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

FORM 10-K

(Mark One)

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2004

OR

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934**
For the transition period from ____ to ____

Commission File Number: 000-32743

ZHONE TECHNOLOGIES, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

22-3509099
(I.R.S. Employer
Identification No.)

7001 Oakport Street
Oakland, California 94621
(Address of principal executive office)

Registrant's telephone number, including area code: (510) 777-7000

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

Securities registered pursuant to Section 12(g) of the Act:
Common Stock, \$0.001 Par Value
(Title of class)

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

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

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

As of February 15, 2005, there were 94,176,303 shares outstanding of the registrant's common stock, \$0.001 par value. As of June 30, 2004 (the last business day of the registrant's most recently completed second fiscal quarter), the aggregate market value of common stock held by non-affiliates of the registrant was approximately \$172,737,000.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement for the 2005 Annual Meeting of Stockholders are incorporated by reference into Part III of this Form 10-K where indicated.

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PART I

ITEM 1. BUSINESS

This Annual Report on Form 10-K, including “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” contains forward-looking statements regarding future events and our future results that are subject to the safe harbors created under the Securities Act of 1933 and the Securities Exchange Act of 1934. These statements are based on current expectations, estimates, forecasts, and projections about the industries in which we operate and the beliefs and assumptions of our management. We use words such as “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “goal,” “intend,” “may,” “plan,” “project,” “seek,” “should,” “target,” “will,” “would,” variations of such words, and similar expressions to identify forward-looking statements. In addition, statements that refer to projections of earnings, revenue, costs or other financial items; anticipated growth and trends in our business or key markets, including growth in the service provider market; future growth and revenues from our SLMS products; improvements in the capital spending environment; future economic conditions and performance; anticipated performance of products or services; plans, objectives and strategies for future operations; and other characterizations of future events or circumstances, are forward-looking statements. Readers are cautioned that these forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions that are difficult to predict. Therefore, actual results may differ materially and adversely from those expressed in any forward-looking statements. Factors that might cause such a difference include, but are not limited to, the ability to generate sufficient revenue to achieve or sustain profitability, the ability to raise additional capital to fund existing and future operations, defects or other performance problems in our products, reliance on contract manufacturers to produce our products cost-effectively and in sufficient volumes, dependence on sole or limited source suppliers for key components, the economic slowdown in the telecommunications industry that has restricted the ability of our customers to purchase our products, commercial acceptance of our SLMS products, intense competition in the communications equipment market from large equipment companies as well as private companies that have announced plans for products that address the same networks needs as our products, higher than anticipated expenses that we may incur, and other factors identified below, under the heading “Risk Factors” and elsewhere in this report. We undertake no obligation to revise or update any forward-looking statements for any reason.

Company Overview

We design, develop and manufacture communications network equipment for telephone companies and cable operators worldwide. We believe that these network service providers can increase their revenues and lower their operating costs by using our products to deliver video and interactive entertainment services in addition to their existing voice and data service offerings, all on a platform that permits a seamless migration from legacy technologies to a converged packet-based architecture. Our Single Line Multi-Service (SLMS) architecture provides cost efficiency and feature flexibility with support for voice over internet protocol (VoIP) and IP video (IPTV). Within this SLMS architecture, our products allow service providers to deliver all of these converged packet services over their existing copper lines while providing support for fiber build-out. Our optical transport products complement our SLMS architecture by providing flexible, low-cost, additional capacity over existing fiber. As service providers expand their broadband service offerings, our optical transport products allow them to alleviate bandwidth bottlenecks in their fiber based transport networks. With our products, network service providers can seamlessly migrate from traditional circuit-based technology to packet-based networks, and from copper-based access lines to fiber-based access lines without abandoning the investments they have made in their existing infrastructures.

We were incorporated in Delaware under the name Zhone Technologies, Inc. in June 1999, and in November 2003, we consummated our merger with Tellium, Inc. Although Tellium acted as the legal acquirer, due to various factors, including the relative voting rights, board control and senior management composition of the combined company, Zhone was treated as the “acquirer” for accounting purposes. Following the merger, the combined company was renamed Zhone Technologies, Inc. and retained substantially all of Zhone’s previous management and operating structure. The mailing address of our worldwide headquarters is 7001 Oakport Street,

Oakland, California 94621, and our telephone number at that location is (510) 777-7000. Our website address is www.zhone.com. The information on our website does not constitute part of this report. Through a link on the Investor Relations section of our website, we make available the following filings as soon as reasonably practicable after they are electronically filed with or furnished to the Securities and Exchange Commission: our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and any amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934. All such filings are available free of charge.

Industry Background

Over the past several years, the communications network industry has experienced rapid expansion and change as the internet and the proliferation of bandwidth intensive applications and services have led to an increased demand for high bandwidth communications networks. However, service providers have had difficulty in meeting this increased demand for high speed broadband access due to the constraints of the existing communications network infrastructure. This infrastructure consists of two interconnected networks:

- the “core” network, which interconnects service providers with each other; and
- the “access” network, which connects end-users to a service provider’s closest facility.

To address the increased customer demand for higher transmission speeds via greater bandwidth, service providers expended significant capital to upgrade the core networks by replacing their copper infrastructure with high-speed optical infrastructure. While the use of fiber optic equipment in the core has relieved the capacity constraints in the core network, the access network continues to be a “bottleneck” that limits the transmission of high speed data. As a result, communications in the core network can travel up to 10 gigabytes per second, while in stark contrast, the majority of communications over the access network occurs at a mere 56 kilobytes per second, a speed that is 175,000 times slower. At 56 kilobytes per second, it may take several minutes to access a media rich website and several hours to download large files. Because re-wiring every individual customer’s home or business with fiber optic cable to deliver high bandwidth services is cost prohibitive and time consuming, solving the access network bottleneck requires both more efficient use of the existing copper wire infrastructure and support for the gradual migration from copper to fiber.

In an attempt to deliver high bandwidth services over existing copper wire in the access network, service providers began deploying digital subscriber line (DSL) technology over a decade ago. However, this early DSL technology has its own share of limitations. The amount of bandwidth available over a copper wire is inversely proportional to the length of the copper wire. In other words, the greater the distance between the service provider’s equipment and the customer’s premises, the lower the bandwidth. Unfortunately, most of the DSL services available are provided by first generation DSL access multiplexer (DSLAM) equipment. These large unwieldy devices require conditioned power and climate controls typically found only in a telephone company’s central office, which is often at great distance from the customer. While adequate for basic data services, these first generation DSLAMs were not designed to meet the needs of today’s high bandwidth applications. The modest bandwidth provided by existing DSLAM equipment is often incapable of delivering even a single channel of standard definition video, much less multiple channels or high definition video.

More recently, regulatory changes and new technologies have allowed new competitors to begin delivering cost effective telecommunication services. As an example, cable operators, with extensive networks designed originally to provide only video programming, have collaborated to adopt new packet technologies that leverage the capabilities of the coaxial cable infrastructure. Using the latest technologies, cable operators have begun to cost effectively deliver new service bundles. The new service offerings, including IPTV, video on demand (VOD), interactive programming, digital video recording and new VoIP calling capabilities, provide not only enhanced features and capability, but also allow the cable operators to deliver these services over a common network. The resulting cost efficiencies are difficult for incumbent telephone companies to match. Even with their legacy voice switches fully paid for, maintaining separate networks for their circuit-based voice and packet-based video and data networks is operationally non-competitive. And perhaps even more important than the

economic efficiencies, by integrating these services over a common packet infrastructure, cable operators will realize levels of integration between applications and new features that will be difficult to achieve from a multi-platform solution.

This increased competition has placed significant pressure on service providers. With hundreds of billions of dollars of service revenues at risk, service providers have started to make investments to upgrade their networks and broaden their service offerings. In response to these competitive pressures, existing service providers have commenced a search for ways to modernize their legacy networks, to enable delivery of additional high bandwidth, high margin services, and to lower the cost of delivering these services.

The Zhone Solution

We believe that we are the first company dedicated solely to developing the full spectrum of next-generation solutions to cost effectively deliver next generation services while simultaneously preserving the investment in today's networks. Most of our products are based upon our SLMS architecture. In addition, our optical transport products extend this architecture to the transport network for the efficient distribution of voice, data and video as well as other high-bandwidth services including VOD and high-definition television (HDTV). From its inception, this new SLMS architecture was specifically designed for the delivery of multiple classes of subscriber services (such as voice, data and video distribution), rather than being based on a particular protocol or media. In other words, our SLMS products are built to support the migration from circuit to packet technologies, and from copper to fiber technologies. This flexibility allows our products to adapt to future technologies while allowing service providers to focus on service delivery. With this SLMS architecture, service providers can leverage their existing networks to deliver a combination of voice, data and video services today, while they migrate, either simultaneously or at a future date, from legacy equipment to next generation equipment with minimal interruption. We believe that our SLMS solutions provide an evolutionary path for service providers from their existing infrastructures, as well as give newer service providers the capability to deploy cost-effective, multi-service networks.

Universal Bandwidth – SLMS provides among the most flexible and scalable access solutions, allowing cost-effective broadband deployment to every subscriber throughout the service providers footprint. Our SLMS access solutions are available in a range of configurations which support from as little as 8 to as many as 2,880 service ports per enclosure. This deployment flexibility allows service providers to minimize loop lengths and to select the precise port densities needed to meet any deployment requirement. SLMS preserves the investments made by service providers in their existing copper wire networks while providing the flexibility to cost-effectively migrate to fiber as warranted, with seamless in-service transitions and very high densities for optimal deployment options.

Packet Migration – SLMS is a flexible multi-service architecture that provides current services while simultaneously supporting migration to a pure packet network. This flexibility allows service providers to cost-effectively provide carrier class performance and functionality for current and future services without interrupting existing services or abandoning existing subscribers. SLMS also protects the value of the investments made by residential and commercial subscribers in equipment, inside wiring and applications, thereby minimizing transition impact and subscriber attrition.

Triple Play Services with Converged Voice, Data and Video – SLMS simplifies the access network by consolidating new and existing services onto a single line. This convergence of services and networks simplifies provisioning and operations, ensures quality of service and reliability, and reduces the time required to provision services. SLMS combines access, transport and customer premises equipment (CPE) and management functions in a standards-based system that provides scalability, interoperability and functionality for integrated voice, data and video services.

Optical Transport – Zhone's optical transport products provide flexible low-cost, additional capacity over existing fiber with efficient multi-service transport. This technology provides for important revenue generating services including gigabit Ethernet business services, video distribution, video on demand and storage area network solutions.

The Zhone Strategy

Our strategy is to combine internal development with acquisitions of established access equipment vendors to achieve the critical mass required of telecommunications equipment providers. Key elements of our strategy include:

- *Deliver Full Customer Solutions.* In addition to delivering hardware and software product solutions, we provide customers with pre-sales and post-sales support, education and professional services to enable our customers to more efficiently deploy and manage their networks. We provide customers with application notes, business planning information, web-based and phone-based troubleshooting assistance and installation guides. Our support programs provide a comprehensive portfolio of support tools and resources that enable our customers to effectively sell to, support and expand their subscriber base using our products and solutions.
- *Expand Our Infrastructure to Meet Service Provider Needs.* Network service providers require extensive support and tight integration with manufacturers to deliver reliable, innovative and cost-effective services. By combining advanced, computer-aided design, test, and manufacturing systems with experienced, customer-focused management and technical staff, we believe that we have established the critical mass required to fully support global service provider requirements. We continue to expand our infrastructure through ongoing development and acquisitions, continuously improving quality, reducing costs and accelerating delivery of advanced solutions.
- *Continue the Advancement and Introduction of Our SLMS Products.* Our SLMS architecture is the cornerstone of our product development strategy. The design criteria for SLMS products include carrier-class reliability, multi-protocol and service support and ease of provisioning. We intend to continue to introduce SLMS products that offer the configurations and feature sets that our customers require. In addition, we have introduced products that adhere to the standards, protocols and interfaces dictated by international standards bodies and service providers. To facilitate the rapid development of our SLMS architecture and products, we have established engineering teams responsible for each critical aspect of the architecture and products. We intend to continue to leverage our expertise in voice, data, and video technologies to enhance our SLMS architecture, supporting new services, protocols and technologies as they emerge. To further this objective, we intend to continue investing in research and development efforts to extend the SLMS architecture and introduce new SLMS products.
- *Pursue Strategic Relationships and Acquisitions.* We have grown through a combination of strategic hiring and the acquisition of companies with relevant technologies and skilled personnel. Our senior management has extensive experience in identifying, executing and integrating strategic acquisitions, both at Zhone and at previous companies. We intend to pursue additional strategic relationships and acquisitions with companies that have innovative technologies and products, highly skilled personnel, market presence, and customer relationships and distribution channels that complement our strategy. We also intend to enhance our product offerings and accelerate our time-to-market by using third-party technology licenses, distribution partnerships and manufacturing relationships.

Product Portfolio

Our products provide the framework around which we are designing and developing high speed communications software and equipment for the access network. All of the products listed below are currently available and shipping. Our products span three distinct categories:

SLMS Products

Our SLMS products address three areas of customer requirements. The Zhone Management System, or ZMS, product provides the software tools necessary to manage all of the component hardware as well as subscribers and services in the network. ZMS is capable of interfacing with and managing other vendor equipment already deployed in network service providers' networks. Our Broadband Aggregation and Service products aggregate, concentrate and optimize communications traffic from copper and fiber networks. These

products are deployed in central offices, remote offices, points of presence, curbsides, data and co-location centers and large enterprises. Our Customer Premise Equipment, or CPE, products offer a cost-effective solution for combining analog voice and data services to the subscriber's premises over a single platform. These products deliver voice, data and video interface connectivity for broadcast and subscription television, internet routers and traditional telephony equipment.

Our SLMS products include:

| <u>Category</u> | <u>Product</u> | <u>Function</u> |
|---|------------------|--------------------------------|
| Network and Subscriber Management . . . | ZMS | Zhone Management System |
| Broadband Aggregation and Service | MALC | Multi-Access Line Concentrator |
| | Raptor | Scalable ATM / IP DSLAM |
| | FiberSLAM | FTTP Optical Line Terminal |
| | BAN/Sechtor 100A | Voice and Data Gateway |
| Customer Premise Equipment (CPE) | ZRG 600 | ADSL2+ Residential Gateway |
| | ZRG 800 | Fiber Residential Gateway |

Optical Transport Products

New business models are emerging as coarse wavelength division multiplexer (CWDM) and dense wavelength division multiplexer (DWDM) transport enables economical support for non-linear, interactive, content-based services, including gigabit ethernet transport, video distribution, VOD, storage area networks (SAN), and edge aggregation. As a result, the access network is becoming much more responsive, combining multi-service flexibility, low cost, and bandwidth scalability—smarter, cheaper, and faster—to deliver competitive advantage. Our GigaMux CWDM/DWDM optical transport solutions enable the responsive network today, with over 3,000 nodes deployed by leading service providers around the globe.

Our optical transport products include:

| <u>Product</u> | <u>Function</u> |
|-----------------------------|-------------------------------------|
| GigaMux 6400 | Full Featured DWDM Product |
| GigaMux 3200/1600 | Modular CWDM / DWDM Product |
| GigaMux 50 | Low-Cost Point-to-Point CWDM Access |

Legacy Products

Our legacy products support a variety of voice and data services, and are broadly deployed by service providers worldwide. Our legacy products include:

| <u>Product</u> | <u>Function</u> |
|-----------------------|--|
| ISC 303 | Early Access Concentrator Replacement System |
| Access Node | Access Concentrator |
| IMACS | Multi-Access Multiplexer |
| RC Family | M13 Multiplexers |
| FD-6 | Fiber Distribution System |
| VISTA | SONET Transport |

Global Service & Support

In addition to our product offerings, we provide a broad range of service offerings through our Global Service & Support organization. We supplement our standard and extended product warranties with programs that offer technical support, product repair, education services and enhanced support services. These services enable our customers to protect their network investments, manage their networks more efficiently and minimize

downtime for mission-critical systems. Technical support services are designed to help ensure that our products operate efficiently, remain highly available, and benefit from recent software releases. Through our education services program, we offer in-depth training courses covering network design, installation, configuration, operation, trouble-shooting and maintenance. Our enhanced services offering is a comprehensive program that provides network engineering, configuration, integration, project management and other consultative support to maximize the results of our customers during the design, deployment and operational phases. As part of our commitment to ensure around-the-clock support, we maintain a technical assistance center and a staff of qualified network support engineers to provide customers with 24-hour service, seven days a week.

Technology

We believe that our future success is dependent upon continued investment in the development and acquisition of advanced technologies in a number of areas. SLMS is based on a number of core technologies that provide sustainable advantages, including the following:

- *Services-Centric Architecture.* SLMS has been designed from inception for the delivery of multiple classes of subscriber services (such as voice, data or video distribution), rather than being based on a particular protocol or media. Our SLMS products are built to interoperate in networks supporting packet, cell and circuit technologies. This independence between services and the underlying transportation is designed to position our products to be able to adapt to future transportation technologies within established architectures and to allow our customers to focus on service delivery.
- *Common Code Base.* Our SLMS products share a common base of software code, which is designed to accelerate development, improve software quality, enable rapid deployment, and minimize training and operations costs, in conjunction with network management software.
- *Network Management and Operations.* ZMS provides the following key technologies to enable rapid, cost-effective, and secure control of the network: standards-based interfaces for seamless integration with supporting systems; hierarchical service and subscriber profiles to allow rapid service definition and provisioning and to enable wholesaling of services; automated and intelligent CPE provisioning, to provide the best end-user experience and accelerate service turn-up; load-balancing for scalability; and full security features to ensure reliability and controlled access to systems and data.
- *Test Methodologies.* Our SLMS architecture provides for interoperability testing and certification with a variety of products that reside in networks in which we will deploy our products. We have built a testing facility to conduct extensive interoperability trials with equipment from other vendors and to ensure full performance under all network conditions. We have completed the Telcordia OSMINE services process for ZMS and for several of our other products. The successful completion of these processes is required by our largest customers to ensure interoperability with their existing software and systems.
- *Acquired Technologies.* We recognize the need to acquire complementary technologies to augment engineering resources when necessary to respond rapidly to service providers' needs. Since our inception, we have completed eleven acquisitions pursuant to which we acquired products, technology and additional technical expertise. See Note 2 to our consolidated financial statements for detailed information regarding acquisitions.

Customers

We sell our products and services to network service providers who offer voice, data and video services to businesses, governments, utilities and consumers. They include regional, national and international telecommunications carriers, as well as cable service providers. To date, our products are deployed by over 300 network service providers on six continents worldwide, including two of the top three cable operators in North America. Our five largest customers during 2004 were Motorola, Qwest, Verilink, Consolidated Communications and MM02 LTD. Motorola accounted for 15% of our revenue in 2004. In 2003, Motorola and Qwest accounted for 17% and 11% of our revenue, respectively.

Research and Development

The industry in which we compete is subject to rapid technological developments, evolving industry standards, changes in customer requirements, and continuing developments in communications service offerings. Our continuing ability to adapt to these changes, and to develop new and enhanced products, is a significant factor in maintaining or improving our competitive position and our prospects for growth. Therefore, we continue to make significant investments in product development.

