of these deferred tax assets. The Company currently believes that future taxable income levels will be sufficient to realize the tax benefits of these deferred tax assets and has not established a valuation allowance. Should the Company determine that future realization of these tax benefits is not likely, a valuation allowance would be established, which would increase the Company's tax provision in the period of such determination.

Included in net deferred assets are net operating loss and credit carryforwards. Due to the Company's acquisition of Synergy, the Company has available pre-ownership change federal net operating loss carryforwards of approximately \$6 million which will begin to expire in 2006 if not utilized. Under Section 382 of the Internal Revenue Code, these pre-ownership change net operating loss carryforwards are subject to an annual limitation estimated to be approximately \$500,000. The Company believes that it is more likely than not that these net operating loss carryforwards will be utilized before expiration. In addition, the Company has available state credit carryforwards of approximately \$17 million consisting primarily of research credit carryforwards, of which approximately \$2 million represents pre-ownership change carryforwards subject to the Section 382 annual limitation. The state research credit carryforwards are not subject to expiration and may be

**MICREL, INCORPORATED**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**  
**Years Ended December 31, 2004, 2003 and 2002**

carried forward indefinitely until utilized.

**9. COMMITMENTS AND CONTINGENCIES**

***Lease Agreements***

The Company leases some of its facilities and equipment under operating lease agreements that expire in the years 2005 through and 2011. Some of the facility lease agreements provide for escalating rental payments over the lease periods. Rent expense is recognized on a straight-line basis over the term of the lease. Deferred rent represents the difference between rental payments and rent expense recognized on a straight-line basis.

Future minimum payments under these agreements are as follows (in thousands):

<b><u>Year Ending December 31,</u></b>	
2005	\$ 3,305
2006	2,813
2007	1,294
2008	1,246
2009	1,280
Thereafter	<u>1,601</u>
	<u><b>\$ 11,539</b></u>

The contractual lease payments above include amounts associated with the Company's Santa Clara, California wafer fabrication facility, of which \$4.1 million and \$584,000 related to leases has been recognized in 2002 and 2004, respectively as restructuring expense associated with the Company's plan to close this facility (Note 13).

Rent expense under operating leases for the years ended December 31, 2004, 2003, and 2002 was (in thousands): \$1,475, \$2,283 and \$4,131, respectively.

***Open Purchase Orders***

As of December 31, 2004, the Company had approximately \$22 million in open purchase orders. Open purchase orders are defined as agreements to purchase goods or services that are enforceable and legally binding and that specify all significant terms, including: fixed or minimum quantities to be purchased; fixed, minimum or variable pricing provisions; and the approximate timing of the transactions. These obligations primarily relate to future purchases of wafer fabrication raw materials, foundry wafers, assembly and testing services and manufacturing equipment. The amounts are based on our contractual commitments.

**MICREL, INCORPORATED**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**  
**Years Ended December 31, 2004, 2003 and 2002**

***Letters of Credit***

Micrel's borrowing arrangements (see Note 6) include a provision for the issuance of commercial or standby letters of credit by the bank on behalf of the Company. At December 31, 2004 there were \$875,000 in standby letters of credit outstanding. The letters of credit are issued to guarantee payments for the Company's workers compensation program.

***Indemnification Obligations***

Micrel is a party to a variety of contractual relationships pursuant under which it may be obligated to indemnify the other party with respect to certain matters. Typically, these obligations arise in the context of contracts entered into by Micrel, or regular sales and purchasing activities, under which Micrel may agree to hold the other party harmless against losses arising from claims related to such matters as title to assets sold, certain intellectual property rights, specified environmental matters, certain income taxes, etc. In these circumstances, indemnification by Micrel is customarily conditioned on the other party making a claim pursuant to the procedures specified in the particular contract or in Micrel's standard terms and conditions, which procedures may allow Micrel to challenge the other party's claims, or afford Micrel the right to settle such claims in its sole discretion. Further, Micrel's obligations under these agreements may be limited in terms of time and/or amount, and in some instances, Micrel may have recourse against third parties for certain payments made by it under these agreements.

It is not possible to predict the maximum potential amount of future payments or indemnification costs under these or similar agreements due to the conditional nature of Micrel's obligations and the unique facts and circumstances involved in each particular agreement. Historically, payments made by Micrel under these agreements have not had a material effect on its business, financial condition or results of operations. Micrel believes that if it were to incur a loss in any of these matters, such loss would not have a material effect on its business, financial condition, cash flows or results of operations.