We conduct the majority of our research and product development activities at our Oakland, California campus. In Oakland, we have built an extensive communications laboratory with hundreds of access infrastructure products from multiple vendors that serves as an interoperability and test facility. This facility allows us to emulate a communications network with serving capacity equivalent to that supporting a city of 350,000 residents. We also have focused engineering staff and activities at additional development centers located in Alpharetta, Georgia; San Diego, California; and Westlake Village, California.

Our product development activities focus on products to support both existing and emerging technologies in the segments of the communications industry that we consider being viable revenue opportunities. We are actively engaged in continuing to refine our SLMS architecture, introducing new products under our SLMS architecture, and creating additional interfaces and protocols for both domestic and international markets.

We continue our commitment to invest in leading edge technology research and development. Our research and product development expenditures were \$23.2 million, \$22.5 million and \$29.8 million in 2004, 2003 and 2002, respectively. All of our expenditures for research and product development costs, as well as stock-based compensation expense relating to research and product development of \$0.6 million, \$0.7 million and \$4.2 million, for 2004, 2003 and 2002, respectively, have been expensed as incurred. In addition, we also charged to expense purchased in-process research and development relating to acquisitions of \$8.6 million and \$0.1 million in 2004 and 2002, respectively. We plan to continue to support the development of new products and features, while seeking to carefully manage associated costs through expense controls.

Intellectual Property

We seek to establish and maintain our proprietary rights in our technology and products through the use of patents, copyrights, trademarks, and trade secret laws. We also seek to maintain our trade secrets and confidential information by nondisclosure policies and through the use of appropriate confidentiality agreements. We have obtained a number of patents and trademarks in the United States and in other countries. There can be no assurance, however, that these patents are valid or can be enforced against competitive products in every jurisdiction. Although we believe the protection afforded by our patents, patent applications, copyrights, trademarks and trade secrets has value, the rapidly changing technology in the networking industry and uncertainties in the legal process make our future success dependent primarily on the innovative skills, technological expertise, and management abilities of our employees rather than on the protection afforded by patent, copyright, trademark, and trade secret laws.

Many of our products are designed to include software or other intellectual property licensed from third parties. While it may be necessary in the future to seek or renew licenses relating to various aspects of our products, we believe, based upon past experience and standard industry practice, that such licenses generally could be obtained on commercially reasonable terms. Nonetheless, there can be no assurance that the necessary licenses would be available on acceptable terms, if at all. Our inability to obtain certain licenses or other rights or to obtain such licenses or rights on favorable terms, or the need to engage in litigation regarding these matters, could have a material adverse effect on our business, operating results, and financial condition.

The communications industry is characterized by rapidly changing technology, a large number of patents, and frequent claims and related litigation regarding patent and other intellectual property rights. We cannot assure you that our patents and other proprietary rights will not be challenged, invalidated or circumvented, that

others will not assert intellectual property rights to technologies that are relevant to us, or that our rights will give us a competitive advantage. In addition, the laws of some foreign countries may not protect our proprietary rights to the same extent as the laws of the United States.

Sales and Marketing

We have a sales presence in various domestic and foreign locations, and we sell our products and services both directly and indirectly through channel partners with support from our sales force. Channel partners include distributors, resellers, system integrators and service providers. These partners sell directly to end customers and often provide system installation, technical support, professional services and support services in addition to the network equipment sale. Our sales efforts are generally organized according to customer and channel types:

- *Strategic Account Sales.* Our Strategic Account Sales organization focuses on large U.S. communications service providers. These include both cable operators and incumbent telephone companies. Our strategy is to target these service providers with our direct sales force and support them with dedicated engineering resources to meet their needs as they deploy SLMS and optical transport networks.
- *North American Sales.* Our North American Sales organization concentrates on established independent operating companies, or IOCs, as well as competitive carriers, developers and utilities. This organization is also responsible for managing our distribution and original equipment manufacturer, or OEM, partnerships.
- *International Sales.* Our International Sales organization targets foreign based service providers and is staffed with individuals with specific experience dealing with service providers in their designated international territories.

Our marketing team works closely with our sales, research and product development organizations and our customers by providing communications that keep the market current on our products and features. Marketing also identifies and sizes new target markets for our products, creates awareness of our company and products, generates contacts and leads within these targeted markets and performs outbound education and public relations.

Backlog

Our backlog consists of purchase orders for products and services that we expect to ship or perform within the next year. At December 31, 2004, our backlog was \$8.0 million, as compared to \$6.8 million at December 31, 2003. We consider backlog to be an indicator, but not the sole predictor, of future sales because our customers may cancel or defer orders without penalty.

Competition

We compete in the communications equipment market, providing products and services for the delivery of voice, data and video services. This market is characterized by rapid change, converging technologies and a migration to solutions that offer superior advantages. These market factors represent both an opportunity and a competitive threat to us. We compete with numerous vendors, including Alcatel, Calix, Ciena, Huawei, Lucent and Tellabs, among others. In addition, a number of companies have announced plans for products that address the same network needs that our products address, both domestically and abroad. Barriers to entry are relatively low, and new ventures to create products that do or could compete with our products are regularly formed. Many of our competitors have greater financial, technical, sales and marketing resources than we do.

The principal competitive factors in the markets in which we presently compete and may compete in the future include:

- Product performance;
- Interoperability with existing products;

- Scalability and upgradeability;
- Conformance to standards;
- Breadth of services;
- Reliability;
- Ease of installation and use;
- Geographic footprints for products;
- Ability to provide customer financing;
- Price;
- Technical support and customer service; and
- Brand recognition.

While we believe that we compete successfully with respect to each of these factors, we expect to face intense competition in our market. In addition, the inherent nature of communications networking requires interoperability. As such, we must cooperate and at the same time compete with many companies.

Manufacturing

We primarily employ an outsourced manufacturing strategy that relies on contract manufacturers for manufacturing services. We utilize contract manufacturers to provide manufacturing services, including material procurement and handling, printed circuit board assembly and mechanical board assembly. We design, specify and monitor all of the tests that are required to meet our internal and external quality standards. We work closely with our contract manufacturers to manage costs and delivery times. We believe that outsourced manufacturing enables us to deliver products more quickly and allows us to focus on our core competencies, including research and product development, sales and customer service.

We complement our contract manufacturing relationships with in-house capabilities for final assembly and testing of our products. Our manufacturing engineers work closely with our design engineers to ensure manufacturability and feasibility of our products and to ensure that manufacturing and testing processes evolve as our technologies evolve. Additionally, our manufacturing engineers interface with our contract manufacturers to ensure that outsourced manufacturing processes and products will integrate easily and cost-effectively with our in-house manufacturing systems. We also configure, package, and ship products from our facilities after a series of inspections, reliability tests and quality control measures. Our manufacturing engineers design and build all of our testing stations, establish quality standards and protocols and develop comprehensive test procedures to assure the reliability and quality of our products. We are ISO-9001 certified which is based upon our model for quality assurance in design, development, production, installation and service processes meeting rigorous quality standards.

Compliance with Regulatory and Industry Standards

Our products must comply with a significant number of voice and data regulations and standards which vary between the U.S. and international markets, and which vary between specific international markets. Standards for new services continue to evolve, and we may need to modify our products or develop new versions to meet these standards. Standards setting and compliance verification in the U.S. are determined by the Federal Communications Commission, or FCC, Underwriters Laboratories, Quality Management Institute, Telcordia Technologies, Inc., and other communications companies. In international markets, our products must comply with standards issued by ETSI and implemented and enforced by the telecommunications regulatory authorities of each nation.

Environmental Matters

Our operations and manufacturing processes are subject to federal, state, local, and foreign environmental protection laws and regulations. These laws and regulations relate to the use, handling, storage, discharge and disposal of certain hazardous materials and wastes, the pre-treatment and discharge of process waste waters and the control of process air pollutants. We believe that we are in compliance in all material respects with applicable environmental regulations.

Employees

As of December 31, 2004, we employed approximately 273 individuals worldwide. We consider the relationships with our employees to be positive. Competition for technical personnel in our industry is intense. We believe that our future success depends in part on our continued ability to hire, assimilate, and retain qualified personnel. To date, we believe that we have been successful in recruiting qualified employees, but there is no assurance that we will continue to be successful in the future.

Executive Officers

Set forth below is information concerning our current executive officers and their ages as of February 15, 2005.

| <u>Name</u> | <u>Age</u> | <u>Position</u> |
|-----------------|------------|--|
| Morteza Ejabat | 54 | Chief Executive Officer and Chairman of the Board of Directors |
| Jeanette Symons | 42 | Chief Technology Officer and Vice President, Engineering |
| Kirk Misaka | 46 | Chief Financial Officer, Vice President, Finance and Corporate Treasurer |

Morteza Ejabat is a co-founder of Zhone and has served as our Chairman of the Board of Directors and Chief Executive Officer since our inception. Prior to co-founding Zhone, from June 1995 to June 1999, Mr. Ejabat was President and Chief Executive Officer of Ascend Communications, Inc., a provider of telecommunications equipment which was acquired by Lucent Technologies, Inc. in June 1999. Previously, Mr. Ejabat held various senior management positions with Ascend from September 1990 to June 1995, most recently as Executive Vice President and Vice President, Operations. Mr. Ejabat holds a B.S. in Industrial Engineering and an M.S. in Systems Engineering from California State University at Northridge and an M.B.A. from Pepperdine University.

Jeanette Symons is a co-founder of Zhone and has served as our Chief Technology Officer and Vice President, Engineering since our inception. Prior to co-founding Zhone, Ms. Symons was Chief Technical Officer and Executive Vice President of Ascend Communications, Inc., which Ms. Symons co-founded, from January 1989 to June 1999. Before co-founding Ascend, Ms. Symons was a software engineer at Hayes Microcomputer, a modem manufacturer, where she developed and managed its ISDN program. Ms. Symons holds a B.S. in Systems Engineering from the University of California at Los Angeles.

Kirk Misaka has served as Zhone's Vice President, Finance and Corporate Treasurer since November 2000 and as Chief Financial Officer since July 2003. Prior to joining Zhone, Mr. Misaka was with KPMG LLP from 1980 to 2000, becoming a partner in 1989. He is a Certified Public Accountant and member of the American Institute of Certified Public Accountants. Mr. Misaka received his B.S. and an M.S. in Accounting from the University of Utah and an M.S. in Tax from Golden Gate University.

ITEM 2. PROPERTIES

Our worldwide headquarters are located at our Oakland, California campus. In March 2001, we purchased the land and buildings in Oakland, California which we had previously leased under a synthetic lease agreement. As part of the financing for the purchase, we granted a deed of trust on the property to Fremont Bank and were required to transfer the land and buildings to a new entity, Zhone Technologies Campus, LLC, from which we currently lease the land and buildings. We are the sole member and manager of Zhone Technologies Campus, LLC. Our lease for this facility will expire in March 2011. The Oakland campus consists of three buildings with an aggregate of approximately 180,000 square feet, and is used for our executive offices, research and product development activities, and manufacturing and warehousing. In April 2004, the Redevelopment Agency of the City of Oakland exercised its option to repurchase from us approximately 3.625 acres of undeveloped land located adjacent to our Oakland, California campus for the purchase price of approximately \$1.5 million.

In addition to our Oakland campus, we also lease facilities for manufacturing, research and development purposes at locations including Alpharetta, Georgia, San Diego, California and Westlake Village, California. We also maintain smaller offices to provide sales and customer support at various domestic and international locations. We believe that our existing facilities are suitable and adequate for our present purposes.

ITEM 3. LEGAL PROCEEDINGS

As a result of the merger with Tellium, Inc., we became a defendant in a securities class action lawsuit. On various dates between approximately December 10, 2002 and February 27, 2003, numerous class-action securities complaints were filed against Tellium in the United States District Court for the District of New Jersey. On May 19, 2003, a consolidated amended complaint representing all of the actions was filed. The complaint alleges, among other things, that Tellium and its then-current directors and executive officers, and its underwriters, violated the Securities Act of 1933 by making false and misleading statements or omissions in its registration statement prospectus relating to the securities offered in the initial public offering. The complaint further alleges that these parties violated the Securities Exchange Act of 1934 by acting recklessly or intentionally in making the alleged misstatements and/or omissions in connection with the sale of Tellium stock. The complaint seeks damages in an unspecified amount, including compensatory damages, costs and expenses incurred in connection with the actions and equitable relief as may be permitted by law or equity. On March 31, 2004, the Court granted Tellium's and the underwriters' motions to dismiss the complaint and allowed the plaintiffs to file a further amended complaint. On May 14, 2004, the plaintiffs filed a second consolidated and amended complaint. On June 25, 2004, Zhone, as Tellium's successor-in-interest, and the underwriters again moved to dismiss the complaint. The motions to dismiss have been fully briefed, and the parties are awaiting the Court's decision on the motions.

As a result of the merger with Tellium, we became a defendant in stockholder derivative lawsuits. On January 8, 2003 and January 27, 2003, two derivative suits were filed in the Superior Court of New Jersey by plaintiffs who purport to be stockholders of Tellium. The complaints in these actions allege, among other things, that Tellium directors breached their fiduciary duties to the company by engaging in stock transactions with individuals associated with Qwest Communications International Inc., and by making materially misleading statements regarding Tellium's relationship with Qwest. The actions seek damages in an unspecified amount, including imposition of a constructive trust in favor of Tellium for the amount of profits allegedly received through stock sales, disgorgement of proceeds in connection with the stock option exercises, damages allegedly sustained by Tellium in connection with alleged breaches of fiduciary duties, and costs and expenses incurred in connection with the actions. These cases have been stayed by the court pending the resolution of motions to dismiss in the above-referenced federal court securities actions. We intend to vigorously defend the claims made in these actions, which have been consolidated.

As a result of the merger with Tellium, we are involved in investigations related to Qwest Communications International Inc. The Denver, Colorado regional office of the SEC is conducting two investigations titled *In the Matter of Qwest Communications International Inc.* and *In the Matter of Issuers Related to Qwest*. The first of

these investigations does not appear to involve any allegation of wrongful conduct on the part of Tellium. In connection with the second investigation, the SEC is examining various transactions and business relationships involving Qwest and eleven companies having a vendor relationship with Qwest, including Tellium. This investigation, insofar as it relates to Tellium, appears to focus on whether Tellium's transactions and relationships with Qwest were appropriately disclosed in Tellium's public filings and other public statements. In addition, the United States Attorney in Denver is conducting an investigation involving Qwest, including Qwest's relationships with certain of its vendors, including Tellium. In connection with that investigation, the U.S. Attorney has sought documents and information from Tellium and has sought interviews and/or grand jury testimony from persons associated or formerly associated with Tellium, including certain of its officers. The U.S. Attorney has indicated that while aspects of its investigation are in an early stage, neither Tellium nor any of the company's current or former officers or employees is a target of the investigation. We are cooperating fully with these investigations. We are not able, at this time, to say when the SEC and/or U.S. Attorney investigations will be completed and resolved, or what the ultimate outcome with respect to the combined company will be. These investigations could result in substantial costs and a diversion of management's attention and may have a material and adverse effect on our business, financial condition, and results of operations.

We are subject to other legal proceedings, claims and litigation arising in the ordinary course of business. While the outcome of these matters is currently not determinable, management does not expect that the ultimate costs to resolve these matters will have a material adverse effect on our consolidated financial position or results of operations. However, litigation is subject to inherent uncertainties, and unfavorable rulings could occur. If an unfavorable ruling were to occur, there exists the possibility of a material adverse impact on the results of operations of the period in which the ruling occurs, or future periods.

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

None.

PART II

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

Price Range of Common Stock

Our common stock has been traded on the Nasdaq National Market under the symbol "ZHNE" since November 14, 2003, following the consummation of the merger with Tellium, Inc. Prior to that date, Tellium's common stock was traded on the Nasdaq under the symbol "TELM". The following table sets forth, for the periods indicated, the high and low closing sale prices as reported on Nasdaq for Zhone and Tellium common stock, as adjusted for all stock splits. Immediately prior to the consummation of the merger with Zhone, Tellium effected a one-for-four reverse split of its outstanding shares of common stock.

| | | |
|--|-------------|------------|
| 2004: | | |
| | <u>High</u> | <u>Low</u> |
| Fourth Quarter ended December 31, 2004 | \$3.12 | \$2.35 |
| Third Quarter ended September 30, 2004 | 3.65 | 2.56 |
| Second Quarter ended June 30, 2004 | 4.14 | 3.24 |
| First Quarter ended March 31, 2004 | 7.33 | 3.30 |
| 2003: | | |
| | <u>High</u> | <u>Low</u> |
| Fourth Quarter ended December 31, 2003 | \$7.36 | \$4.21 |
| Third Quarter ended September 30, 2003 | 6.12 | 3.08 |
| Second Quarter ended June 30, 2003 | 4.84 | 2.16 |
| First Quarter ended March 31, 2003 | 2.56 | 2.12 |

As of February 15, 2005, there were approximately 1,649 stockholders of record.

Dividend Policy

We have never paid or declared any cash dividends on our common stock or other securities and do not anticipate paying cash dividends in the foreseeable future. Any future determination to pay cash dividends will be at the discretion of the Board of Directors, subject to any applicable restrictions under our debt and credit agreements, and will be dependent upon our financial condition, results of operations, capital requirements, general business condition and such other factors as the Board of Directors may deem relevant.

Recent Sales of Unregistered Securities

In June 2004, we issued warrants to the City of Oakland to purchase 16,450 shares of our common stock at an exercise price of \$6.49 per share. These warrants were issued in connection with the repricing of warrants previously issued to the City of Oakland. The issuance of these warrants was not registered under the Securities Act of 1933 in reliance upon an exemption from registration afforded by Section 4(2) of the Securities Act of 1933, and/or Regulation D promulgated thereunder.

ITEM 6. SELECTED FINANCIAL DATA

The following selected financial data has been derived from our consolidated financial statements and should be read in conjunction with the consolidated financial statements and notes thereto and with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and other financial data included elsewhere in this report. The historical results are not necessarily indicative of results to be expected for any future period.

| | Year Ended December 31, | | | | |
|--|---------------------------------------|-------------------|--------------------|--------------------|--------------------|
| | 2004 | 2003 | 2002 | 2001 | 2000 |
| | (in thousands, except per share data) | | | | |
| Statement of Operations Data: | | | | | |
| Net revenue | \$ 97,168 | \$ 83,138 | \$ 112,737 | \$ 110,724 | \$ 80,756 |
| Cost of revenue | 55,305 | 51,081 | 69,689 | 106,006 | 59,384 |
| Gross profit | 41,863 | 32,057 | 43,048 | 4,718 | 21,372 |
| Operating expenses: | | | | | |
| Research and product development | 23,210 | 22,495 | 29,802 | 63,869 | 85,959 |
| Sales and marketing | 21,958 | 15,859 | 19,676 | 35,472 | 35,153 |
| General and administrative | 10,416 | 5,324 | 10,843 | 13,095 | 15,911 |
| Purchased in-process research and development | 8,631 | — | 59 | 11,983 | 439 |
| Restructuring charges | — | — | 4,531 | 5,115 | — |
| Litigation settlement | — | 1,600 | — | — | — |
| Stock-based compensation | 1,396 | 1,238 | 10,376 | 17,098 | 42,316 |
| Amortization and impairment of intangible assets | 10,132 | 7,942 | 15,995 | 88,834 | 38,082 |
| Impairment of long-lived assets | — | — | 50,759 | — | — |
| Total operating expenses | 75,743 | 54,458 | 142,041 | 235,466 | 217,860 |
| Operating loss | (33,880) | (22,401) | (98,993) | (230,748) | (196,488) |
| Other income (expense), net | (1,561) | (2,552) | (9,434) | (12,627) | (1,849) |
| Loss before income taxes | (35,441) | (24,953) | (108,427) | (243,375) | (198,337) |
| Income tax (benefit) provision | 205 | (7,778) | 140 | 145 | (1,866) |
| Net loss | (35,646) | (17,175) | (108,567) | (243,520) | (196,471) |
| Accretion on preferred stock | — | (12,700) | (22,238) | (3,325) | (2,775) |
| Net loss applicable to holders of common stock | <u>\$(35,646)</u> | <u>\$(29,875)</u> | <u>\$(130,805)</u> | <u>\$(246,845)</u> | <u>\$(199,246)</u> |
| Basic and diluted net loss per share applicable to holders of common stock | \$ (0.42) | \$ (1.87) | \$ (25.87) | \$ (59.87) | \$ (56.27) |
| Shares used in per-share calculation | 85,745 | 15,951 | 5,057 | 4,123 | 3,541 |

| | As of December 31, | | | | |
|---|--------------------|------------------|--------------------|--------------------|--------------------|
| | 2004 | 2003 | 2002 | 2001 | 2000 |
| | (in thousands) | | | | |
| Balance Sheet Data: | | | | | |
| Cash, cash equivalents and short-term investments | \$ 65,216 | \$ 98,256 | \$ 10,614 | \$ 24,137 | \$ 71,972 |
| Working capital (deficit) | 71,789 | 82,301 | (7,957) | (47,361) | 53,767 |
| Total assets | 325,227 | 274,877 | 163,963 | 274,051 | 331,984 |
| Total short-term and long-term debt | 41,313 | 33,391 | 38,703 | 100,819 | 47,500 |
| Redeemable convertible preferred stock | — | — | 165,890 | 421,601 | 383,976 |
| Stockholders’ equity (deficit) | <u>\$229,784</u> | <u>\$186,879</u> | <u>\$ (98,642)</u> | <u>\$(335,990)</u> | <u>\$(167,634)</u> |

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

Overview

We believe that we are the first company dedicated solely to developing the full spectrum of next-generation solutions to cost effectively deliver next generation services while simultaneously preserving the investment in today's networks. Most of our products are based upon our SLMS architecture. In addition, our optical transport products extend this architecture to the transport network for the efficient distribution of voice, data and video as well as other high-bandwidth services including VOD and high-definition television (HDTV). From its inception, this new SLMS architecture was specifically designed for the delivery of multiple classes of subscriber services (such as voice, data and video distribution), rather than being based on a particular protocol or media. In other words, our SLMS products are built to support the migration from circuit to packet technologies, and from copper to fiber technologies. This flexibility allows our products to adapt to future technologies while allowing service providers to focus on service delivery. With this SLMS architecture, service providers can leverage their existing networks to deliver a combination of voice, data and video services today, while they migrate, either simultaneously or at a future date, from legacy equipment to next generation equipment with minimal interruption. We believe that our SLMS solutions provide an evolutionary path for service providers from their existing infrastructures, as well as give newer service providers the capability to deploy cost-effective, multi-service networks.

Our product offerings fall within three categories: the SLMS product family; optical transport products; and legacy products and services. Our customer base includes regional, national and international telecommunications carriers, as well as cable service providers. To date, our products are deployed by over 300 network service providers on six continents worldwide, including two of the top three cable operators in North America. We believe that we have assembled the employee base, technological breadth and market presence to provide a simple yet comprehensive set of next-generation solutions to the bandwidth bottleneck in the access network and the other problems encountered by network service providers when delivering communications services to subscribers.

Since inception, we have incurred significant operating losses and have an accumulated deficit of \$631.4 million at December 31, 2004. The global communications market has deteriorated significantly over the last several years. Many of our customers and potential customers have reduced their capital spending and many others have ceased operations. As a result our revenues declined 26% from 2002 to 2003. In 2004, we have seen market conditions stabilize as demand for our products has increased. In addition, during 2004 we generated additional revenue from a new line of products we acquired from Sorrento Networks Corporation in July 2004.

Going forward, our key financial objectives include the following:

- Increasing revenue while continuing to carefully control costs;
- Continued investments in strategic research and product development activities that will provide the maximum potential return on investment;
- Minimizing consumption of our cash and short-term investments; and
- Analyzing and pursuing strategic acquisitions that will allow us to expand our customer, technology and revenue base.

Basis of Presentation

In November 2003, we consummated our merger with Tellium. Tellium was the surviving entity under corporate law and following the merger its name was changed to Zhone Technologies, Inc. However, due to various factors, including the relative voting rights, board control and senior management composition of the combined company, Zhone was treated as the "acquirer" for accounting purposes. As a result, the financial

statements of the combined company after the merger reflect the financial results of Zhone on a historical basis after giving effect to the merger exchange ratio to historical share-related data. The results of operations for Tellium were included in the combined company's results of operations from the effective date of the merger.

In July 2002, in conjunction with our Equity Restructuring (as described in Note 6 to our consolidated financial statements), our Board of Directors approved a reverse stock split of our common stock at a ratio of one-for-ten (the Reverse Split), causing each outstanding share of common stock to convert automatically into one-tenth of a share of common stock. As a result of the merger with Tellium, stockholders of Zhone prior to the merger received 0.47 of a share of Tellium common stock for each outstanding share of Zhone common stock, following the conversion of all outstanding shares of preferred stock into common stock.

Stockholders' equity (deficit) has been restated to give retroactive recognition to the Reverse Split and the effect of the Tellium merger for all periods presented by reclassifying the excess par value resulting from the reduced number of shares from common stock to paid-in capital. All references to preferred share, common share and per common share amounts for all periods presented have been retroactively restated to reflect the Reverse Split and the effect of the Tellium merger.

In October 2003, in response to an inquiry from the SEC, we restated our consolidated financial statements and related disclosures for the year ended December 31, 2002. All information, discussions and comparisons in this report reflect the restatement. The restatement reflected increased non-cash stock-based compensation expense resulting from a change in the estimated fair value of our common stock from \$0.21 per share to \$3.19 per share.

Acquisitions

As of December 31, 2004, we had completed eleven acquisitions of complementary companies, products or technologies to supplement our internal growth. To date, we have generated a significant amount of our revenue from sales of products obtained through acquisitions.

In July 2004, we completed the acquisition of Sorrento Networks Corporation in exchange for total consideration of \$98.0 million, consisting of common stock valued at \$57.7 million, options and warrants to purchase common stock valued at \$12.3 million, assumed liabilities of \$27.0 million, and acquisition costs of \$1.0 million. We acquired Sorrento to obtain its line of optical transport products and enhance our competitive position with cable operators.

The purchase consideration was allocated to the fair values of the assets acquired as follows: net tangible assets—\$23.4 million, amortizable intangible assets—\$14.8 million, purchased in-process research and development—\$2.4 million, goodwill—\$57.2 million and deferred compensation—\$0.2 million. The amount allocated to purchased in-process research and development was charged to expense during the third quarter of 2004, because technological feasibility had not been established and no future alternative uses for the technology existed. The estimated fair value of the purchased in-process research and development was determined using a discounted cash flow model, based on a discount rate which took into consideration the stage of completion and risks associated with developing the technology. Of the amount allocated to amortizable intangible assets, \$9.2 million was allocated to core technology, which is being amortized over an estimated useful life of five years. The remaining \$5.6 million was allocated to customer relationships, which is being amortized over an estimated useful life of four years.

In February 2004, we acquired certain assets of Gluon Networks, Inc. in exchange for total consideration of \$6.5 million, consisting of common stock valued at \$5.7 million, \$0.7 million of cash and \$0.1 million of acquisition related costs. The transaction was accounted for as an asset acquisition rather than a business combination, since only assets were acquired, which consisted primarily of Gluon's intellectual property. Gluon was a development stage company that had developed a product for customer trials but had not generated any revenue to date. We agreed to acquire Gluon's intellectual property and hired approximately ten of the former Gluon employees. We intend to incorporate elements of the Gluon technology into our future product offerings.

The purchase price for the Gluon transaction was allocated to purchased in-process research and development—\$6.2 million, and acquired workforce—\$0.3 million. The amount allocated to purchased in-process research and development was charged to expense during the first quarter of 2004, because technological feasibility had not been established and no future alternative uses for the technology existed. The estimated fair value of the purchased in-process research and development was determined using a discounted cash flow model, based on a discount rate which took into consideration the stage of completion and risks associated with developing the technology. Because the transaction did not constitute a business combination, no goodwill was recorded and a portion of the purchase price was allocated to the acquired workforce, which was being amortized over a two year period. An impairment charge of \$0.2 million was subsequently recorded in the second quarter of 2004 relating to the Gluon acquired workforce, because the majority of the former Gluon employees were no longer employed by us.

We are likely to acquire additional businesses, products and technologies in the future. If we complete additional acquisitions in the future, we could consume cash, incur substantial additional debt and other liabilities, incur amortization expenses related to acquired intangible assets or incur large write-offs related to impairment of goodwill and long-lived assets. In addition, future acquisitions may have a significant impact on our short term results of operations, materially impacting revenues or expenses and making period to period comparisons of our results of operations less meaningful.

Critical Accounting Policies and Estimates

Management's discussion and analysis of its financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosure of contingent assets and liabilities. The policies discussed below are considered by management to be critical because changes in such estimates can materially affect the amount of our reported net income or loss. For all of these policies, management cautions that actual results may differ materially from these estimates under different assumptions or conditions.

Revenue Recognition

We recognize revenue when the earnings process is complete. We recognize product revenue upon shipment of product under contractual terms which transfer title to customers upon shipment, under normal credit terms, or under sales-type leases, net of estimated sales returns and allowances at the time of shipment. Revenue is deferred if there are significant post-delivery obligations, if collection is not considered reasonably assured at the time of sale, or if the fees are not fixed or determinable. When significant post-delivery obligations exist, revenue is deferred until such obligations are fulfilled. Our arrangements generally do not have any significant post-delivery obligations. We offer products and services such as support, education and training, hardware upgrades and post warranty support. For multiple element revenue arrangements, we establish the fair value of these products and services based primarily on sales prices when the products and services are sold separately. If fair value cannot be established for undelivered elements, all of the revenue under the arrangement is deferred until those elements have been delivered. When collectibility is not reasonably assured, revenue is recognized when cash is collected. Revenue from education services and support services is recognized over the contract term or as the service is performed. We make certain sales to product distributors. These customers are given certain privileges to return a portion of inventory. We recognize revenue on sales to distributors that have contractual return rights when the products have been sold by the distributors, unless there is sufficient customer specific sales and sales returns history to support revenue recognition upon shipment. Revenue from sales of software products is recognized provided that a purchase order has been received, the software has been shipped, collection of the resulting receivable is probable, and the amount of the related fees is fixed or determinable. To date, revenue from software transactions and sales-type leases has not been significant. We accrue for warranty costs, sales returns, and other allowances at the time of shipment based on historical experience and expected future costs.

Allowances for Sales Returns and Doubtful Accounts

We record an allowance for sales returns for estimated future product returns related to current period product revenue. The allowance for sales returns is recorded as a reduction of revenue and an allowance against our accounts receivable. We base our allowance for sales returns on periodic assessments of historical trends in product return rates and current approved returned products. If the actual future returns were to deviate from the historical data on which the reserve had been established, our future revenue could be adversely affected. We record an allowance for doubtful accounts for estimated losses resulting from the inability of customers to make payments for amounts owed to us. The allowance for doubtful accounts is recorded as a charge to general and administrative expenses. We base our allowance on periodic assessments of our customers' liquidity and financial condition through analysis of information obtained from credit rating agencies, financial statement reviews and historical collection trends. Additional allowances may be required in the future if the liquidity or financial condition of our customers deteriorates, resulting in impairment in their ability to make payments.

Valuation of Long-Lived Assets, including Goodwill and Other Acquisition-Related Intangible Assets

Our long-lived assets consist primarily of goodwill, other acquisition-related intangible assets and property and equipment. We review long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Such events or circumstances include, but are not limited to, a significant decrease in the benefits realized from the acquired business, difficulty and delays in integrating the business or a significant change in the operations of the acquired business or use of an asset. Goodwill and other acquisition-related intangible assets not subject to amortization are tested annually for impairment using a two-step approach, and are tested for impairment more frequently if events and circumstances indicate that the asset might be impaired. An impairment loss is recognized to the extent that the carrying amount exceeds the asset's fair value. We estimate the fair value of our long-lived assets based on a combination of the market, income and replacement cost approaches. In the application of the impairment testing, we are required to make estimates of future operating trends and resulting cash flows and judgments on discount rates and other variables. Actual future results and other assumed variables could differ from these estimates. As of December 31, 2004, we had \$157.2 million of goodwill, \$17.8 million of other acquisition-related intangible assets and \$23.0 million of property and equipment. Other acquisition-related intangible assets are comprised mainly of technology in place and customer relationships. Many of the entities acquired by us do not have significant tangible assets. As a result, a significant portion of the purchase price is typically allocated to intangible assets and goodwill. Our future operating performance will be impacted by the future amortization of intangible assets, potential charges related to purchased in-process research and development for future acquisitions, and potential impairment charges related to goodwill. Accordingly, the allocation of the purchase price of the acquired companies to intangible assets and goodwill has a significant impact on our future operating results. The allocation process requires management to make significant estimates and assumptions, including estimates of future cash flows expected to be generated by the acquired assets and the appropriate discount rate for these cash flows. Should different conditions prevail, we would have to perform an impairment review that might result in material write-downs of intangible assets and/or goodwill. Other factors we consider important which could trigger an impairment review, include, but are not limited to, significant changes in the manner of use of our acquired assets, significant changes in the strategy for our overall business or significant negative economic trends. If this evaluation indicates that the value of an intangible asset or long-lived asset may be impaired, an assessment of the recoverability of the net carrying value of the asset over its remaining useful life is made. If this assessment indicates that the cost of an intangible asset or long-lived asset is not recoverable, based on the estimated undiscounted future cash flows or other comparable market valuations of the entity or technology acquired over the remaining amortization or depreciation period, the net carrying value of the related intangible asset or long-lived asset will be reduced to fair value and the remaining amortization or depreciation period may be adjusted. For example, in the fourth quarter of 2002, we recorded approximately \$50.8 million of impairment in property, plant and equipment and other assets. Due to uncertain market conditions and potential changes in our strategy and product portfolio, it is possible that forecasts used to support our intangible assets may change in the future, which could result in additional non-cash charges that would adversely affect our results of operations and financial condition.

Restructuring Charges

During the year ended December 31, 2002, we recorded charges of \$4.5 million in connection with a restructuring program. These restructuring charges were comprised primarily of: (1) severance and related charges; (2) facilities and lease cancellations and (3) write-offs of abandoned equipment. We accounted for each of these costs in accordance with relevant accounting literature as summarized in SEC Staff Accounting Bulletin No. 100, *Restructuring and Impairment Charges*, Emerging Issues Task Force (EITF) Issue No. 94-3, *Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (Including Certain Costs Incurred in a Restructuring)* and EITF Issue No. 88-10, *Costs Associated with Lease Modification or Termination*. Any such costs incurred in the future will be recorded in accordance with SFAS No. 146, *Accounting for Costs Associated with Exit or Disposal Activities* or SFAS No. 112, *Employers Accounting for Post Employment Benefits*, and any write-off of abandoned equipment will be accounted for in accordance with SFAS No. 144, *Accounting for the Impairment or Disposal of Long Lived Assets*.

RESULTS OF OPERATIONS

We list in the tables below the historical consolidated statement of operations as a percentage of revenue for the periods indicated.

| | Year Ended December 31 | | |
|--|------------------------|------|------|
| | 2004 | 2003 | 2002 |
| Net revenue | 100% | 100% | 100% |
| Cost of revenue | 57% | 61% | 62% |
| Gross profit | 43% | 39% | 38% |
| Operating expenses: | | | |
| Research and product development | 24% | 27% | 26% |
| Sales and marketing | 23% | 19% | 18% |
| General and administrative | 11% | 6% | 10% |
| Purchased in-process research and development | 9% | 0% | 0% |
| Restructuring charges | 0% | 0% | 4% |
| Litigation settlement | 0% | 2% | 0% |
| Stock-based compensation | 1% | 2% | 9% |
| Amortization and impairment of intangible assets | 10% | 10% | 14% |
| Impairment of long-lived assets | 0% | 0% | 45% |
| Total operating expenses | 78% | 66% | 126% |
| Operating loss | -35% | -27% | -88% |
| Other income (expense), net | -2% | -3% | -8% |
| Loss before income taxes | -37% | -30% | -96% |
| Income tax (benefit) provision | N/M | -9% | N/M |
| Net loss | -37% | -21% | -96% |

2004 COMPARED WITH 2003

Revenue

Information about our revenue for products and services for 2004 and 2003 is summarized below (in millions):

| | 2004 | 2003 | Increase (Decrease) | % change |
|----------|---------------|---------------|------------------------|-------------|
| Products | \$88.4 | \$75.3 | \$13.1 | 17% |
| Services | 8.8 | 7.8 | 1.0 | 13% |
| | <u>\$97.2</u> | <u>\$83.1</u> | <u>\$14.1</u> | 17% |

Information about our revenue for North America and International markets for 2004 and 2003 is summarized below (in millions):

| | <u>2004</u> | <u>2003</u> | <u>Increase (Decrease)</u> | <u>% change</u> |
|-------------------------|---------------|---------------|--------------------------------|---------------------|
| North America | \$75.5 | \$75.5 | \$ — | NM |
| International | <u>21.7</u> | <u>7.6</u> | <u>14.1</u> | 186% |
| | <u>\$97.2</u> | <u>\$83.1</u> | <u>\$14.1</u> | 17% |

Information about our revenue by product line for 2004 and 2003 is summarized below (in millions):

| | <u>2004</u> | <u>2003</u> | <u>Increase (Decrease)</u> | <u>% change</u> |
|------------------------------|---------------|---------------|--------------------------------|---------------------|
| SLMS | \$29.4 | \$20.9 | \$ 8.5 | 41% |
| Optical Transport | 8.9 | — | 8.9 | 100% |
| Legacy and Service | <u>58.9</u> | <u>62.2</u> | <u>(3.3)</u> | (5)% |
| | <u>\$97.2</u> | <u>\$83.1</u> | <u>\$14.1</u> | 17% |

Total revenue increased 17% or \$14.1 million to \$97.2 million for 2004 compared to \$83.1 million for 2003. The increase in total revenue was due to incremental revenue relating to the acquisition of our new optical transport product line from Sorrento in July 2004, as well as increased demand for our SLMS products compared to the prior year. In 2004, product revenue increased 17% or \$13.1 million and service revenue increased by 13% or \$1.0 million compared to 2003. Service revenue represents revenue from maintenance and other services associated with product shipments. The increase in both product and service revenue was due to the stabilization of the overall economic environment as well as incremental revenue associated with our new optical transport product family. International revenue increased 186% or \$14.1 million to \$21.7 million in 2004 and represented 22% of total revenue compared with 9% in 2003. The significant increase in international revenue represents the increasing opportunity for our next generation products in both existing and new network deployments among international carriers, as well as incremental revenue from our new optical transport product family.