**10. PROFIT-SHARING 401(k) PLAN**

The Company has a profit-sharing plan and deferred compensation plan (the "Plan"). All employees completing one month of service are eligible to participate in the Plan. Participants may contribute 1% to 15% of their annual compensation on a before tax basis, subject to Internal Revenue Service limitations. Profit-sharing contributions by the Company are determined at the discretion of the Board of Directors. The Company accrued \$684,000 in contributions for the year ended December 31, 2004 and made no contributions to the plan for the years ended December 31, 2003 and 2002. Participants vest in Company contributions ratably over six years of service.

**MICREL, INCORPORATED**  
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**Years Ended December 31, 2004, 2003 and 2002**

**11. LITIGATION**

On February 26, 1999, the Lemelson Medical, Education & Research Foundation (the “Lemelson Partnership”) filed a complaint which was served on the Company on June 15, 1999, entitled Lemelson Medical, Education & Research Foundation, Limited Partnership v. Lucent Technologies Inc., et al. in the United States District Court in Phoenix, Arizona, against eighty-eight defendants, including the Company, alleging infringement of Lemelson Foundation patents. The complaint in the lawsuit seeks unspecified compensatory damages, treble damages and attorneys' fees, as well as injunctive relief against further infringement of the Lemelson patents at issue. The case is currently in the motion and hearing phase. The Company intends to continue to defend itself against these claims.

On May 9, 1994, Linear Technology Corporation (“Linear” or “LTC”), a competitor of the Company, filed a complaint against the Company, entitled Linear Technology Corporation v. Micrel, Incorporated, in the United States District Court in San Jose, California, alleging patent and copyright infringement and unfair competition. All claims, except the patent infringement claim, have been settled or dismissed. The complaint in the lawsuit seeks unspecified compensatory damages, treble damages and attorneys' fees as well as preliminary and permanent injunctive relief against infringement of the Linear patent at issue. On August 20, 1999, the United States District Court in San Jose adjudicated in favor of the Company on a motion, finding the patent to be invalid under the “on sale bar” defense as the plaintiff had placed ICs containing the alleged invention on sale more than a year before filing its patent application. The United States District Court in San Jose dismissed the plaintiff’s complaint on the merits of the case and awarded the Company its legal costs. Linear appealed the trial Court’s decision to the United States Court of Appeal for the Federal Circuit (“CAFC”) on September 17, 1999. On December 28, 2001, the CAFC reversed the District Court’s judgment of invalidity and remanded the case to the District Court. After the Company’s Petition for Rehearing En Banc by the Court of Appeal was denied, the Company filed a Petition for Writ of Certiorari with the Supreme Court of the United States, which Linear opposed. On May 19, 2003, the Supreme Court denied the Petition for Writ of Certiorari. The District Court subsequently determined a schedule for further discovery and hearing matters before the Court. A claim construction hearing (also called a “Markman” hearing) was held before the District Court on December 16, 2003. The Court issued its ruling on January 24, 2004, interpreting the claims at issue in the litigation. Furthermore, the parties have attended three settlement conferences before the District Court. On November 8, 2004, a status conference was held with the Court, at which time a trial date was set for June 28, 2005. Subsequently, the parties stipulated to a continuance of the trial date to November 28, 2005. The Company intends to continue to defend itself against the claims alleged in this litigation

On December 27, 2002, the Company filed a complaint against TRW, Inc. (“TRW”) entitled Micrel, Incorporated v. TRW, Inc., dba TRW Automotive Electronics Group, in the United States District Court, Northern District of Ohio, Eastern Division, alleging various causes of action relating to breach of a relationship surrounding the development of certain custom products by Micrel for TRW. In this lawsuit, Micrel is alleging that TRW breached various agreements to assist in Micrel’s development of, and to purchase, certain Application Specific Integrated Circuits. The complaint seeks compensatory damages, attorneys’ fees and costs of suit. On February 24, 2003, TRW filed an answer to the Company’s complaint and a counterclaim alleging various causes of action relating to breach of the above-mentioned relationship concerning ASIC development. The Company intends to vigorously defend itself against these counterclaims. The case is currently in the pretrial

**MICREL, INCORPORATED**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**  
**Years Ended December 31, 2004, 2003 and 2002**

phase. Case management and settlement conferences were conducted with the Court on December 7, 2004 and February 17, 2005. A trial date has been set for July 12, 2005.

On April 21, 2003, the Company filed a complaint against its former principal accountants Deloitte & Touche LLP ("Deloitte") entitled Micrel, Incorporated v. Deloitte & Touche LLP in the Superior Court of the State of California, County of Santa Clara, alleging various causes of action relating to certain professional advice received by Micrel from Deloitte. In this lawsuit, Micrel is alleging that Deloitte negligently rendered services as accountants to Micrel, breached certain agreements with Micrel by failing to perform services using ordinary skill and competence and in conformance with generally accepted principles for such work and made certain false representations upon which Micrel justifiably relied. As a direct result of Deloitte's actions, Micrel alleges damages including: expenses incurred in the form of payments to various professionals to address the impact on Micrel's financial statements and other effects of the wrongful conduct; loss of cash as well as equity from stock options; additional charges to earnings that Micrel would not incur but for the wrongful advice; additional potential liability for taxes; potential liability for tax penalties; and the harm to Micrel in both financial and semiconductor markets resulting in loss of overall value of the company as a whole. Deloitte has denied all allegations in the complaint. The complaint seeks compensatory damages, costs of suit and such other relief that the court may deem just and proper. The case is currently in the discovery and pre-trial phase. A trial setting conference was conducted with the Court on January 4, 2005. A trial date has been set for September 19, 2005.

On November 11, 2004, the Company filed a complaint against Monolithic Power Systems ("MPS"), entitled Micrel, Inc. v. Monolithic Power Systems, in the United States District Court, Northern District of California (the "Court") alleging two causes of action for infringement by MPS of certain patents owned by Micrel. In the complaint, the Company is alleges that MPS has been and is infringing U.S. patent no. 5,517,046 (the "'046 patent") and U.S. patent no. 5,556,796 (the "'796 patent"). Micrel alleges damages attributable to MPS' infringement of the '046 and '796 patents as a direct result of MPS' actions, including treble damages for wanton, deliberate, malicious and willful conduct. Subsequently, on November 29, 2004 the Company filed an amended complaint adding Michael R. Hsing, MPS's President and Chief Executive Officer ("Hsing"), and James C. Moyer, MPS's Chief Design Engineer ("Moyer") as defendants. Hsing and Moyer are both former employees of Micrel. In addition to the original two causes of action against MPS for infringement of the '046 and '796 Patents, the amended complaint adds causes of action for statutory and common law misappropriation of Micrel's trade secrets, breach of confidentiality agreements by Hsing and Moyer, and violation of California's Unfair Competition Law. The amended complaint seeks compensatory damages, costs of suit and such other relief that the Court may deem proper. On December 16, 2004, MPS filed a Motion to Dismiss the Company's claims for statutory and common law misappropriation of Micrel's trade secrets. A hearing on this motion is set for April 8, 2005.

Based on the status to date of the above litigation, the Company believes that the ultimate outcome of the legal actions discussed above will not result in a material adverse effect on the Company's financial condition, results of operation or cash flows, and the Company believes it is not reasonably possible that a material loss has been incurred. However, litigation is subject to inherent uncertainties, and no assurance can be given that the Company will prevail in these lawsuits. Accordingly, the pending lawsuits, as well as potential future litigation with other companies, could result in substantial costs and diversion of resources and could have a material adverse effect on the Company's financial condition, results of operations or cash flows.

**MICREL, INCORPORATED**  
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The semiconductor industry is characterized by frequent litigation regarding patent and other intellectual property rights. To the extent that the Company becomes involved in such intellectual property litigation, in addition to litigation mentioned herein, it could result in substantial costs and diversion of resources to the Company and could have a material adverse effect on the Company's financial condition, results of operation or cash flows.

In the event of an adverse ruling in any intellectual property litigation that now exists or might arise in the future, the Company might be required to discontinue the use of certain processes, cease the manufacture, use and sale of infringing products, expend significant resources to develop non-infringing technology or obtain licenses to the infringing technology. There can be no assurance, however, that under such circumstances, a license would be available under reasonable terms or at all. In the event of a successful claim against the Company and the Company's failure to develop or license substitute technology on commercially reasonable terms, the Company's financial condition, results of operations, or cash flows could be adversely affected. Based on the status of the litigation described above, the Company does not believe that any material and specific risk exists related to the loss of use of patents, products or processes.