By product family, revenue for our SLMS product family increased \$8.5 million or 41% in 2004 compared to 2003 as demand has increased, particularly in international territories. Revenue for our legacy products and services decreased \$3.3 million or 5% in 2004 as we continue to focus our marketing efforts on our next generation SLMS products. Revenue for our optical transport products was \$8.9 million in 2004. No revenue was generated from our optical transport product line in 2003 as this product family was acquired in July 2004.

While we anticipate focusing our sales and marketing efforts on our SLMS and optical transport product families in 2005, revenue from our legacy products and services is expected to continue to represent a significant percentage of total revenue in the near term, given current trends in service provider capital spending, which tend to focus more on supporting legacy type products, rather than investing in newer, more technologically advanced products. We expect that over time, the product mix will continue to shift toward next generation products in SLMS and optical transport. While we have experienced significant growth in international markets, we do not anticipate international revenues to continue to grow at the same rates experienced in 2004.

In 2004, Motorola accounted for approximately 15% of total revenue. In 2003, Motorola and Qwest accounted for 17% and 11% of total revenue, respectively. No other customer accounted for 10% or more of total revenue in either period. We anticipate that our results of operations in any given period will continue to depend to a large extent on sales to a small number of large accounts. As a result, our revenue for any quarter may be subject to significant volatility based upon changes in orders from one or a small number of key customers.

Cost of Revenue

Total cost of revenue increased \$4.2 million, or 8% to \$55.3 million for 2004 compared to \$51.1 million for 2003, driven primarily by the overall increase in revenue. Total cost of revenue was 57% of revenue for 2004, compared to 61% of revenue for 2003. Cost of revenue included excess inventory charges of \$2.4 million in 2004 and \$6.0 million in 2003, representing 2% and 7% of revenue, respectively. The excess inventory charges recorded in 2003 were primarily due to the impact of our reduced sales forecast in 2003.

We expect that, in the future, our cost of revenue will also vary as a percentage of net revenue depending on the mix and average selling prices of products sold. In addition, competitive and economic pressures could cause us to reduce our prices, adjust the carrying values of our inventory, or record inventory charges relating to discontinued products and excess or obsolete inventory.

Research and Product Development Expenses

Research and product development expenses increased 3% or \$0.7 million to \$23.2 million for 2004 compared to \$22.5 million for 2003. The increase was primarily due to increased personnel related costs to support development efforts on acquired technologies. This increase was partially offset by savings in facility related costs associated with the closure of one of our Canadian offices as we continued our efforts to consolidate our research and development locations. We intend to continue to invest in research and product development to attain our strategic product development objectives, while seeking to manage the associated costs through expense controls.

Sales and Marketing Expenses

Sales and marketing expenses increased 38% or \$6.1 million to \$22.0 million for 2004 compared to \$15.9 million for 2003. The increase was primarily attributable to higher commissions and other personnel related costs to support revenue growth, particularly in the international territories, as well as increased spending on trade shows and other marketing promotions. In addition, we recorded a benefit of \$2.4 million in 2003, related to the termination of a customer financing agreement with a financial institution.

General and Administrative Expenses

General and administrative expenses increased 96% or \$5.1 million to \$10.4 million for 2004 compared to \$5.3 million for 2003. Significant increases were attributable to increased costs associated with being an SEC registrant, increased personnel related costs, subsequently incurred legal expenses related to acquisitions, and charges related to lease terminations for multiple excess facilities. The allowance for doubtful accounts expense also increased in 2004 because, in 2003, we realized a benefit in the allowance for doubtful accounts as we were able to collect amounts owing from certain customers whose accounts had been written off in prior years.

Purchased in process research and development

In 2004, we recorded an in process research and development charge of \$8.6 million relating to the acquisitions of Sorrento and Gluon because technological feasibility for certain research and development efforts by these companies had not been established and no future alternative uses for these research and development efforts existed.

Litigation Settlement

In 2003, we recorded a charge of \$1.6 million relating to the settlement of a litigation matter involving HeliOss Communications, Inc. There were no litigation settlement charges in 2004.

Stock-Based Compensation Expenses

Stock-based compensation expense increased \$0.4 million to \$1.6 million for 2004 compared to \$1.2 million for 2003. For the years ended December 31, 2004 and 2003, \$0.2 million and (\$0.1) million of stock-based compensation expense was classified as cost of revenue, respectively, and \$1.4 million and \$1.2 million was classified as operating expenses, respectively. Stock-based compensation expense primarily resulted from the difference between the fair value of our common stock and the exercise price for stock options granted to employees on the date of grant. We amortize the resulting deferred compensation over the vesting periods of the applicable options using an accelerated method, which can result in a net credit to stock-based compensation expense during a particular period, if the amount reversed due to the forfeiture of unvested shares exceeds the amortization of deferred compensation.

For each period, we recorded stock-based compensation expense representing the amortization of deferred compensation, offset by a benefit due to the reversal of previously recorded stock compensation expense on forfeited shares. Components of stock-based compensation expense were comprised as follows (in millions):

| | <u>2004</u> | <u>2003</u> |
|--|---------------|---------------|
| Amortization of deferred stock compensation expense | \$ 1.7 | \$ 6.5 |
| Benefit due to reversal of previously recorded stock compensation expense on forfeited shares | (0.1) | (5.5) |
| Compensation expense relating to non-employees | — | 0.2 |
| | <u>\$ 1.6</u> | <u>\$ 1.2</u> |

Amortization and Impairment of Intangibles

Amortization and impairment of intangibles increased \$2.2 million to \$10.1 million for 2004 compared to \$7.9 million for 2003. The increase was primarily attributable to incremental amortization expense of \$1.9 million relating to the acquisitions of Sorrento in July 2004 and eLuminant in February 2003. In addition, we recorded a charge of \$0.2 million during 2004 relating to an impairment of acquired workforce from the Gluon acquisition in February 2004.

Other Income (Expense), Net

Other income (expense), net was \$(1.6) million for 2004 compared to \$(2.6) million for 2003. The components for each period were comprised as follows (in millions):

| | <u>2004</u> | <u>2003</u> |
|------------------------|----------------|----------------|
| Interest expense | \$(4.0) | \$(3.9) |
| Interest income | 1.3 | 0.4 |
| Other income | 1.1 | 0.9 |
| | <u>\$(1.6)</u> | <u>\$(2.6)</u> |

Interest expense for 2004 increased by \$0.1 million compared to 2003 due primarily to increased borrowings assumed from Sorrento in July 2004 offset by a decrease in the average balance outstanding on other borrowings. Interest income increased due to higher average balances of cash and short term investments. Other income increased by \$0.2 million due to exchange gains on foreign currency transactions.

Income Tax (Benefit) Provision

During the year ended December 31, 2004, we recorded a net tax provision of \$0.2 million related to foreign and state taxes. No deferred tax benefit was recorded due to our operating losses and net operating loss

carryforwards. Due to the significant uncertainty regarding the realization of our net deferred tax assets, a full valuation allowance was recorded.

In 2003, we recognized a net tax benefit of \$7.8 million, which included a tax benefit of \$8.0 million relating to the final resolution of tax refund claims for net operating loss carrybacks of post-acquisition losses incurred by Premisys, offset by foreign and state taxes of \$0.2 million. We had originally received the tax refunds related to Premisys in previous years, but did not recognize any income tax benefit at that time due to the substantial uncertainty regarding whether the benefit could be sustained upon examination by tax authorities.

2003 COMPARED WITH 2002

Revenue

Information about our revenue for products and services for 2003 and 2002 is summarized below (in millions):

| | <u>2003</u> | <u>2002</u> | <u>Increase (Decrease)</u> | <u>% change</u> |
|----------------|---------------|----------------|--------------------------------|---------------------|
| Products | \$75.3 | \$105.3 | \$(30.0) | (29)% |
| Services | 7.8 | 7.4 | 0.4 | 5% |
| | <u>\$83.1</u> | <u>\$112.7</u> | <u>\$(29.6)</u> | <u>(26)%</u> |

Information about our revenue for North America and International markets for 2003 and 2002 is summarized below (in millions):

| | <u>2003</u> | <u>2002</u> | <u>Increase (Decrease)</u> | <u>% change</u> |
|---------------------|---------------|----------------|--------------------------------|---------------------|
| North America | \$75.5 | \$ 93.2 | \$(17.7) | (19)% |
| International | 7.6 | 19.5 | (11.9) | (61)% |
| | <u>\$83.1</u> | <u>\$112.7</u> | <u>\$(29.6)</u> | <u>(26)%</u> |

Information about our revenue by product line for 2003 and 2002 is summarized below (in millions):

| | <u>2003</u> | <u>2002</u> | <u>Increase (Decrease)</u> | <u>% change</u> |
|--------------------------|---------------|----------------|--------------------------------|---------------------|
| SLMS | \$20.9 | \$ 32.8 | \$(11.9) | (36)% |
| Legacy and Service | 62.2 | 79.9 | (17.7) | (22)% |
| | <u>\$83.1</u> | <u>\$112.7</u> | <u>\$(29.6)</u> | <u>(26)%</u> |

Total revenue decreased 26% or \$29.6 million to \$83.1 million for 2003 compared to \$112.7 million for 2002. The decrease in total revenue was due to the continued capital constraints and economic slowdown affecting the communications industry and the technology industry in general. On a quarterly basis, our revenue declined significantly in the first quarter of 2003 as compared to the fourth quarter of 2002, but then increased sequentially over the remainder of the year.

In 2003, product revenue declined by 29% or \$30.0 million while service revenue increased by 5% or \$0.4 million compared to 2002. The decrease in product revenue was due to the overall economic environment impacting service provider capital spending. The modest increase in service revenue was due to revenue from maintenance and other services associated with product shipments that occurred in previous periods. International revenue declined 61% or \$11.9 million to \$7.6 million in 2003 and represented 9% of total revenue compared with 17% in 2002. The decline in international revenue was due to the global economic environment and declining sales to non-U.S. based competitive local exchange carriers, or CLECs.

By product family, revenue for our SLMS product family declined by \$11.9 million or 36% in 2003 as compared to 2002. Revenue for our legacy and service products declined by \$17.7 million or 22% in 2003. The percentage decline in SLMS product line revenue exceeded the overall percentage decline in revenue. Due to the economic environment affecting service providers during 2003, our customers and potential customers limited capital expenditures to sustain their current revenue generating activities while significantly reducing capital expenditures for newer technologies. As a result, during 2003, network service providers continued to invest in our legacy equipment and applications while spending more conservatively on newer technologies in the SLMS product line.

In 2003, Motorola and Qwest accounted for approximately 17% and 11% of total revenue, respectively. In 2002, Motorola accounted for approximately 12% of total revenue. No other customer accounted for 10% or more of total revenue in either period.

Cost of Revenue

Total cost of revenue decreased \$18.6 million to \$51.1 million for 2003 compared to \$69.7 million for 2002, driven primarily by the overall decrease in revenue. Total cost of revenue was 61% of revenue for 2003, compared to 62% of revenue for 2002. Cost of revenue included excess inventory charges of \$6.0 million in 2003 and \$2.4 million in 2002, representing 7% and 2% of revenue, respectively. The higher excess inventory charges recorded in 2003 were primarily due to the impact of our reduced sales forecasts.

Excluding the effect of excess inventory charges, total cost of revenue as a percentage of revenue would have been 54% in 2003 compared to 60% in 2002. This improvement was primarily attributable to a shift in product mix towards a higher percentage of revenue from certain high margin legacy products.

Research and Product Development Expenses

Research and product development expenses decreased 25% or \$7.3 million to \$22.5 million for 2003 compared to \$29.8 million for 2002. The decrease was primarily due to lower depreciation expense and facilities related costs, and a decrease in personnel-related expenses resulting from our restructuring activities in 2002, which resulted in a consolidation of product offerings and more focused development programs. Depreciation expense and facilities related costs decreased by approximately \$4.1 million due to the effect of an impairment charge for certain facilities and equipment in 2002 and a consolidation of research and product development office locations. Personnel related expenses decreased by approximately \$2.0 million for 2003 due primarily to headcount reductions resulting from the consolidation of product offerings.

Sales and Marketing Expenses

Sales and marketing expenses decreased 19% or \$3.8 million to \$15.9 million for 2003 compared to \$19.7 million for 2002. The decrease was primarily due to a credit to sales and marketing expense of \$2.4 million recorded in 2003, as a result of the termination of a customer financing agreement with a financial institution. The amount represented the recovery of a reserve for projected credit losses which had originally been recorded as sales and marketing expense in 2001.

General and Administrative Expenses

General and administrative expenses decreased 51% or \$5.5 million to \$5.3 million for 2003 compared to \$10.8 million for 2002. The decrease was primarily due to lower provisions for doubtful accounts of approximately \$7.1 million which occurred because there were no additional specifically reserved customer accounts in 2003. This decrease was partially offset by higher legal and accounting expenses of approximately \$1.5 million, which was primarily attributable to increased costs associated with being an SEC registrant.

Restructuring Charges

We did not record any restructuring charges in 2003, as compared to \$4.5 million of charges recorded during 2002 relating to severance and related charges, facilities and lease cancellations and equipment write-offs.

Litigation Settlement

In 2003, we recorded a charge of \$1.6 million relating to the settlement of a litigation matter involving HeliOss Communications, Inc. No litigation settlement charges were recorded in 2002.

Stock-Based Compensation Expenses

Stock-based compensation expense decreased \$9.6 million to \$1.2 million for 2003 compared to \$10.8 million for 2002. The decrease was primarily attributable to lower amortization of deferred compensation due to the use of an accelerated amortization method. For the years ended December 31, 2003 and 2002, \$(0.1) million and \$0.4 million of stock-based compensation expense was classified as cost of revenue, respectively, and \$1.2 million and \$10.4 million was classified as operating expenses, respectively. Stock-based compensation expense primarily resulted from the difference between the fair value of our common stock and the exercise price for stock options granted to employees on the date of grant. We amortize the resulting deferred compensation expense over the vesting periods of the applicable options using an accelerated method, which can result in a net credit to stock-based compensation expense during a particular period, if the amount reversed due to the forfeiture of unvested shares exceeds the amortization of deferred compensation.

For each period, we recorded stock-based compensation expense representing the amortization of deferred compensation expense, offset by a benefit due to the reversal of previously recorded stock compensation expense on forfeited shares. For the year ended December 31, 2002, we also recorded compensation expense of \$2.5 million due to the cancellation of notes receivable due from officers relating to the repurchase by us of common stock subject to repurchase rights and issuance of promissory notes to the founders relating to their purchase of our common stock. For the year ended December 31, 2002, we also recorded compensation expense of \$1.8 million due to the exchange of certain shares of our common stock subject to repurchase rights for Series B preferred stock. Components of stock-based compensation expense were comprised as follows (in millions):

| | <u>2003</u> | <u>2002</u> |
|---|---------------|----------------|
| Amortization of deferred stock compensation expense | \$ 6.5 | \$ 21.5 |
| Benefit due to reversal of previously recorded stock compensation expense on forfeited shares | (5.5) | (14.4) |
| Compensation expense (benefit) relating to non-employees | 0.2 | (0.6) |
| Compensation expense relating to cancellation of prior notes receivable and issuance of notes receivable | — | 2.5 |
| Compensation expense relating to exchange of stock options | — | 1.8 |
| | <u>\$ 1.2</u> | <u>\$ 10.8</u> |

Amortization and Impairment of Intangibles

Amortization and impairment of intangibles decreased \$8.1 million to \$7.9 million for 2003 compared to \$16.0 million for 2002. The decrease was primarily attributable to the intangibles from acquisitions made in previous years becoming fully amortized, offset by the incremental amortization expense of \$1.3 million relating to the acquisition of eLuminant in February 2003. In addition, we recorded an impairment charge of \$0.7 million during 2002 relating to the discontinuation of the development of certain technology obtained from the acquisition of OptaPhone Networks, Inc.

Impairment of Long-Lived Assets

We did not record any impairment charges in 2003, as compared to \$50.8 million of charges recorded during 2002 relating primarily to a write down in the carrying value of our headquarters facility and related assets. The impairment charge in 2002 was recorded following an impairment review that resulted from factors including a significant reduction in forecasted revenues and excess equipment and building capacity caused by restructuring activities completed earlier in 2002.

Other Income (Expense), Net

Other income (expense), net was \$(2.6) million for 2003 compared to \$(9.4) million for 2002. The components for each period were comprised as follows (in millions):

| | <u>2003</u> | <u>2002</u> |
|------------------------------|----------------|----------------|
| Interest expense | \$(3.9) | \$(9.5) |
| Interest income | 0.4 | 0.4 |
| Other income (expense) | <u>0.9</u> | <u>(0.3)</u> |
| | <u>\$(2.6)</u> | <u>\$(9.4)</u> |

Interest expense for 2003 decreased by \$5.6 million compared to 2002 due primarily to a reduction in average borrowings outstanding during the year. Other income (expense) increased by \$1.2 million due to various non-operating cash receipts, none of which were individually material.

Income Tax (Benefit) Provision

During the year ended December 31, 2003, we recorded a net tax benefit of \$7.8 million, which consisted of a current tax benefit of \$8.0 million, offset by foreign and state taxes of \$0.2 million. No deferred tax benefit was recorded due to our operating losses and net operating loss carryforwards. Due to the significant uncertainty regarding the realization of our net deferred tax assets, a full valuation allowance was recorded.

We recognized a tax benefit of \$8.0 million in 2003 relating to the final resolution of tax refund claims for net operating loss carrybacks of post-acquisition losses incurred by Premisys. We had originally received the tax refunds related to Premisys in previous years, but did not recognize any income tax benefit at that time due to the substantial uncertainty regarding whether the benefit could be sustained upon examination by tax authorities.

LIQUIDITY AND CAPITAL RESOURCES

Historically, we have financed our operations through private sales of capital stock and borrowings under various credit arrangements. Following the completion of our merger with Tellium in November 2003, in which our common stock became publicly traded, we have financed and expect to continue to finance our operations through a combination of our existing cash, cash equivalents and investments, available credit facilities, and sales of equity and debt instruments, based on our operating requirements and market conditions.

At December 31, 2004, cash, cash equivalents and short-term investments were \$65.2 million. This amount includes cash and cash equivalents of \$46.6 million, as compared with \$32.5 million at December 31, 2003. The increase in cash and cash equivalents of \$14.1 million was attributable to cash provided by investing activities of \$58.1 million and cash provided by financing activities of \$3.3 million, offset by cash used in operating activities of \$47.3 million.

Net cash provided by investing activities consisted primarily of net proceeds of \$47.0 million from the sales and maturities of short term investments, net cash acquired through the Sorrento and Gluon acquisitions of \$5.6 million, and proceeds from the sale of certain excess facilities. Net cash provided by financing activities

consisted primarily of net borrowings under our line of credit of \$9.7 million, offset by the repayment of debt associated with the facilities sold and other debt. Net cash used in operating activities consisted of the net loss of \$35.6 million, adjusted for non-cash charges totaling \$21.8 million and changes in operating assets and liabilities totaling \$33.4 million. The most significant components of the changes in operating assets and liabilities were a decrease in accrued expenses of \$16.0 million and an increase in inventories of \$7.3 million.

As a result of the financial demands of major network deployments and the difficulty in accessing capital markets, network service providers continue to request financing assistance from their suppliers. From time to time we may provide or commit to extend credit or credit support to our customers. This financing may include extending credit to customers or guaranteeing the indebtedness of customers to third parties. Depending upon market conditions, we may seek to factor these arrangements to financial institutions and investors to reduce the amount of our financial commitments for such arrangements. Our ability to provide customer financing is limited and depends upon a number of factors, including our capital structure, the level of our available credit and our ability to factor commitments to third parties. Any extension of financing to our customers will limit the capital that we have available for other uses. Currently, we do not have any significant customer financing commitments.

Our primary source of liquidity comes from our cash and cash equivalents and short-term investments, which totaled \$65.2 million at December 31, 2004, and our \$25 million line of credit agreement, under which \$14.5 million was outstanding at December 31, 2004 and an additional \$9.1 million was committed as security for obligations under our secured real estate loan facility and other letters of credit. Borrowings under the line of credit bear interest at the financial institution's prime rate or LIBOR plus 2.9%, at the election of the borrower. Our short-term investments are classified as available-for-sale and consist of securities that are readily convertible to cash, including certificates of deposits, commercial paper and government securities, with original maturities at the date of acquisition ranging from 90 days to one year. At current revenue levels, we anticipate that some portion of our existing cash and cash equivalents and investments will continue to be consumed by operations.

In March 2005, we entered into an amendment to our existing revolving credit facility with Silicon Valley Bank providing for a one year extension of the term of the existing facility and an increase in the size of the facility from \$25 million to \$35 million (the "Amended Facility"). Under the Amended Facility we have the option of either borrowing funds at agreed upon rates of interest or selling specific accounts receivable to Silicon Valley Bank, on a limited recourse basis, at agreed upon discounts to the face amount of those accounts receivable, so long as the aggregate amount of outstanding borrowings and financed accounts receivable does not exceed \$35 million. The amounts borrowed will bear interest, payable monthly, at a floating rate that, at our option, is either (1) Silicon Valley Bank's prime rate, or (2) the sum of the LIBOR rate plus 2.9%; provided that in either case, the minimum interest rate is 4.0%.

In March 2004, we filed a Form S-3 Registration Statement which allows us to sell, from time to time, up to \$100 million of our common stock or other securities. Although we may use this multi-purpose shelf registration to raise additional capital, there can be no certainty as to when or if we may offer any securities under the shelf registration or what the terms of any such offering would be.

Our accounts receivable, while not considered a primary source of liquidity, represents a concentration of credit risk because a significant portion of the accounts receivable balance at any point in time typically consists of a relatively small number of customer account balances. At December 31, 2004, one customer represented 10% of our total accounts receivable balance. Our fixed commitments for cash expenditures consist primarily of payments under operating leases, inventory purchase commitments, and payments of principal and interest for debt obligations. We do not currently have any material commitments for capital expenditures, or any other material commitments aside from operating leases for our facilities, inventory purchase commitments and debt. We currently intend to fund our operations for the foreseeable future using our existing cash, cash equivalents and investments and liquidity available under our line of credit agreement.

Based on our current plans and business conditions, we believe that our existing cash, cash equivalents and investments and available credit facilities will be sufficient to satisfy our anticipated cash requirements for at least the next twelve months. However, we may require additional funds if our revenues or expenses fail to meet our current projections or to support other purposes and may need to raise additional funds through debt or equity financing or from other sources. There can be no assurances that additional funding will be available at all, or that if available, such financing will be obtainable on terms favorable to us.

Contractual Commitments and Off-Balance Sheet Arrangements

At December 31, 2004, our future contractual commitments by fiscal year were as follows (in thousands):

| | <u>Total</u> | <u>2005</u> | <u>2006</u> | <u>2007</u> | <u>2008 and beyond</u> |
|--|-----------------|-----------------|-----------------|----------------|----------------------------|
| Operating leases | \$ 1,928 | \$ 1,111 | \$ 471 | \$ 346 | \$— |
| Line of Credit | 14,500 | 14,500 | — | — | — |
| Debt | 41,313 | 1,378 | 31,068 | 8,867 | — |
| Inventory purchase commitments | 4,544 | 4,544 | — | — | — |
| Total future contractual commitments | <u>\$62,285</u> | <u>\$21,533</u> | <u>\$31,539</u> | <u>\$9,213</u> | <u>—</u> |

The operating lease amounts shown above represent off-balance sheet arrangements to the extent that a liability is not already recorded on our balance sheet. For operating lease commitments, a liability is generally not recorded on our balance sheet unless the facility represents an excess facility for which an estimate of the facility exit costs has been recorded on our balance sheet. Payments made under operating leases will be treated as rent expense for the facilities currently being utilized. The debt and line of credit obligations have been recorded on our balance sheet. The debt obligation amounts shown above represent the scheduled principal repayments, including \$31.1 million due in April 2006 in connection with our secured real estate loan, but not the associated interest payments which may vary based on changes in market interest rates. At December 31, 2004, the interest rate on our outstanding debt obligations ranged from 7.5% to 8%. Inventory purchase commitments represent the amount of excess inventory purchase commitments that have been recorded on our balance sheet at December 31, 2004.

We also had commitments under outstanding letters of credit totaling \$0.4 million at December 31, 2004. We have recorded restricted cash of \$0.3 million on our balance sheet related to amounts outstanding under these letters of credit.

Recent Accounting Pronouncements

In December 2004, the Financial Accounting Standards Board (FASB) enacted Statement of Financial Accounting Standards 123—revised 2004 (SFAS 123R), “Share-Based Payment” which replaces Statement of Financial Accounting Standards No. 123 (SFAS 123), “Accounting for Stock-Based Compensation” and supersedes APB Opinion No. 25 (APB 25), “Accounting for Stock Issued to Employees.” SFAS 123R requires the measurement of all share-based payments to employees, including grants of employee stock options, using a fair value-based method and the recording of such expense in our consolidated statements of income. The accounting provisions of SFAS 123R are effective for reporting periods beginning after June 15, 2005.

We are required to adopt SFAS 123R in the third quarter of fiscal 2005. The pro forma disclosures previously permitted under SFAS 123 no longer will be an alternative to financial statement recognition. See Note 1 in our Notes to Consolidated Financial Statements for the pro forma net loss and net loss per share amounts, for fiscal 2002 through fiscal 2004, as if we had used a fair value-based method similar to the methods required under SFAS 123R to measure compensation expense for employee stock incentive awards. We are evaluating the requirements under SFAS 123R and, although we have not yet determined whether the adoption of

SFAS 123R will result in amounts that are similar to the current pro forma disclosures under SFAS 123, we do expect that the adoption will have a significant adverse impact on our consolidated statements of operations and net loss per share.

See Note 1 of the Consolidated Financial Statements for a description of other recent accounting pronouncements, including the expected dates of adoption and estimated effects on results of operations and financial condition.

RISK FACTORS

Set forth below and elsewhere in this report and in other documents we file with the SEC are risks and uncertainties that could cause actual results to differ materially from the results contemplated by the forward-looking statements contained in this report.

Our future operating results are difficult to predict and our stock price may continue to be volatile.

As a result of a variety of factors discussed in this report, our revenues for a particular quarter are difficult to predict. Our revenue and operating results may vary significantly from quarter to quarter due to a number of factors, many of which are outside of our control. The primary factors that may affect our results of operations include the following:

- commercial acceptance of our SLMS products;
- fluctuations in demand for network access products;
- the timing and size of orders from customers;
- the ability of our customers to finance their purchase of our products as well as their own operations;
- new product introductions, enhancements or announcements by our competitors;
- our ability to develop, introduce and ship new products and product enhancements that meet customer requirements in a timely manner;
- changes in our pricing policies or the pricing policies of our competitors;
- the ability of our company and our contract manufacturers to attain and maintain production volumes and quality levels for our products;
- our ability to obtain sufficient supplies of sole or limited source components;
- increases in the prices of the components we purchase, or quality problems associated with these components;
- unanticipated changes in regulatory requirements which may require us to redesign portions of our products;
- changes in accounting rules, such as recording expenses for employee stock option grants;
- integrating and operating any acquired businesses;
- our ability to achieve targeted cost reductions;
- how well we execute on our strategy and operating plans; and
- general economic conditions as well as those specific to the communications, internet and related industries.

Any of the foregoing factors, or any other factors discussed elsewhere herein, could have a material adverse effect on our business, results of operations, and financial condition that could adversely affect our stock price.

We have incurred significant losses to date and expect that we will continue to incur losses in the foreseeable future. If we fail to generate sufficient revenue to achieve or sustain profitability, our stock price could decline.

We have incurred significant losses to date and expect that we will continue to incur losses in the foreseeable future. Our net losses for 2004 and 2003 were \$35.6 million and \$17.2 million, respectively, and we had an accumulated deficit of \$631.4 million at December 31, 2004. We have not generated positive cash flow from operations since inception, and expect this to continue for the foreseeable future. We have significant fixed expenses and expect that we will continue to incur substantial manufacturing, research and product development, sales and marketing, customer support, administrative and other expenses in connection with the ongoing development of our business. In addition, we may be required to spend more on research and product development than originally budgeted to respond to industry trends. We may also incur significant new costs related to acquisitions and the integration of new technologies, including our ongoing integration of Sorrento, and other acquisitions that may occur in the future. Further, given the increased costs associated with compliance with the Sarbanes-Oxley Act of 2002, we have incurred and are likely to continue to incur increased expenses related to regulatory and legal compliance. We may not be able to adequately control costs and expenses or achieve or maintain adequate operating margins. As a result, our ability to achieve and sustain profitability will depend on our ability to generate and sustain substantially higher revenue while maintaining reasonable cost and expense levels. If we fail to generate sufficient revenue to achieve or sustain profitability, we will continue to incur substantial operating losses and our stock price could decline.

We have significant debt obligations, which could adversely affect our business, operating results and financial condition.

As of December 31, 2004, we had approximately \$39.9 million in long-term debt. Our debt obligations could materially and adversely affect us in a number of ways, including:

- limiting our ability to obtain additional financing in the future for working capital, capital expenditures, acquisitions or general corporate purposes;
- limiting our flexibility to plan for, or react to, changes in our business or market conditions;
- requiring us to use a significant portion of any future cash flow from operations to repay or service the debt, thereby reducing the amount of cash available for other purposes;
- making us more highly leveraged than some of our competitors, which may place us at a competitive disadvantage; and
- making us more vulnerable to the impact of adverse economic and industry conditions and increases in interest rates.

We cannot assure you that we will generate sufficient cash flow or be able to borrow funds in amounts sufficient to enable us to service our debt or to meet our working capital and capital expenditure requirements. If we are unable to generate sufficient cash flow from operations or to borrow sufficient funds to service our debt, due to borrowing base restrictions or otherwise, we may be required to sell assets, reduce capital expenditures, refinance all or a portion of existing debt or obtain additional financing. We cannot assure you that we will be able to engage in any of these actions on reasonable terms, if at all.

If we are unable to obtain additional capital to fund our existing and future operations, we may be required to reduce the scope of our planned product development and marketing and sales efforts, which would harm our business, financial condition and results of operations.

The development and marketing of new products and the expansion of our direct sales operations and associated support personnel requires a significant commitment of resources. We may continue to incur significant operating losses or expend significant amounts of capital if:

- the market for our products develops more slowly than anticipated;
- we fail to establish market share or generate revenue at anticipated levels;
- our capital expenditure forecasts change or prove inaccurate; or
- we fail to respond to unforeseen challenges or take advantage of unanticipated opportunities.

As a result, we may need to raise substantial additional capital. Additional capital, if required, may not be available on acceptable terms, or at all. If additional capital is raised through the issuance of debt securities, the terms of such debt could impose financial or other restrictions on our operations. If we are unable to obtain additional capital or are required to obtain additional capital on terms that are not favorable to us, we may be required to reduce the scope of our planned product development and sales and marketing efforts, which would harm our business, financial condition and results of operations.

If demand for our SLMS products does not develop, then our results of operations and financial condition will be adversely affected.

Although we expect that our Single Line Multi-Service (SLMS) product line will account for a substantial portion of our revenue in the future, to date we have generated a significant portion of our revenue from sales of products from the legacy and service product lines that we acquired from other companies. Our future revenue depends significantly on our ability to successfully develop, enhance and market our SLMS products to the network service provider market. Most network service providers have made substantial investments in their current infrastructure, and they may elect to remain with their current architectures or to adopt new architectures, such as SLMS, in limited stages or over extended periods of time. A decision by a customer to purchase our SLMS products will involve a significant capital investment. We must convince our service provider customers that they will achieve substantial benefits by deploying our products for future upgrades or expansions. We do not know whether a viable market for our SLMS products will develop or be sustainable. If this market does not develop or develops more slowly than we expect, our business, financial condition and results of operations will be seriously harmed.

Because our products are complex and are deployed in complex environments, our products may have defects that we discover only after full deployment, which could seriously harm our business.

We produce highly complex products that incorporate leading-edge technology, including both hardware and software. Software typically contains defects or programming flaws that can unexpectedly interfere with expected operations. In addition, our products are complex and are designed to be deployed in large quantities across complex networks. Because of the nature of these products, they can only be fully tested when completely deployed in large networks with high amounts of traffic, and there is no assurance that our pre-shipment testing programs will be adequate to detect all defects. As a result, our customers may discover errors or defects in our hardware or software, or our products may not operate as expected, after they have been fully deployed. If we are unable to cure a product defect, we could experience damage to our reputation, reduced customer satisfaction, loss of existing customers and failure to attract new customers, failure to achieve market acceptance, reduced sales opportunities, loss of revenue and market share, increased service and warranty costs, diversion of development resources, legal actions by our customers, and increased insurance costs. Defects, integration issues or other performance problems in our products could also result in financial or other damages to our customers.

Our customers could seek damages for related losses from us, which could seriously harm our business, financial condition and results of operations. A product liability claim brought against us, even if unsuccessful, would likely be time consuming and costly. The occurrence of any of these problems would seriously harm our business, financial condition and results of operations.

We depend upon the development of new products and enhancements to existing products, and if we fail to predict and respond to emerging technological trends and customers' changing needs, our operating results and market share may suffer.

The markets for our products are characterized by rapidly changing technology, evolving industry standards, changes in end-user requirements, frequent new product introductions and changes in communications offerings from network service provider customers. Our future success depends on our ability to anticipate or adapt to such changes and to offer, on a timely and cost-effective basis, products that meet changing customer demands and industry standards. We may not have sufficient resources to successfully and accurately anticipate customers' changing needs, technological trends, manage long development cycles or develop, introduce and market new products and enhancements. The process of developing new technology is complex and uncertain, and if we fail to develop new products or enhancements to existing products on a timely and cost-effective basis, or if our new products or enhancements fail to achieve market acceptance, our business, financial condition and results of operations would be materially adversely affected.

A shortage of adequate component supply or manufacturing capacity could increase our costs or cause a delay in our ability to fulfill orders, and our failure to estimate customer demand properly may result in excess or obsolete component inventories that could adversely affect our gross margins.

Our manufacturing operations depend on our ability to anticipate our needs for components and products, and on the ability of our suppliers to deliver sufficient quantities of quality components and products at reasonable prices in time to meet critical manufacturing and distribution schedules. The long lead times that are required to manufacture, assemble and deliver certain components and products present challenges in planning production and managing inventory levels. If we are not able to effectively manage these challenges, we could incur substantial operating losses. Also, other supplier problems, including component shortages, excess supply and risks related to fixed-price contracts, could require us to pay more for our inventory of parts than competitive prices for such parts available in the open market.

Occasionally we may experience a supply shortage, or a delay in receiving, certain component parts as a result of strong demand for the component parts and/or capacity constraints or other problems experienced by suppliers. If shortages or delays persist, the price of these components may increase, we may be exposed to quality issues or the components may not be available at all. We may not be able to obtain enough components at reasonable prices and acceptable quality to build new products in a timely manner in the quantities or configurations needed. Accordingly, our revenue and gross margin could be adversely affected since we may lose time-sensitive sales or be unable to pass on price increases to our customers. In order to secure components for the production of new products, we may enter into non-cancelable purchase commitments with vendors. If we fail to anticipate customer demand properly, an oversupply of parts could result in excess or obsolete components that could adversely affect our gross margin. If we have excess inventory, we may have to reduce our prices and write down inventory, which in turn could result in lower gross margins.

Furthermore, as a result of binding price or purchase commitments with suppliers, we may be obligated to purchase components at prices that are higher than those available in the current market and be limited in our ability to respond to changing market conditions. In the event that we become committed to purchase components in excess of the current market price when the components are actually utilized, we may be at a disadvantage to competitors who have access to components, and our gross margin could decrease.

We rely on contract manufacturers for a significant portion of our manufacturing requirements.

We rely on contract manufacturers to perform a significant portion of the manufacturing operations for our products. While we are not solely dependent on one contract manufacturer, we continue to use Solectron Corporation to manufacture certain product lines under the terms of an agreement which expired in March 2004, on a purchase order basis with no minimum purchase commitments. These contract manufacturers build product for other companies, including our competitors. In addition, we do not have contracts in place with some of these providers, including Solectron. We may not be able to effectively manage our relationships with our contract manufacturers, and we cannot be certain that they will be able to fill our orders in a timely manner. We face a number of risks associated with this dependence on contract manufacturers including reduced control over delivery schedules, the potential lack of adequate capacity during periods of excess demand, poor manufacturing yields and high costs, quality assurance, increases in prices, and the potential misappropriation of our intellectual property. We have experienced in the past, and may experience in the future, problems with our contract manufacturers, such as inferior quality, insufficient quantities and late delivery of products.

We depend on sole or limited source suppliers for several key components. If we are unable to obtain these components on a timely basis, we will be unable to meet our customers' product delivery requirements, which would harm our business.

We currently purchase several key components from single or a limited number of suppliers. If any of our sole or limited source suppliers experience capacity constraints, work stoppages or any other reduction or disruption in output, they may be unable to meet our delivery schedules. Our suppliers may enter into exclusive arrangements with our competitors, be acquired by our competitors, stop selling their products or components to us at commercially reasonable prices, refuse to sell their products or components to us at any price or be unable to obtain or have difficulty obtaining components for their products from their suppliers. If we do not receive critical components from our sole or limited source suppliers in a timely manner, we will be unable to meet our customers' product delivery requirements. Any failure to meet a customer's delivery requirements could materially adversely affect our business, operating results and financial condition and could materially damage customer relationships.

Our target customer base is concentrated, and the loss of one or more of our customers could harm our business.