Certain additional claims have been filed by or have arisen against the Company in its normal course of business. The Company believes that these claims and lawsuits will not have a material adverse effect on the Company's financial condition, results of operation or cash flows.

## **12. SEGMENT REPORTING**

The Company follows the provisions of SFAS No. 131, Disclosures about Segments of an Enterprise and Related Information. SFAS No. 131 establishes standards for reporting information regarding operating segments in annual financial statements and requires selected information for those segments to be presented in interim financial reports issued to stockholders. SFAS No. 131 also establishes standards for related disclosures about products and services and geographic areas. Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision maker. The Company has two reportable segments: standard products and custom and foundry products. The chief operating decision maker evaluates segment performance based on revenue. Accordingly, all expenses are considered corporate level activities and are not allocated to segments. Therefore, it is not practical to show profit or loss by reportable segments. Also, the chief operating decision maker does not assign assets to these segments. Consequently, it is not practical to show assets by reportable segments.

**Net Revenues by Segment (in thousands):**

	<b>Years Ended December 31,</b>		
	<b><u>2004</u></b>	<b><u>2003</u></b>	<b><u>2002</u></b>
Standard Products	\$ 246,580	\$ 191,134	\$ 180,407
Custom and Foundry Products	<u>10,971</u>	<u>20,592</u>	<u>24,297</u>
Total net revenues	<u>\$ 257,551</u>	<u>\$ 211,726</u>	<u>\$ 204,704</u>

**MICREL, INCORPORATED**  
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For the year ended December 31, 2004, the Company recorded revenue from customers throughout the United States; Canada and Mexico (collectively referred to as "Other North American Countries"); the U.K., Italy, Germany, France, Israel, Sweden, Hungary, Austria, Finland, Switzerland, and other European countries (collectively referred to as "Europe"); Korea; Taiwan; Singapore; China; Japan; Hong Kong, Malaysia and other Asian countries (collectively referred to as "Other Asian Countries").

**Geographic Information (in thousands):**

	<b>2004</b>		<b>2003</b>		<b>2002</b>
	<b><u>Total Net</u></b>	<b><u>Long-Lived</u></b>	<b><u>Total Net</u></b>	<b><u>Long-Lived</u></b>	<b><u>Total Net</u></b>
	<b><u>Revenues*</u></b>	<b><u>Assets</u></b>	<b><u>Revenues*</u></b>	<b><u>Assets</u></b>	<b><u>Revenues*</u></b>
United States of America	\$ 45,489	\$ 76,978	\$ 48,647	\$ 85,472	\$ 52,664
Other North American Countries	15,196	-	15,277	-	10,044
Korea	62,221	99	42,508	35	31,476
Taiwan	43,233	73	42,857	97	56,632
Singapore	24,178	27	17,682	-	10,071
China	23,827	104	8,081	67	7,221
Japan	12,072	127	11,230	63	13,952
Other Asian Countries	4,887	6,387	3,416	2,171	3,561
Europe	<u>26,448</u>	<u>279</u>	<u>22,028</u>	<u>603</u>	<u>19,083</u>
Total	<u>\$ 257,551</u>	<u>\$ 84,074</u>	<u>\$ 211,726</u>	<u>\$ 88,508</u>	<u>\$ 204,704</u>

\* Total revenues are attributed to countries based on "ship to" location of customer.

Long-lived assets consist of property, plant and equipment, long-term investments and other non-current assets.

### **13. RESTRUCTURING AND MANUFACTURING FACILITY IMPAIRMENT**

In September 2002, the Company approved a plan to close its Santa Clara, California wafer fabrication facility to reduce costs and improve operating efficiencies. The Company accrued \$5.5 million in restructuring expenses associated with the facility closure which consisted of \$1.0 million for equipment disposal costs and \$4.5 million in net contractual building lease costs, excluding estimated sublease income, that will provide no future benefit. During July 2003, the Company ceased all manufacturing processes within the Santa Clara facility and completed the relocation of all employees to its San Jose, CA facilities. During 2004, the Company increased its accrued restructuring expenses for contractual building lease costs by \$584,000 to eliminate remaining estimated future sub-lease income as efforts to sub-lease the facility have been unsuccessful to date and the estimated probability of future sub-lease has been reduced to less than probable.