The target customers for our products are network service providers that operate voice, data and video communications networks. There are a limited number of potential customers in our target market. During the year ended December 31, 2004, one customer accounted for 15% of our revenue. During the year ended December 31, 2003, two customers accounted for approximately 17% and 11% of our revenue, respectively. Also, a significant portion of our future revenue will depend on sales of our products to a limited number of customers. Any failure of one or more customers to purchase products from us for any reason, including any downturn in their businesses, would seriously harm our business, financial condition and results of operations.

We are exposed to the credit risk of some of our customers and to credit exposures in weakened markets, which could result in material losses.

Industry and economic conditions have weakened the financial position of some of our customers. To sell to some of these customers, we may be required to assume incremental risks of uncollectible accounts. While we monitor these situations carefully and attempt to take appropriate measures to protect ourselves, it is possible that we may have to write down or write off uncollectible accounts. Such write-downs or write-offs, if large, could have a material adverse effect on our operating results and financial condition.

The market we serve is highly competitive and we may not be able to compete successfully.

Competition in the communications equipment market is intense. This market is characterized by rapid change, converging technologies and a migration to networking solutions that offer superior advantages. We are

aware of many companies in related markets that address particular aspects of the features and functions that our products provide. Currently, our primary competitors include Alcatel, Calix, Ciena, Huawei, Lucent and Tellabs, among others. We also may face competition from other large communications equipment companies or other companies that may enter our market in the future. In addition, a number of companies have announced plans for products that address the same network needs that our products address, both domestically and abroad. Many of our competitors have longer operating histories, greater name recognition, larger customer bases and greater financial, technical, sales and marketing resources than we do and may be able to undertake more extensive marketing efforts, adopt more aggressive pricing policies and provide more customer financing than we can. Moreover, our competitors may foresee the course of market developments more accurately than we do and could develop new technologies that render our products less valuable or obsolete.

In our markets, principal competitive factors include:

- product performance;
- interoperability with existing products;
- scalability and upgradeability;
- conformance to standards;
- breadth of services;
- reliability;
- ease of installation and use;
- geographic footprints for products;
- ability to provide customer financing;
- price;
- technical support and customer service; and
- brand recognition.

If we are unable to compete successfully against our current and future competitors, we may have difficulty obtaining or retaining customers, and we could experience price reductions, order cancellations, increased expenses and reduced gross margins, any of which could have a material adverse effect on our business, financial condition and results of operations.

Industry consolidation may lead to increased competition and may harm our operating results.

There has been a trend toward industry consolidation in the communications equipment market for several years. We expect this trend to continue as companies attempt to strengthen or hold their market positions in an evolving industry and as companies are acquired or are unable to continue operations. We believe that industry consolidation may result in stronger competitors that are better able to compete as sole-source vendors for customers. This could have a material adverse effect on our business, financial condition and results of operations. Furthermore, rapid consolidation could result in a decrease in the number of customers we serve. Loss of a major customer could have a material adverse effect on our business, financial condition and results of operations.

Our success largely depends on our ability to retain and recruit key personnel, and any failure to do so would harm our ability to meet key objectives.

Our future success depends upon the continued services of our executive officers and our ability to identify, attract and retain highly skilled technical, managerial, sales and marketing personnel who have critical industry

experience and relationships that we rely on to build our business, including Morteza Ejabat, our co-founder, Chairman and Chief Executive Officer, Jeanette Symons, our co-founder and Chief Technical Officer, and Kirk Misaka, our Chief Financial Officer. The loss of the services of any of our key employees, including Mr. Ejabat, Ms. Symons and Mr. Misaka, could delay the development and production of our products and negatively impact our ability to maintain customer relationships, which would harm our business, financial condition and results of operations.

We have been, and may continue to be, adversely affected by recent unfavorable developments in the communications industry, geopolitical uncertainties and unfavorable economic and market conditions.

Adverse economic conditions worldwide have contributed to slowdowns in the communications industry and may continue to impact our business. Our customers and potential customers continue to experience a severe economic slowdown that has led to significant decreases in their revenues. For most of the last five years, the markets for our equipment have been influenced by the entry into the communications services business of a substantial number of new companies. In the United States, this was due largely to changes in the regulatory environment, in particular those brought about by the Telecommunications Act of 1996. These new companies raised significant amounts of capital, much of which they invested in new equipment, causing acceleration in the growth of the markets for communications equipment. More recently, there has been a reversal of this trend, including the failure of a large number of the new entrants and a sharp contraction of the availability of capital to the industry. This industry trend has been compounded by the weakness in the United States economy as well as the economies in virtually all of the countries in which we market our products. As a result of these factors, our revenue declined by 26% from 2002 to 2003, and we expect that these economic conditions will likely continue to impact our business. In addition, the continuing turmoil in the geopolitical environment in many parts of the world, including terrorist activities and military actions, particularly the aftermath of the war in Iraq, may continue to adversely effect global economic conditions. If the economic and market conditions in the United States and the rest of the world do not improve, or if they deteriorate further, we may continue to experience material adverse impacts on our business, operating results, and financial condition.

Capital constraints in the communications industry could restrict the ability of our customers to buy our products.

Due to the economic slowdown affecting the communications industry and the technology industry in general, our customers and potential customers have significantly reduced the rate of their capital expenditures, and as result, our revenue declined by 26% from 2002 to 2003. During the year ended December 31, 2004, excluding the impact of incremental revenue associated with the acquisition of Sorrento, revenue increased modestly compared to the same period in 2003. Any reduction of capital equipment acquisition budgets or the inability of our current and prospective customers to obtain capital could cause them to reduce or discontinue purchase of our products, and as a result we could experience reduced revenues and our operating results could be adversely impacted. In addition, many of the current and prospective customers for our products are emerging companies with limited operating histories. These companies require substantial capital for the development, construction and expansion of their businesses. Neither equity nor debt financing may be available to these companies on favorable terms, if at all. To the extent that these companies are unable to obtain the financing they need, our ability to make future sales to these customers and realize revenue from any such sales could be harmed. In addition, to the extent we choose to provide financing to these prospective customers, we will be subject to additional financial losses in the event that the customers are unable to pay us for the products and services they purchase from us.

Compliance with changing regulation of corporate governance and public disclosure may result in additional expenses.

Changing laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002, new SEC regulations and Nasdaq National Market rules, are greatly adding to

the complexity of managing our business. In many cases, these new or modified laws, regulations and standards are subject to varying interpretations due to their lack of specificity, and as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This situation leads to continuing uncertainty regarding compliance matters and higher costs to comply with ongoing revisions to disclosure and governance practices. We are committed to maintaining high standards of corporate governance and public disclosure. As a result, our efforts to comply with evolving laws, regulations and standards have resulted in, and are likely to continue to result in, increased general and administrative expenses and a diversion of management time and attention from revenue-generating and cost control activities to compliance activities. In particular, our efforts to comply with Section 404 of the Sarbanes-Oxley Act of 2002 and the related regulations regarding the required assessment of our internal control over financial reporting and our external auditors' audit of that assessment has required the commitment of significant financial and managerial resources. We expect these efforts to require the continued commitment of significant resources. Further, our board members, Chief Executive Officer and Chief Financial Officer could face an increased risk of personal liability in connection with the performance of their responsibilities pursuant to the new or modified laws, regulations and standards. As a result, we may have difficulty attracting and retaining qualified board members and executive officers, which could harm our business. Furthermore, our reputation could be harmed if our efforts to comply with new or changed laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities in such laws, regulations and standards.

Changes in financial accounting standards related to stock option expenses are expected to have a significant effect on our reported results.

In December 2004, the Financial Accounting Standards Board (FASB) issued a revised standard that requires that we record compensation expense in the statement of operations for employee stock options using the fair value method. The adoption of the new standard is expected to have a significant effect on our reported earnings, although it will not affect our cash flows, and could adversely impact our ability to provide accurate guidance on our future reported financial results due to the variability of the factors used to establish the value of stock options. As a result, the adoption of the new standard in the third quarter of 2005 could negatively affect our stock price and our stock price volatility.

Due to the international nature of our business, political or economic changes or other factors in a specific country or region could harm our future revenue, costs and expenses and financial condition.

We currently have international operations consisting of sales, technical support and marketing teams in various locations around the world. We expect to continue expanding our international operations in the future. The successful management and expansion of our international operations requires significant human effort and the commitment of substantial financial resources. Further, our international operations may be subject to certain risks and challenges that could harm our operating results, including:

- trade protection measures and other regulatory requirements which may affect our ability to import or export our products into or from various countries;
- political considerations that affect service provider and government spending patterns;
- differing technology standards or customer requirements;
- developing and customizing our products for foreign countries;
- fluctuations in currency exchange rates;
- longer accounts receivable collection cycles and financial instability of customers;
- difficulties and excessive costs for staffing and managing foreign operations;
- potentially adverse tax consequences; and
- changes in a country's or region's political and economic conditions.

Any of these factors could harm our existing international operations and business or impair our ability to continue expanding into international markets.

Adverse resolution of litigation may harm our operating results or financial condition.

We are a party to various lawsuits and claims in the normal course of our business. Litigation can be expensive, lengthy, and disruptive to normal business operations. Moreover, the results of complex legal proceedings are difficult to predict. An unfavorable resolution of a particular lawsuit could have a material adverse effect on our business, operating results and financial condition. For additional information regarding litigation in which we are involved, see Item 3, "Legal Proceedings," contained in Part I of this report.

Our intellectual property rights may prove difficult to enforce.

We generally rely on a combination of copyrights, patents, trademarks and trade secret laws and restrictions on disclosure to protect our intellectual property rights. We also enter into confidentiality or license agreements with our employees, consultants and corporate partners and control access to and distribution of our proprietary information. Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy or otherwise obtain and use our products or technology. Monitoring unauthorized use of our technology is difficult, and we do not know whether the steps we have taken will prevent unauthorized use of our technology, particularly in foreign countries where the laws may not protect our proprietary rights as extensively as in the United States. While we are not dependent on any individual patents, if we are unable to protect our proprietary rights, we may find ourselves at a competitive disadvantage to others who need not incur the substantial expense, time and effort required to create the innovative products.

We may be subject to intellectual property infringement claims that are costly and time consuming to defend and could limit our ability to use some technologies in the future.

Third parties have in the past and may in the future assert claims or initiate litigation related to patent, copyright, trademark and other intellectual property rights to technologies and related standards that are relevant to us. The asserted claims or initiated litigation can include claims against us or our manufacturers, suppliers, or customers, alleging infringement of their proprietary rights with respect to our existing or future products or components of those products. We have received correspondence from Lucent and other companies claiming that many of our products are using technology covered by or related to the intellectual property rights of these companies and inviting us to discuss licensing arrangements for the use of the technology. Regardless of the merit of these claims, intellectual property litigation can be time consuming, and result in costly litigation and diversion of technical and management personnel. Any such litigation could force us to stop selling, incorporating or using our products that include the challenged intellectual property, or redesign those products that use the technology. In addition, if a party accuses us of infringing upon its proprietary rights, we may have to enter into royalty or licensing agreements, which may not be available on terms acceptable to us, if at all. If we are unsuccessful in any such litigation, we could be subject to significant liability for damages and loss of our proprietary rights. Any of these results could have a material adverse effect on our business, financial condition and results of operations.

We rely on the availability of third party licenses.

Many of our products are designed to include software or other intellectual property licensed from third parties. It may be necessary in the future to seek or renew licenses relating to various elements of the technology used to develop these products. We cannot assure you that our existing and future third-party licenses will be available to us on commercially reasonable terms, if at all. Our inability to maintain or obtain any third-party license required to sell or develop our products and product enhancements could require us to obtain substitute technology of lower quality or performance standards or at greater cost.

Acquisitions are an important part of our strategy, and any strategic acquisitions or investments we make could disrupt our operations and harm our operating results.

As of December 31, 2004, we had acquired eleven companies or product lines since we were founded in 1999, and we may acquire additional businesses, products or technologies in the future. On an ongoing basis, we may evaluate acquisitions of, or investments in, complementary companies, products or technologies to supplement our internal growth. Also, in the future, we may encounter difficulties identifying and acquiring suitable acquisition candidates on reasonable terms.

If we do complete future acquisitions, we could:

- issue stock that would dilute our current stockholders' percentage ownership;
- consume cash;
- incur substantial debt;
- assume liabilities;
- increase our ongoing operating expenses and level of fixed costs;
- record goodwill and non-amortizable intangible assets that will be subject to impairment testing and potential periodic impairment charges;
- incur amortization expenses related to certain intangible assets;
- incur large and immediate write-offs; and
- become subject to litigation.

Any acquisitions or investments that we make in the future will involve numerous risks, including:

- difficulties in integrating the operations, technologies, products and personnel of the acquired companies;
- unanticipated costs;
- diversion of management's time and attention away from managing the normal daily operations of the business;
- adverse effects on existing business relationships with suppliers and customers;
- difficulties in entering markets in which we have no or limited prior experience;
- insufficient revenues to offset increased expenses associated with acquisitions and where competitors in such markets have stronger market positions; and
- potential loss of key employees, particularly those individuals employed by acquired companies.

Mergers and acquisitions of high-technology companies are inherently risky, and we cannot be certain that our previous or future acquisitions will be successful and will not materially adversely affect our business, operating results or financial condition. We do not know whether we will be able to successfully integrate the businesses, products, technologies or personnel that we might acquire in the future or that any strategic investments we make will meet our financial or other investment objectives. Any failure to do so could seriously harm our business, financial condition and results of operations.

The long and variable sales cycles for our products may cause revenue and operating results to vary significantly from quarter to quarter.

The target customers for our products have substantial and complex networks that they traditionally expand in large increments on a periodic basis. Accordingly, our marketing efforts are focused primarily on prospective customers that may purchase our products as part of a large-scale network deployment. Our target customers typically require a lengthy evaluation, testing and product qualification process. Throughout this process, we are often required to spend considerable time and incur significant expense educating and providing information to prospective customers about the uses and features of our products. Even after a company makes the final decision to purchase our products, it may deploy our products over extended periods of time. The timing of deployment of our products varies widely, and depends on a number of factors, including our customers' skill sets, geographic density of potential subscribers, the degree of configuration and integration required to deploy our products, and our customers' ability to finance their purchase of our products as well as their operations. As a result of any of these factors, our revenue and operating results may vary significantly from quarter to quarter.

The communications industry is subject to government regulations, which could harm our business.

The Federal Communications Commission, or FCC, has jurisdiction over the entire communications industry in the United States and, as a result, our existing and future products and our customers' products are subject to FCC rules and regulations. Changes to current FCC rules and regulations and future FCC rules and regulations could negatively affect our business. The uncertainty associated with future FCC decisions may cause network service providers to delay decisions regarding their capital expenditures for equipment for broadband services. In addition, international regulatory bodies establish standards that may govern our products in foreign markets. Changes to or future domestic and international regulatory requirements could result in postponements or cancellations of customer orders for our products and services, which would harm our business, financial condition and results of operations. Further, we cannot be certain that we will be successful in obtaining or maintaining regulatory approvals that may, in the future, be required to operate our business.

Your ability to influence key transactions, including changes of control, may be limited by significant insider ownership, provisions of our charter documents and provisions of Delaware law.

At December 31, 2004, our executive officers, directors and entities affiliated with them beneficially owned, in the aggregate, approximately 37% of our outstanding common stock. These stockholders, if acting together, will be able to influence substantially all matters requiring approval by our stockholders, including the election of directors and the approval of mergers or other business combination transactions. Circumstances may arise in which the interests of these stockholders could conflict with the interests of our other stockholders. These stockholders could delay or prevent a change in control of our company even if such a transaction would be beneficial to our other stockholders. In addition, provisions of our certificate of incorporation, bylaws, and Delaware law could make it more difficult for a third party to acquire us, even if doing so would be beneficial to certain stockholders.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Cash, Cash Equivalents and Investments

We consider all cash and highly liquid investments purchased with an original maturity of less than three months to be cash equivalents.

Cash, cash equivalents and short-term investments consisted of the following as of December 31, 2004 and 2003 (in thousands):

| | <u>December 31, 2004</u> | <u>December 31, 2003</u> |
|---------------------------------|------------------------------|------------------------------|
| Cash | \$24,434 | \$32,547 |
| Money market funds | 5,294 | — |
| Commercial paper | 16,876 | — |
| Cash and cash equivalents | <u>\$46,604</u> | <u>\$32,547</u> |
| Short-term investments | <u>\$18,612</u> | <u>\$65,709</u> |

Concentration of Credit Risk

Financial instruments which potentially subject us to concentrations of credit risk consist primarily of cash and cash equivalents, short-term investments and accounts receivable. Cash and cash equivalents and short-term investments consist principally of demand deposit and money market accounts, commercial paper, and debt securities of domestic municipalities with credit ratings of AA or better. Cash and cash equivalents and short-term investments are principally held with various domestic financial institutions with high-credit standing. As of December 31, 2004, accounts receivable balances from one customer represented 10% of our accounts receivable. As of December 31, 2004 and 2003, we had accounts receivable balances from customers in international territories of approximately \$8.5 million and \$6.1 million, respectively.

Interest Rate Risk

Our exposure to market risk for changes in interest rates relates primarily to our investment portfolio and long-term debt. We do not use derivative financial instruments in our investment portfolio. We do not hold financial instruments for trading or speculative purposes. We manage our interest rate risk by maintaining an investment portfolio primarily consisting of debt instruments of high credit quality and relatively short average maturities. Our cash and cash equivalents and short-term investments are not subject to material interest rate risk due to their short maturities. Under our investment policy, short-term investments have a maximum maturity of one year from the date of acquisition, and the average maturity of the portfolio cannot exceed six months. Due to the relatively short maturity of the portfolio, a 10% increase in market interest rates at December 31, 2004 would decrease the fair value of the portfolio by less than \$0.1 million.

Foreign Currency Risk

We transact business in various foreign countries. Substantially all of our assets are located in the United States. We have sales operations throughout Europe, Asia, the Middle East and Latin America. Accordingly, our operating results are exposed to changes in exchange rates between the U.S. dollar and those currencies. During 2004 and 2003, we did not hedge any of our local currency cash flows. While our financial results to date have not been materially affected by any changes in currency exchange rates, any revaluation of the U.S. dollar against these currencies may affect our future operating results.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

ZHONE TECHNOLOGIES, INC. AND SUBSIDIARIES

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders
Zhone Technologies, Inc.:

We have audited the accompanying consolidated balance sheets of Zhone Technologies, Inc. and subsidiaries (“the Company”) as of December 31, 2004 and 2003, and the related consolidated statements of operations, redeemable convertible preferred stock and stockholders’ equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 2004. These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

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

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Zhone Technologies, Inc. and subsidiaries as of December 31, 2004 and 2003, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2004, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of the Company’s 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), and our report dated March 14, 2005 expressed an unqualified opinion on management’s assessment of, and the effective operation of, internal control over financial reporting.