During 2003, the Company incurred and paid severance costs of \$320,000 related to the termination of 46 employees associated with the wafer fabrication facility closure. The affected employees consisted primarily of wafer fabrication operators and maintenance technicians. These termination costs have been reported as restructuring expense in the statement of operations.

**MICREL, INCORPORATED**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**  
**Years Ended December 31, 2004, 2003 and 2002**

A summary of restructuring expense accrual is as follows: (\$000)

		Severance <u>Costs</u>	Contractual <u>Facility Costs</u>	Equipment <u>Disposal</u>	<u>Total</u>
2002	Charges	\$ --	\$ 4,536	\$ 1,000	\$ 5,536
	Uses	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>
	Balance December 31, 2002	--	4,536	1,000	5,536
2003	Charges	320	466	(500)	286
	Uses	<u>(320)</u>	<u>(883)</u>	<u>(89)</u>	<u>(1,292)</u>
	Balance December 31, 2003	--	4,119	411	4,530
2004	Charges	--	584	--	584
	Uses	<u>--</u>	<u>(1,654)</u>	<u>(51)</u>	<u>(1,705)</u>
	Balance December 31, 2004	<u>\$ --</u>	<u>\$ 3,049</u>	<u>\$ 360</u>	<u>\$ 3,409</u>

Of the \$3.4 million in accrued restructuring costs, \$2.0 million has been classified as other current liabilities and the remaining \$1.4 million has been classified as other long-term obligations as of December 31, 2004. These restructuring costs are expected to be paid in cash over the remaining facility lease term, which expires in October 2006. Actual future costs or actual sublease income may be different than these estimates and could require an adjustment to the restructuring accrual in the period such determination is made.

Also related to the facility closure, in September 2002, the Company recorded a \$23.4 million impairment of long-lived assets to reduce the net book value of the facility's leasehold improvements and equipment to fair value. The fair value was determined by management based on the estimated net realizable sales value. A number of factors were considered to estimate the net realizable sales value including a third party appraisal of the equipment to be sold, which was primarily based on comparable sales from recent equipment auctions, liquidations and other used equipment sales. In 2003, the company sold previously impaired equipment which resulted in a \$624,000 gain, recognized as an adjustment to manufacturing facility impairment expense in 2003. As of December 31, 2003, there was no remaining book value for equipment previously impaired during the 2002 restructuring actions.

#### **14. PATENT CROSS LICENSE AND SETTLEMENT AGREEMENT**

On May 23, 2002, the Company entered into a Patent Cross License and Settlement Agreement with National Semiconductor which settled all outstanding patent disputes between the companies and cross licensed the entire patent portfolio of each company. Some of the National patents within certain field of use areas are licensed for the life of the patents, all other patents of both companies are licensed through May 22, 2009. Under the terms of the agreement Micrel agreed to pay National \$9.0 million of which \$3.0 million was paid in 2002, \$2.0 million was paid in each of the years 2003 and 2004 and the remaining \$2.0 million balance will be paid in 2005. At December 31, 2004, \$1.9 million was included in other accrued liabilities, representing the present value of the remaining payments using an imputed annual interest rate of 8.0%.

Based on the estimated historical and future benefits of the Patent Cross License and Settlement Agreement, the Company has allocated the present value of the payments as follows (in thousands):

**MICREL, INCORPORATED**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**  
**Years Ended December 31, 2004, 2003 and 2002**

Settlement of patent disputes	\$ 947
Patent license	<u>7,207</u>
Present value of payments	<u>\$ 8,154</u>

To determine the amounts to be apportioned to settlement of patents disputes and to patent license, the Company apportioned the present value of payments based on the ratio of estimated risk adjusted pre-settlement revenues for products that were allegedly infringing on the National patents to the present value of estimated future revenues from products that are expected to utilize one or more of the National patents under the Patent Cross License and Settlement Agreement. The \$947,000 valuation of the settlement of patent disputes was expensed to other income (expense), net in 2002. The patent license valuation of \$7.2 million was recorded as an intangible asset and is being amortized on a straight-line basis over its estimated useful life of 7 years.