/s/ KPMG LLP

Mountain View, California
March 14, 2005

ZHONE TECHNOLOGIES, INC. AND SUBSIDIARIES

**Consolidated Balance Sheets
December 31, 2004 and 2003
(In thousands, except par value)**

| | 2004 | 2003 |
|--|-------------------|-------------------|
| Assets | | |
| Current assets: | | |
| Cash and cash equivalents | \$ 46,604 | \$ 32,547 |
| Short-term investments | 18,612 | 65,709 |
| Accounts receivable, net of allowances for sales returns and doubtful accounts of \$4,990 in 2004 and \$3,505 in 2003 | 19,243 | 11,001 |
| Inventories | 37,352 | 24,281 |
| Prepaid expenses and other current assets | 3,949 | 3,905 |
| Total current assets | 125,760 | 137,443 |
| Property and equipment, net | 22,967 | 22,585 |
| Goodwill | 157,232 | 100,337 |
| Other acquisition-related intangible assets, net | 17,847 | 12,877 |
| Restricted cash | 758 | 622 |
| Other assets | 663 | 1,013 |
| Total assets | \$ 325,227 | \$ 274,877 |
| Liabilities and Stockholders' Equity | | |
| Current liabilities: | | |
| Accounts payable | \$ 14,155 | \$ 17,796 |
| Line of credit | 14,500 | 4,800 |
| Current portion of long-term debt | 1,378 | 1,351 |
| Accrued and other liabilities | 23,938 | 31,195 |
| Total current liabilities | 53,971 | 55,142 |
| Long-term debt, less current portion | 39,935 | 32,040 |
| Other long-term liabilities | 1,537 | 816 |
| Total liabilities | 95,443 | 87,998 |
| Stockholders' equity: | | |
| Common stock, \$0.001 par value. Authorized 900,000 shares; issued and outstanding 94,139 and 76,629 shares as of December 31, 2004 and 2003, respectively | 94 | 77 |
| Additional paid-in capital | 862,261 | 787,567 |
| Notes receivable from stockholders | (550) | (550) |
| Deferred compensation | (538) | (4,444) |
| Other comprehensive (loss) | (80) | (14) |
| Accumulated deficit | (631,403) | (595,757) |
| Total stockholders' equity | 229,784 | 186,879 |
| Total liabilities and stockholders' equity | \$ 325,227 | \$ 274,877 |

See accompanying notes to consolidated financial statements.

ZHONE TECHNOLOGIES, INC. AND SUBSIDIARIES

Consolidated Statements of Operations
Years ended December 31, 2004, 2003, and 2002
(In thousands, except per share data)

| | <u>2004</u> | <u>2003</u> | <u>2002</u> |
|--|-------------------|-------------------|--------------------|
| Net revenue | \$ 97,168 | \$ 83,138 | \$ 112,737 |
| Cost of revenue | 55,095 | 51,166 | 69,231 |
| Stock-based compensation | 210 | (85) | 458 |
| Gross profit | <u>41,863</u> | <u>32,057</u> | <u>43,048</u> |
| Operating expenses: | | | |
| Research and product development (excluding non-cash stock based compensation expense of \$581, \$652 and \$4,236, respectively) | 23,210 | 22,495 | 29,802 |
| Sales and marketing (excluding non-cash stock based compensation expense of \$459, \$(241), and \$996, respectively) | 21,958 | 15,859 | 19,676 |
| General and administrative (excluding non-cash stock based compensation expense of \$356, \$827, and \$5,144, respectively) | 10,416 | 5,324 | 10,843 |
| Purchased in-process research and development | 8,631 | — | 59 |
| Restructuring charges | — | — | 4,531 |
| Litigation settlement | — | 1,600 | — |
| Stock-based compensation | 1,396 | 1,238 | 10,376 |
| Amortization and impairment of intangible assets | 10,132 | 7,942 | 15,995 |
| Impairment of long-lived assets | — | — | 50,759 |
| Total operating expenses | <u>75,743</u> | <u>54,458</u> | <u>142,041</u> |
| Operating loss | (33,880) | (22,401) | (98,993) |
| Other expense, net | <u>(1,561)</u> | <u>(2,552)</u> | <u>(9,434)</u> |
| Loss before income taxes | (35,441) | (24,953) | (108,427) |
| Income tax provision (benefit) | 205 | (7,778) | 140 |
| Net loss | (35,646) | (17,175) | (108,567) |
| Accretion on preferred stock | — | (12,700) | (22,238) |
| Net loss applicable to holders of common stock | <u>\$(35,646)</u> | <u>\$(29,875)</u> | <u>\$(130,805)</u> |
| Basic and diluted net loss per share applicable to holders of common stock .. | \$ (0.42) | \$ (1.87) | \$ (25.87) |
| Weighted average shares outstanding used to compute basic and diluted net loss per share applicable to holders of common stock | 85,745 | 15,951 | 5,057 |

All per share and weighted average share amounts have been restated retroactively to reflect the one-for-ten reverse split of common stock and the effect of the Tellium merger in 2003 (See Note 1(b)).

See accompanying notes to consolidated financial statements.

ZHONE TECHNOLOGIES, INC. AND SUBSIDIARIES

Consolidated Statements of Redeemable Convertible Preferred Stock and Stockholders' Equity (Deficit)
Years ended December 31, 2004, 2003 and 2002
(In thousands)

| | Series A redeemable convertible preferred stock | | Series AA redeemable convertible preferred stock | | Series B redeemable convertible preferred stock | | Common stock | | Additional paid-in capital | Notes receivable from stockholders | Deferred stock compensation | Other comprehensive loss | Accumulated deficit | Total stockholders' equity (deficit) |
|--|--|-----------|---|-----------|--|----------|--------------|--------|----------------------------------|---|-----------------------------------|--------------------------------|------------------------|---|
| | Shares | Amount | Shares | Amount | Shares | Amount | Shares | Amount | | | | | | |
| Balances as of December 31, 2001 | 58,750 | 421,601 | — | — | — | — | 4,610 | 5 | 163,850 | (1,903) | (27,862) | (64) | (470,016) | (335,990) |
| Issuance of preferred stock for acquisition | — | — | — | — | 4,576 | 15,457 | — | — | — | — | — | — | — | — |
| Exercise of stock options for cash and notes | — | — | — | — | — | — | 2,814 | 2 | 778 | (550) | — | — | — | 230 |
| Repurchase of unvested common stock | — | — | — | — | — | — | (146) | (0) | (5,485) | 1,903 | — | — | — | (3,582) |
| Issuance of convertible preferred stock | — | — | — | — | 814 | 3,508 | — | — | — | — | — | — | — | — |
| Capital draw from convertible preferred stock, net of issuance costs of \$1,300 | — | 63,700 | — | — | — | — | — | — | — | — | — | — | — | — |
| Accretion on preferred stock | — | 1,812 | — | 19,746 | — | 679 | — | — | (22,238) | — | — | — | — | (22,238) |
| Conversion of Series A to Series AA | (58,750) | (487,113) | 29,375 | 126,500 | — | — | — | — | 360,613 | — | — | — | — | 360,613 |
| Deferred compensation related to stock option grants | — | — | — | — | — | — | — | — | 13,070 | — | (13,070) | — | — | — |
| Amortization of deferred compensation related to stock option grants | — | — | — | — | — | — | — | — | — | — | 21,585 | — | — | 21,585 |
| Reversal of unamortized deferred compensation | — | — | — | — | — | — | — | — | (8,007) | — | 8,007 | — | — | — |
| Reversal of stock-based compensation | — | — | — | — | — | — | — | — | (14,417) | — | — | — | — | (14,417) |
| Non-cash stock based compensation expense | — | — | — | — | — | — | — | — | 3,510 | — | — | — | — | 3,510 |
| Issuance of warrants for services | — | — | — | — | — | — | — | — | 216 | — | — | — | — | 216 |
| Comprehensive loss: | | | | | | | | | | | | | | |
| Net loss | — | — | — | — | — | — | — | — | — | — | — | — | (108,566) | (108,566) |
| Foreign currency translation adjustment | — | — | — | — | — | — | — | — | — | — | — | (1) | — | (1) |
| Unrealized loss on available for sale securities | — | — | — | — | — | — | — | — | — | — | — | (2) | — | (2) |
| Total comprehensive loss | — | — | — | — | — | — | — | — | — | — | — | — | — | (108,569) |
| Balances as of December 31, 2002 | — | — | 29,375 | 146,246 | 5,390 | 19,644 | 7,278 | 7 | 491,890 | (550) | (11,340) | (67) | (578,582) | (98,642) |
| Issuance of preferred stock for acquisition | — | — | — | — | 4,230 | 10,125 | — | — | — | — | — | — | — | — |
| Exercise of stock options for cash | — | — | — | — | — | — | 797 | 1 | 1,293 | — | — | — | — | 1,294 |
| Repurchase of unvested common stock | — | — | — | — | — | — | (5) | (0) | (5) | — | — | — | — | (5) |
| Accretion on preferred stock | — | — | — | 11,738 | — | 962 | — | — | (12,700) | — | — | — | — | (12,700) |
| Deferred compensation related to stock options grants | — | — | — | — | — | — | — | — | 898 | — | (898) | — | — | — |
| Amortization of deferred compensation related to stock option grants | — | — | — | — | — | — | — | — | — | — | 6,533 | — | — | 6,533 |
| Reversal of unamortized deferred compensation | — | — | — | — | — | — | — | — | (4,446) | — | 4,446 | — | — | — |
| Reversal of stock-based compensation | — | — | — | — | — | — | — | — | (5,527) | — | — | — | — | (5,527) |
| Non-cash stock based compensation expense | — | — | — | — | — | — | — | — | 142 | — | — | — | — | 142 |
| Reclassification of Series AA and Series B preferred stock to equity and conversion to common stock | — | — | (29,375) | (157,984) | (9,620) | (30,731) | 38,995 | 39 | 188,676 | — | — | — | — | 188,715 |
| Issuance of warrants for services | — | — | — | — | — | — | — | — | 44 | — | — | — | — | 44 |
| Issuance of common stock and stock options for acquisition | — | — | — | — | — | — | 29,564 | 30 | 127,302 | — | (3,185) | — | — | 124,147 |
| Comprehensive loss: | | | | | | | | | | | | | | |
| Net loss | — | — | — | — | — | — | — | — | — | — | — | — | (17,175) | (17,175) |
| Foreign currency translation adjustment | — | — | — | — | — | — | — | — | — | — | — | 6 | — | 6 |
| Unrealized gain on available for sale securities | — | — | — | — | — | — | — | — | — | — | — | 47 | — | 47 |
| Total comprehensive loss | — | — | — | — | — | — | — | — | — | — | — | — | — | (17,122) |

| | Series A redeemable convertible preferred stock | | Series AA redeemable convertible preferred stock | | Series B redeemable convertible preferred stock | | Common stock | | Additional paid-in capital | Notes receivable from stockholders | Deferred stock compensation | Other comprehensive loss | Accumulated deficit | Total stockholders' equity (deficit) |
|--|--|--------|---|--------|--|--------|--------------|--------|----------------------------------|---|-----------------------------------|--------------------------------|------------------------|---|
| | Shares | Amount | Shares | Amount | Shares | Amount | Shares | Amount | | | | | | |
| Balances as of December 31, 2003 | — | — | — | — | — | — | 76,629 | 77 | 787,567 | (550) | (4,444) | (14) | (595,757) | 186,879 |
| Exercise of stock options for cash | — | — | — | — | — | — | 640 | 1 | 1,034 | — | — | — | — | 1,035 |
| Issuance of common stock in connection with employee stock purchase plan | — | — | — | — | — | — | 120 | 0 | 346 | — | — | — | — | 346 |
| Amortization of deferred compensation related to stock option grants | — | — | — | — | — | — | — | — | — | — | 1,734 | — | — | 1,734 |
| Reversal of unamortized deferred compensation | — | — | — | — | — | — | — | — | (2,352) | — | 2,352 | — | — | — |
| Reversal of stock-based compensation | — | — | — | — | — | — | — | — | (135) | — | — | — | — | (135) |
| Non-cash stock based compensation expense and other | — | — | — | — | — | — | 103 | — | 119 | — | — | — | — | 119 |
| Issuance of warrants for services | — | — | — | — | — | — | — | — | 21 | — | — | — | — | 21 |
| Issuance of common stock and stock options for acquisition | — | — | — | — | — | — | 16,647 | 16 | 75,661 | — | (180) | — | — | 75,497 |
| Comprehensive loss: | | | | | | | | | | | | | | |
| Net loss | — | — | — | — | — | — | — | — | — | — | — | — | (35,646) | (35,646) |
| Foreign currency translation adjustment | — | — | — | — | — | — | — | — | — | — | — | 24 | — | 24 |
| Unrealized loss on available for sale securities | — | — | — | — | — | — | — | — | — | — | — | (90) | — | (90) |
| Total comprehensive loss | — | — | — | — | — | — | — | — | — | — | — | — | — | (35,712) |
| Balances as of December 31, 2004 | — | \$— | — | \$— | — | \$— | 94,139 | \$ 94 | \$862,261 | \$(550) | \$ (538) | \$(80) | \$(631,403) | \$229,784 |

See accompanying notes to consolidated financial statements.

ZHONE TECHNOLOGIES, INC. AND SUBSIDIARIES

Consolidated Statements of Cash Flows
Years ended December 31, 2004, 2003, and 2002
(In thousands)

| | 2004 | 2003 | 2002 |
|---|-------------|-------------|--------------|
| Cash flows from operating activities: | | | |
| Net loss | \$ (35,646) | \$ (17,175) | \$ (108,567) |
| Adjustments to reconcile net loss to net cash used in operating activities: | | | |
| Depreciation and amortization | 11,288 | 9,341 | 23,469 |
| Stock-based compensation | 1,606 | 1,153 | 10,834 |
| Impairment of long-lived assets | — | — | 50,759 |
| Impairment of intangible assets | 239 | — | 691 |
| Non-cash portion of restructuring charges | — | — | 3,262 |
| Purchased in-process research and development | 8,631 | — | 59 |
| Changes in operating assets and liabilities, net of effect of acquisitions: | | | |
| Accounts receivable | (5,050) | 7,622 | 4,111 |
| Inventories | (7,302) | (3,032) | 17,661 |
| Prepaid expenses and other current assets | 434 | 81 | 1,354 |
| Other assets | 434 | 631 | 948 |
| Accounts payable | (5,914) | 4,813 | 324 |
| Accrued liabilities and other | (16,044) | (48,572) | (24,433) |
| Net cash used in operating activities | (47,324) | (45,138) | (19,528) |
| Cash flows from investing activities: | | | |
| Net cash acquired in acquisitions | 5,617 | 140,649 | 21,926 |
| Proceeds from sale of property and equipment | 6,875 | — | 94 |
| Purchase of property and equipment | (1,816) | (444) | (2,493) |
| Purchase of short-term and other investments | (208,520) | (75,983) | (11) |
| Proceeds from sales and maturities of short-term investments | 255,527 | 10,321 | 1,991 |
| Change in restricted cash | 363 | 5,691 | — |
| Net cash provided by investing activities | 58,046 | 80,234 | 21,507 |
| Cash flows from financing activities: | | | |
| Net borrowings (repayments) under credit facilities | 9,700 | 186 | (12,859) |
| Net proceeds from issuance of Series A redeemable convertible preferred stock | — | — | 63,700 |
| Net proceeds from issuance of Series B redeemable convertible preferred stock | — | — | 3,508 |
| Proceeds from issuance of common stock and warrants, net of repurchases | 1,492 | 1,289 | (3,975) |
| Repayment of debt | (7,881) | (14,644) | (64,576) |
| Net borrowings under loans from officers/employees | — | — | 683 |
| Net cash provided by (used in) financing activities | 3,311 | (13,169) | (13,519) |
| Effect of exchange rate changes on cash | 24 | 6 | — |
| Net increase (decrease) in cash and cash equivalents | 14,057 | 21,933 | (11,540) |
| Cash and cash equivalents at beginning of year | 32,547 | 10,614 | 22,154 |
| Cash and cash equivalents at end of year | \$ 46,604 | \$ 32,547 | \$ 10,614 |
| Supplemental disclosures of cash flow information: | | | |
| Cash paid during period for: | | | |
| Taxes | \$ 487 | \$ 351 | \$ 41 |
| Interest | 3,095 | 3,757 | 7,842 |
| Noncash investing and financing activities: | | | |
| Common stock and options issued for acquisition | 75,677 | 127,332 | — |
| Series B redeemable convertible preferred stock issued for acquisition | — | 10,125 | 15,457 |
| Conversion of Series AA and Series B preferred stock to common stock | — | 188,715 | — |
| Conversion of Series A to Series AA redeemable convertible preferred stock | — | — | 360,613 |

See accompanying notes to consolidated financial statements.

ZHONE TECHNOLOGIES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

(1) Organization and Summary of Significant Accounting Policies

(a) Description of Business

Zhone Technologies, Inc. and subsidiaries (“Zhone” or the “Company”) designs, develops and markets communications network equipment for telephone companies and cable operators worldwide. The Company’s products allow network service providers to deliver video and interactive entertainment services in addition to their existing voice and data service offerings. The Company was incorporated under the laws of the state of Delaware in June 1999. The Company began operations in September 1999 and is headquartered in Oakland, California.

The Company has completed eleven acquisitions through December 31, 2004, which were comprised as follows: Sorrento Networks Corporation (July 2004), Gluon Networks, Inc. (February 2004), Tellium, Inc. (November 2003), NEC eLuminant Technologies, Inc. (February 2003), Vpacket Technologies, Inc. (July 2002), Nortel Networks AccessNode and Universal Edge 9000 (August 2001), Xybridge Technologies (February 2001), Roundview, Inc. and OptaPhone Systems, Inc. (February 2000), Premisys Communications, Inc. (December 1999) and CAG Technologies, Inc. (November 1999). See Note 2 for detailed information regarding acquisitions.

(b) Basis of Presentation

The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All significant intercompany transactions and balances have been eliminated in consolidation.

In July 2002, in conjunction with the Company’s equity restructuring (Note 6), the Company’s Board of Directors approved a reverse stock split of the Company’s common stock at a ratio of one-for-ten (the “Reverse Split”), causing each outstanding share of common stock to convert automatically into one-tenth of a share of common stock. In November 2003, the Company consummated its merger with Tellium, Inc. As a result of the merger, the stockholders of Zhone received 0.47 of a share of Tellium common stock for each outstanding share of Zhone common stock, following the conversion of all outstanding shares of Zhone preferred stock into Zhone common stock. Immediately following the exchange, the combined company was renamed Zhone Technologies, Inc.

For accounting purposes, the merger with Tellium was treated as a reverse merger, in which Zhone was treated as the acquirer based on factors including the relative voting rights, board control, and senior management composition. The financial statements of the combined company after the merger reflect the financial results of Zhone on a historical basis after giving effect to the merger exchange ratio to historical share-related data. The results of operations for Tellium were included in Zhone’s results of operations from the effective date of the merger.

Stockholders’ equity (deficit) has been restated to give retroactive recognition to the Reverse Split and the effect of the Tellium merger for all periods presented by reclassifying the excess par value resulting from the reduced number of shares from common stock to paid-in capital. All references to preferred share, common share and per common share amounts for all periods presented have been retroactively restated to reflect the Reverse Split and the effect of the Tellium merger.