## SUPPLEMENTAL QUARTERLY FINANCIAL SUMMARY — UNAUDITED

(in thousands, except per share amounts)

	<u>Three Months Ended</u>			
	<u>Mar. 31,</u>	<u>June 30,</u>	<u>Sept. 30,</u>	<u>Dec. 31,</u>
	<u>2004</u>	<u>2004<sup>(1)</sup></u>	<u>2004</u>	<u>2004</u>
Net revenues	\$ 61,261	\$ 68,996	\$ 67,853	\$ 59,441
Gross profit	\$ 27,544	\$ 34,378	\$ 33,255	\$ 27,520
Net income	\$ 4,575	\$ 14,048	\$ 7,536	\$ 5,094
Net income per share:				
Basic	\$ 0.05	\$ 0.15	\$ 0.08	\$ 0.06
Diluted	\$ 0.05	\$ 0.15	\$ 0.08	\$ 0.06
Weighted-average shares used in computing per share amounts:				
Basic	92,518	92,259	91,252	90,007
Diluted	95,249	94,074	91,996	91,012

(in thousands, except per share amounts)

	<u>Three Months Ended</u>			
	<u>Mar. 31,</u>	<u>June 30,</u>	<u>Sept. 30,</u>	<u>Dec. 31,</u>
	<u>2003</u>	<u>2003</u>	<u>2003<sup>(2)</sup></u>	<u>2003</u>
Net revenues	\$ 50,955	\$ 49,109	\$ 53,364	\$ 58,298
Gross profit	\$ 20,544	\$ 18,229	\$ 21,204	\$ 23,742
Net income (loss)	\$ 174	\$ (913)	\$ 1,613	\$ 3,973
Net income (loss) per share:				
Basic	\$ 0.00	\$ (0.01)	\$ 0.02	\$ 0.04
Diluted	\$ 0.00	\$ (0.01)	\$ 0.02	\$ 0.04
Weighted-average shares used in computing per share amounts:				
Basic	92,039	92,171	92,032	92,337
Diluted	92,739	92,171	93,735	95,274

(1) Net income for the quarter ended June 30, 2004 includes \$6.3 million in net reversals of accrued income and payroll tax liabilities as a result of the completion of a federal tax audit (see Note 8).

(2) Net income for the quarter ended September 30, 2003 includes a charge of \$286,000 for net restructuring accrual adjustments charged to restructuring expense. In addition, the Company sold previously impaired equipment resulting in a \$624,000 gain which has been recorded as a credit to the manufacturing facility impairment expense (see Note 13).

**SCHEDULE II**

**MICREL, INCORPORATED**  
**VALUATION AND QUALIFYING ACCOUNTS**  
**For the Years Ended December 31, 2004, 2003, and 2002**  
(Amounts in thousands)

<u>Description</u>	<u>Balance at Beginning of Year</u>	<u>Allowance Additions or (Reductions)</u>	<u>Returns and Price Adjustments</u>	<u>Bad Debt Write-offs</u>	<u>Balance at End of Year</u>
<b><u>Year Ended December 31, 2004</u></b>					
Allowances for OEM and stocking representative returns and price adjustments	\$ 1,392	\$ 6,941	\$ (5,840)	\$ --	\$ 2,493
Allowances for unclaimed distributor price adjustments <sup>(1)</sup>	1,264	20,290	(20,300)	--	1,254
Allowances for doubtful accounts	180	51	--	--	231
Total allowances	<u>\$ 2,836</u>	<u>\$ 27,282</u>	<u>\$ (26,140)</u>	<u>\$ --</u>	<u>\$ 3,978</u>
<b><u>Year Ended December 31, 2003</u></b>					
Allowances for OEM and stocking representative returns and price adjustments	\$ 2,096	\$ 4,165	\$ (4,869)	\$ --	\$ 1,392
Allowances for unclaimed distributor price adjustments <sup>(1)</sup>	788	15,802	(15,326)	--	1,264
Allowances for doubtful accounts	421	(134)	--	(107)	180
Total allowances	<u>\$ 3,305</u>	<u>\$ 19,833</u>	<u>\$ (20,195)</u>	<u>\$ (107)</u>	<u>\$ 2,836</u>
<b><u>Year Ended December 31, 2002</u></b>					
Allowances for OEM and stocking representative returns and price adjustments	\$ 2,498	\$ 4,945	\$ (5,347)	\$ --	\$ 2,096
Allowances for unclaimed distributor price adjustments <sup>(1)</sup>	600	12,038	(11,850)	--	788
Allowances for doubtful accounts	788	41	--	(408)	421
Total allowances	<u>\$ 3,886</u>	<u>\$ 17,024</u>	<u>\$ (17,197)</u>	<u>\$ (408)</u>	<u>\$ 3,305</u>

(1) The Company estimates and records an allowance for distributor price adjustments for which the specific resale transaction has been completed, but the price adjustment claim has not yet been received and recorded by the Company. This allowance typically represents approximately three to four weeks of unclaimed price adjustments.

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities and Exchange Act of 1934, the registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized, in San Jose, California on the 15th day of March, 2005.

### MICREL, INCORPORATED

By /S/ Raymond D. Zinn  
Raymond D. Zinn  
*President and Chief Executive Officer*

## POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Raymond D. Zinn and Richard D. Crowley, Jr., and each of them, his attorneys-in-fact, each with the power of substitution, for him in any and all capacities, to sign any amendments to this Report on Form 10-K and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his substitute or substitutes, may do or cause to be done by virtue hereof.

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/S/ Raymond D. Zinn</u> Raymond D. Zinn	President, Chief Executive Officer and Chairman of the Board of Directors ( <i>Principal Executive Officer</i> )	March 15, 2005
<u>/S/ Richard D. Crowley.</u> Richard D. Crowley	Vice President, Finance and Chief Financial Officer ( <i>Principal Financial and Accounting Officer</i> )	March 15, 2005
<u>/S/ Warren H. Muller</u> Warren H. Muller	Director	March 15, 2005
<u>/S/ Donald Livingstone</u> Donald Livingstone	Director	March 15, 2005
<u>/S/ George Kelly</u> George Kelly	Director	March 15, 2005
<u>/S/ Larry L. Hansen</u> Larry L. Hansen	Director	March 15, 2005

**Micrel, Incorporated**  
**Exhibits Pursuant to Item 601 of Regulation S-K**

<u>Exhibit Number</u>	<u>Description</u>
2.1	Agreement and Plan of Merger and Reorganization among Micrel, Incorporated, Kournikova Acquisition Sub, Inc., Kendin Communications Inc., and with respect to Articles VIII and IX only, John C.C. Fan, as Stockholders' Agent, dated May 4, 2001. (8)
3.1	Amended and Restated Articles of Incorporation of the Registrant. (1)
3.2	Certificate of Amendment of Articles of Incorporation of the Registrant. (2)
3.3	Amended and Restated Bylaws of the Registrant. (2)
3.4	Certificate of Amendment of Articles of Incorporation of the Registrant. (7)
4.1	Certificate for Shares of Registrant's Common Stock. (3)
10.1	Indemnification Agreement between the Registrant and each of its officers and directors. (3)
10.3	1994 Stock Option Plan and form of Stock Option Agreement. (1)*
10.4	1994 Stock Purchase Plan. (3)
10.5	2003 Incentive Award Plan. (13)*
10.8	Form of Domestic Distribution Agreement. (2)
10.9	Form of International Distributor Agreement. (2)
10.10	Amended and Restated 1994 Employee Stock Purchase Plan, as amended January 1, 1996. (4)
10.11	Commercial Lease between Harris Corporation and Synergy Semiconductor Corporation dated February 29, 1996. (5)
10.12	Standard Industrial/Commercial Single-Tenant Lease Agreement Dated March 3, 2000 between the Registrant and Rose Ventures II (6)
10.13	Loan and Security Agreement Dated June 29, 2001 between the Registrant and Bank of the West (9)
10.14	Amendment No. Two to Loan and Security Agreement Dated June 29, 2001 between the Registrant and Bank of the West (10)
10.15	Commercial Mortgage Financing Agreement between Micrel, Incorporated and Bank of the West, dated September 27, 2002 (11)
10.16	Credit Agreement between the Registrant and Bank of The West dated June 30, 2003 (12)
14.1	Micrel, Incorporated Code of Ethics for Senior Officers
23.1	Consent of Independent Registered Public Accounting Firm
24.1	Power of Attorney. (See Signature Page.)
31	Certification of the Company's Chief Executive Officer and Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32	Certification of the Company's Chief Executive Officer and Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

\* Management contract or compensatory plan or agreement.

- (1) Incorporated herein by reference to the Company's Registration Statement on Form S-1 ("Registration Statement"), File No. 33-85694, in which this exhibit bears the same number, unless otherwise indicated.
- (2) Incorporated by reference to Amendment No. 1 to the Registration Statement, in which this exhibit bears the same number, unless otherwise indicated.
- (3) Incorporated by reference to the Company's Annual Report on Form 10-K for the year ended December 31, 1995, in which this exhibit bears the same number, unless otherwise indicated.

- (4) Incorporated by reference to the Company's Annual Report on Form 10-K for the year ended December 31, 1996, in which this exhibit bears the number 10.14.
- (5) Incorporated by reference to the Company's Annual Report on Form 10-K for the year ended December 31, 1998, in which this exhibit bears the number 10.14.
- (6) Incorporated by reference to exhibit 10.1 filed with the Company's quarterly report on Form 10-Q for the period ended March 31, 2000.
- (7) Incorporated by reference to exhibit 3.1 filed with the Company's quarterly report on Form 10-Q for the period ended September 30, 2000.
- (8) Incorporated by reference to exhibit 10.1 filed with the Company's registration statement on Form S-3 filed with the S.E.C. on June 22, 2001.
- (9) Incorporated by reference to exhibit 10.1 filed with the Company's quarterly report on Form 10-Q for the period ended June 30, 2001.
- (10) Incorporated by reference to exhibit 10.16 filed with the Company's annual report on Form 10-K for the period ended December 31, 2002.
- (11) Incorporated by reference to exhibit 10.1 filed with the Company's quarterly report on Form 10-Q for the period ended September 30, 2002.
- (12) Incorporated by reference to exhibit 10.1 filed with the Company's quarterly report on Form 10-Q for the period ended June 30, 2003.
- (13) Incorporated by reference to exhibit 1 filed with the Company's Schedule Proxy Statement on Schedule 14A dated May 9, 2003.

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (No. 333-70876, 333-63620 and 333-37808) and S-8 (No. 333-63618, 33-87222, 33-90396, 333-10167, 333-89223, 333-52136, 333-37832 and 333-105862) of Micrel, Incorporated of our report dated March 10, 2005, relating to the financial statements and financial statement schedule, management's assessment of the effectiveness of internal control over financial reporting and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP  
San Jose, California  
March 15, 2005

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

I, Raymond D. Zinn, certify that:

1. I have reviewed this annual report on Form 10-K of Micrel, Incorporated;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as designed in the Exchange Act Rules 13a-15(d) and 15d-15(f) for the registrant and have:
  - (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) designed such internal control over financial reporting, or caused such internal control over financial control to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 15, 2005

/s/ Raymond D. Zinn

Raymond D. Zinn  
President, Chief Executive Officer and Director  
(Principal Executive Officer)

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

I, Richard D. Crowley, certify that:

1. I have reviewed this annual report on Form 10-K of Micrel, Incorporated;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as designed in the Exchange Act Rules 13a-15(d) and 15d-15(f) for the registrant and have:
  - (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) designed such internal control over financial reporting, or caused such internal control over financial control to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 15, 2005

/s/ Richard D. Crowley

Richard D. Crowley  
Vice President, Finance and  
Chief Financial Officer  
(Principal Financial and Accounting Officer)

**Certifications of  
Chief Executive Officer and Chief Financial Officer  
Pursuant to 18 U.S.C. Section 1350,  
As Adopted Pursuant to  
Section 906 of the Sarbanes-Oxley Act Of 2002**

In connection with the Annual Report of Micrel, Incorporated (the “Company”) on Form 10-K for the period ended December 31, 2004 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Raymond D. Zinn, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d), of the Securities Exchange Act of 1934; and
2. That information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 15, 2005

\_\_\_\_\_/S/ Raymond D. Zinn

Raymond D. Zinn  
President, Chief Executive Officer and Director  
(Principal Executive Officer)

In connection with the Annual Report of Micrel, Incorporated (the “Company”) on Form 10-K for the period ended December 31, 2004 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Richard D. Crowley, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d), of the Securities Exchange Act of 1934; and
2. That information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 15, 2005

\_\_\_\_\_/S/ Richard D. Crowley

Richard D. Crowley  
Vice President, Finance and  
Chief Financial Officer  
(Principal Financial and Accounting Officer)