(c) Use of Estimates

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

(d) Revenue Recognition

The Company recognizes revenue when the earnings process is complete. The Company recognizes product revenue upon shipment of product under contractual terms which transfer title to customers upon shipment, under normal credit terms, or under sales-type leases, net of estimated sales returns and allowances at the time of shipment. Revenue is deferred if there are significant post-delivery obligations, if collection is not considered reasonably assured at the time of sale, or if the fees are not fixed or determinable. When significant post-delivery obligations exist, revenue is deferred until such obligations are fulfilled. The Company's arrangements generally do not have any significant post-delivery obligations. The Company offers products and services such as support, education and training, hardware upgrades and post warranty support. For multiple element revenue arrangements, the Company establishes the fair value of these products and services based primarily on sales prices when the products and services are sold separately. If fair value cannot be established for undelivered elements, all of the revenue under the arrangement is deferred until those elements have been delivered. When collectibility is not reasonably assured, revenue is recognized when cash is collected. Revenue from education services and support services is recognized over the contract term or as the service is performed. The Company makes certain sales to product distributors. These customers are given certain privileges to return a portion of inventory. The Company recognizes revenue on sales to distributors that have contractual return rights when the products have been sold by the distributors, unless there is sufficient customer specific sales and sales returns history to support revenue recognition upon shipment. Revenue from sales of software products is recognized provided that a purchase order has been received, the software has been shipped, collection of the resulting receivable is probable, and the amount of the related fees is fixed or determinable. To date, revenue from software transactions has not been significant. The Company accrues for warranty costs, sales returns, and other allowances at the time of shipment based on historical experience and expected future costs.

(e) Allowances for Sales Returns and Doubtful Accounts

The Company records an allowance for sales returns for estimated future product returns related to current period product revenue. The allowance is recorded as a reduction of revenues in the Company's financial statements. The Company bases its allowance on periodic assessments of historical trends in product return rates and current approved returned products. If the actual future returns were to deviate from the historical data on which the reserve had been established, the Company's revenue could be adversely affected.

The Company records an allowance for doubtful accounts for estimated losses resulting from the inability of customers to make payments. The allowance is recorded as a General and Administrative expense in the Company's financial statements. The Company bases its allowance on periodic assessments of its customers' liquidity and financial condition through analysis of information obtained from credit rating agencies, financial statement review, and historical collection trends. Additional allowances may be required if the liquidity or financial condition of its customers were to deteriorate.

Activity under the Company's allowance for doubtful accounts was comprised as follows:

| | Year ended December 31, | | |
|---|-------------------------|-----------------|-----------------|
| | 2004 | 2003 | 2002 |
| Balance at beginning of period | \$ 3,505 | \$ 7,969 | \$ 10,460 |
| Charged to costs and expenses | 2,345 | 1,355 | 8,966 |
| Deductions | (2,233) | (5,819) | (11,457) |
| Allowance from acquired companies | 1,373 | — | — |
| Balance at end of period | <u>\$ 4,990</u> | <u>\$ 3,505</u> | <u>\$ 7,969</u> |

(f) Inventories

Inventories are stated at the lower of cost or market, with cost being determined using the first-in, first-out (FIFO) method. In assessing the net realizable value of inventories, the Company is required to make judgments as to future demand requirements and compare these with the current or committed inventory levels. Once inventory has been written down to its estimated net realizable value, its carrying value cannot be increased due to subsequent changes in demand forecasts. To the extent that a severe decline in forecasted demand occurs, or the Company experiences a higher incidence of inventory obsolescence due to rapidly changing technology and customer requirements, the Company may incur significant charges for excess inventory.

(g) Restructuring Charges

During 2002, the Company recorded charges of \$4.5 million in connection with its restructuring program in accordance with relevant guidance as summarized in SEC Staff Accounting Bulletin (“SAB”) No. 100. The related reserves reflected many estimates, including those pertaining to severance and related charges, facilities and lease cancellations and equipment write-offs. The Company assessed the reserve requirements to complete each individual plan under its restructuring programs at the end of each reporting period and recorded any adjustments as appropriate. Future restructuring charges, if any, will be recorded under the provisions of SFAS No. 146, “Accounting for Costs Associated with Exit or Disposal Activities” or SFAS No. 112, “Employers Accounting for Post Employment Benefits.” As of December 31, 2004 and 2003, there were no liabilities associated with the Company’s restructuring programs.

(h) Cash and Cash Equivalents and Short Term Investments

The Company considers all cash and highly liquid investments purchased with an original maturity of less than three months to be cash equivalents.

Short-term investments include securities with original maturities greater than three months and less than one year. Short-term investments consisting principally of debt securities of domestic municipalities and corporations have been classified as available-for-sale. Under this classification, the investments are reported at fair value, with unrealized gains and losses excluded from results of operations and reported, net of tax, as a component of other comprehensive loss in stockholders’ equity. Realized gains and losses and declines in value judged to be other than temporary are included in results of operations. Gains and losses from the sale of securities are based on the specific-identification method.

In accordance with EITF 03-1, the following summarizes the fair value and gross unrealized losses related to available for sale securities, aggregated by investment category and length of time that the individual securities have been in a continuous unrealized loss position, at December 31, 2004 (in thousands).

| | <u>Less Than 12 Months</u> | |
|-----------------------|----------------------------|------------------------|
| | <u>Fair Value</u> | <u>Unrealized Loss</u> |
| Corporate Bonds | \$19,638 | \$(21) |

(i) Fair Value of Financial Instruments

The carrying amounts of the Company’s financial instruments which include cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities approximate their fair values as of December 31, 2004 and 2003 due to the relatively short maturities of these instruments. The carrying value of the Company’s debt obligations at December 31, 2004 and 2003 approximate fair value due to their relatively short maturities, and the Company’s liquidity situation which would make default under these obligations unlikely.

(j) Concentration of Risk

Financial instruments which potentially subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents and accounts receivable. Cash and cash equivalents consist principally of demand deposit and money market accounts, commercial paper, and debt securities of domestic municipalities with credit ratings of AA or better. Cash and cash equivalents are principally held with various domestic financial institutions with high-credit standing. The Company's customers include competitive and incumbent local exchange carriers, competitive access providers, internet service providers, wireless carriers, and resellers serving these markets. The Company performs ongoing credit evaluations of its customers and generally does not require collateral. Allowances are maintained for potential doubtful accounts. For the year ended December 31, 2004, sales to Motorola represented 15% of net revenue. For the year ended December 31, 2003, sales to Motorola and Qwest represented 17% and 11% of net revenue, respectively. For the year ended December 31, 2002, sales to Motorola represented 12% of net revenue. At December 31, 2004, the Company had accounts receivable balances from one customer representing 10% of accounts receivable. At December 31, 2003, the Company had accounts receivable balances from two customers representing 31% and 11% of accounts receivable, respectively. As of December 31, 2004 and 2003, the Company had receivables from customers in international territories of approximately \$8.5 million and \$6.1 million, respectively.

The Company's products are concentrated in the communications equipment market, which is highly competitive and subject to rapid change. Significant technological changes in the industry could adversely affect operating results. The Company's inventories include components that may be specialized in nature, and subject to rapid technological obsolescence. The Company actively manages inventory levels, and the Company considers technological obsolescence and potential changes in product demand based on macroeconomic conditions when estimating required allowances to reduce recorded inventory amounts to market value. Such estimates could change in the future.

The Company's growth and ability to meet customer demands are also dependent on its ability to obtain timely deliveries of components from suppliers and contract manufacturers. The Company depends on contract manufacturers and sole or limited source suppliers for several key components. If the Company were unable to obtain these components on a timely basis, the Company would be unable to meet its customers' product delivery requirements which could adversely impact operating results.

While the Company is not solely dependent on one contract manufacturer, it continues to use Soletron Corporation to manufacture certain product lines under the terms of an agreement which expired in March 2004, on a purchase order basis with no minimum purchase commitments. The Company expects to continue to rely on contract manufacturers to fulfill a significant portion of its product manufacturing requirements.

(k) Property and Equipment

Property and equipment are stated at cost and depreciated using the straight-line method over their estimated useful lives. Useful life for buildings is 30 years. Useful lives for lab and manufacturing equipment range from 10 to 30 years. Useful lives of all other property and equipment range from 3 to 5 years. Leasehold improvements are amortized over the shorter of 2 years or the remaining lease term. During the year ended December 31, 2002, the Company revised its useful lives for certain equipment as discussed in Note 4.

(l) Goodwill

Costs in excess of the fair value of tangible and identifiable intangible assets acquired and liabilities assumed in a purchase business combination are recorded as goodwill. SFAS No. 142, "Goodwill and Other Intangible Assets," requires that companies no longer amortize goodwill, but instead test for impairment at least annually using a two-step approach. The Company adopted SFAS No. 142 in the first quarter of fiscal

2002 and no longer amortizes goodwill. The Company evaluates goodwill, at a minimum, on an annual basis and whenever events and changes in circumstances suggest that the carrying amount may not be recoverable. Impairment of goodwill is tested at the reporting unit level by comparing the reporting unit's carrying amount, including goodwill, to the fair value of the reporting unit. The Company has determined that it operates in a single segment with one operating unit. In 2002, the fair value of the reporting unit was estimated using a combination of the income, or discounted cash flows, approach and the market approach, which utilized comparable companies' data. Effective November 2003, the Company performs the annual goodwill impairment test using the market approach, reflecting the fact that the Company's stock was publicly traded following the consummation of the Tellium merger. If the carrying amount of the reporting unit exceeds its fair value, goodwill is considered impaired and a second step is performed to measure the amount of impairment loss, if any.

(m) Purchased Intangibles and Other Long-Lived Assets

In accordance with SFAS No. 144, long-lived assets, such as property, plant and equipment, and purchased intangibles subject to amortization, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be fully recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future net undiscounted cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized by the amount by which the carrying amount of the asset exceeds the fair value of the asset. During the year ended December 31, 2002, the Company recorded an impairment loss on long-lived assets of \$50.8 million. Any assets to be disposed of would be separately presented in the balance sheet and reported at the lower of the carrying amount or fair value less costs to sell, and would no longer be depreciated. The assets and liabilities of a disposed group classified as held for sale would be presented separately in the appropriate asset and liability sections of the balance sheet.

Goodwill and other acquisition-related intangible assets not subject to amortization are tested annually for impairment, and are tested for impairment more frequently if events and circumstances indicate that the asset might be impaired. An impairment loss is recognized to the extent that the carrying amount exceeds the asset's fair value. During the year ended December 31, 2004, the Company recorded a charge of \$0.2 million related to impairment of the acquired workforce from Gluon.

(n) Research and Product Development Expenditures

Costs related to research, design, and development of products are charged to research and product development expense as incurred. Costs for the development of new software and substantial enhancements to existing software are expensed as incurred until technological feasibility has been established, at which time any additional development costs would be capitalized. The Company's current process for developing software is essentially completed concurrently with the establishment of technological feasibility; accordingly, no costs have been capitalized to date.

(o) Accounting for Stock-Based Compensation

The Company has elected to account for employee stock options using the intrinsic-value method in accordance with Accounting Principles Board Opinion No. 25 ("APB 25") and related interpretations. Under this method, compensation expense is recorded on the date of grant only if the current fair value exceeds the exercise price. SFAS No. 123, *Accounting for Stock-Based Compensation*, established accounting and disclosure requirements using a fair value-based method of accounting for stock-based employee compensation plans. As allowed by SFAS No. 123, the Company has elected to continue to apply the intrinsic value-based method of accounting described above, and has adopted the disclosure requirements of SFAS No. 123, as amended.

In December 2004, the Financial Accounting Standards Board (“FASB”) enacted Statement of Financial Accounting Standards 123—revised 2004 (“SFAS 123R”), “Share-Based Payment” which replaces Statement of Financial Accounting Standards No. 123 (“SFAS 123”), “Accounting for Stock-Based Compensation” and supersedes APB Opinion No. 25 (“APB 25”), “Accounting for Stock Issued to Employees.” SFAS 123R requires the measurement of all share-based payments to employees, including grants of employee stock options, using a fair value-based method and the recording of such expense in our consolidated statements of income. The accounting provisions of SFAS 123R are effective for reporting periods beginning after June 15, 2005.

The Company is required to adopt SFAS 123R in the third quarter of fiscal 2005. The pro forma disclosures previously permitted under SFAS 123 no longer will be an alternative to financial statement recognition. Although the Company has not yet determined whether the adoption of SFAS 123R will result in amounts that are similar to the current pro forma disclosures under SFAS 123 below, it is evaluating the requirements under SFAS 123R and expects the adoption to have a significant adverse impact on its consolidated statements of income and net income per share.

For the years ended December 31, 2004, 2003, and 2002, the fair value of the Company’s stock-based awards to employees was estimated using the following weighted average assumptions: expected life of option of 4.0, 4.6 and 4.0 years, respectively; risk-free interest rate of 3.1%, 3.5%, and 4.0%, respectively; expected volatility of 87%, 78%, and 0%, respectively; and expected dividend yield of zero. Prior to entering into the merger agreement with Tellium, in July 2003, the Company used the minimum value option pricing model for privately-held companies which does not consider the impact of stock price volatility.

The following table illustrates the effect on net loss and net loss per share if the fair value-based method had been applied to all outstanding and unvested awards in each period (in thousands, except per share data):

| | <u>Year ended December 31,</u> | | |
|--|--------------------------------|-------------------|--------------------|
| | <u>2004</u> | <u>2003</u> | <u>2002</u> |
| Net loss applicable to holders of common stock, as reported . . . | <u>\$(35,646)</u> | <u>\$(29,875)</u> | <u>\$(130,805)</u> |
| Add: Stock-based compensation expense included in reported net loss | 1,606 | 1,153 | 10,834 |
| Deduct: Total stock-based compensation expense determined under fair value method for all awards | <u>(7,417)</u> | <u>(3,081)</u> | <u>(9,789)</u> |
| Pro forma net loss | <u>\$(41,457)</u> | <u>\$(31,803)</u> | <u>\$(129,760)</u> |
| Loss per share applicable to holders of common stock: | | | |
| As reported – basic and diluted | <u>\$ (0.42)</u> | <u>\$ (1.87)</u> | <u>\$ (25.87)</u> |
| Pro forma – basic and diluted | <u>\$ (0.48)</u> | <u>\$ (1.99)</u> | <u>\$ (25.66)</u> |

(p) Income Taxes

The Company uses the asset and liability method to account for income taxes. Under this method, deferred tax assets and liabilities are determined based on differences between the financial reporting and the income tax bases of assets and liabilities. Deferred tax assets and liabilities are measured using enacted tax rates and laws that will be in effect when the differences are expected to reverse. Valuation allowances are established, when necessary, to reduce deferred tax assets to the amount expected to be realized. The Company has recorded a full valuation allowance against its net deferred tax assets at December 31, 2004 and 2003 due to the significant uncertainty regarding whether the deferred tax assets will be realized.

(q) Net Loss per Common Share

Basic net loss per share is computed by dividing the net loss applicable to holders of common stock for the period by the weighted average number of shares of common stock outstanding during the period. The

calculation of diluted net loss per share gives effect to common stock equivalents; however, potential common equivalent shares are excluded if their effect is antidilutive. Potential common equivalent shares are composed of common stock subject to repurchase rights and incremental shares of common equivalent shares issuable upon the exercise of stock options and warrants and upon conversion of convertible preferred stock and convertible debt.

(r) Other Comprehensive Income (Loss)

Other comprehensive income (loss) is recorded directly to stockholders' equity (deficit) and includes unrealized gains and losses which have been excluded from the consolidated statements of operations. These unrealized gains and losses consist of foreign currency translation adjustments and unrealized gains and losses on available-for-sale securities.

(s) Recent Accounting Pronouncements

In December 2004, the FASB enacted SFAS 123R, "Share-Based Payment" which replaces SFAS 123, "Accounting for Stock-Based Compensation" and supersedes APB 25, "Accounting for Stock Issued to Employees." SFAS 123R requires the measurement of all share-based payments to employees, including grants of employee stock options, using a fair value-based method and the recording of such expense in our consolidated statements of income. The accounting provisions of SFAS 123R are effective for reporting periods beginning after June 15, 2005.

The Company is required to adopt SFAS 123R in the third quarter of fiscal 2005. The pro forma disclosures previously permitted under SFAS 123 no longer will be an alternative to financial statement recognition. Although the Company has not yet determined whether the adoption of SFAS 123R will result in amounts that are similar to the current pro forma disclosures under SFAS 123, it is evaluating the requirements under SFAS 123R and expects the adoption to have a significant adverse impact on its consolidated statements of income and net income per share.

In December 2004, the FASB issued FASB Staff Position No. FAS 109-2 ("FAS 109-2"), "Accounting and Disclosure Guidance for the Foreign Earnings Repatriation Provision within the American Jobs Creations Act of 2004." FAS 109-2 provides guidance under FASB Statement No. 109, "Accounting for Income Taxes," with respect to recording the potential impact of the repatriation provisions of the American Jobs Creation Act of 2004 (the "Jobs Act") on enterprises' income tax expense and deferred tax liability. The Jobs Act was enacted on October 22, 2004. FAS 109-2 states that an enterprise is allowed time beyond the financial reporting period of enactment to evaluate the effect of the Jobs Act on its plan for reinvestment or repatriation of foreign earnings for purposes of applying FASB Statement No. 109. The Company has not yet completed evaluating the impact of the repatriation provisions, however it does not anticipate the adoption will have a material impact on its consolidated financial statements.

In November 2004, the FASB issued SFAS No. 151, "Inventory Costs-An Amendment of ARB No. 43, Chapter 4" (SFAS 151). SFAS 151 amends the guidance in ARB No. 43, Chapter 4, "Inventory Pricing", to clarify the accounting for abnormal amounts of idle facility expense, freight, handling costs, and wasted material (spoilage). Among other things, the new rule requires that items such as idle facility expense, excessive spoilage, freight, and handling costs be recognized as current period charges regardless of whether they meet the criteria of "so abnormal" as stated in ARB No. 43. Additionally, SFAS 151 requires that the allocation of fixed production overheads to the cost of conversion be based on the normal capacity of the production facilities. SFAS 151 is effective for fiscal years beginning after June 15, 2005. The Company is currently evaluating the effect that the adoption of SFAS 151 will have on its consolidated financial statements but does not expect SFAS 151 to have a material impact.

In March 2004, the FASB issued EITF Issue No. 03-1 ("EITF 03-1"), "The Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments" which provided new guidance for assessing impairment losses on investments. Additionally, EITF 03-1 includes new disclosure requirements

for investments that are deemed to be temporarily impaired. In September 2004, the FASB delayed the accounting provisions of EITF 03-1; however the disclosure requirements remain effective for annual periods ending after June 15, 2004. The Company will evaluate the impact of EITF 03-1 once final guidance is issued, however it does not anticipate the adoption will have a material impact on its consolidated financial statements.

In January 2003, the FASB issued FASB Interpretation No. 46 ("FIN 46"), "*Consolidation of Variable Interest Entities.*" In December 2003, the FASB issued a revision to FIN 46 ("FIN 46R"). FIN 46R requires that if an entity has a controlling financial interest in a variable interest entity, the assets, liabilities and results of activities of the variable interest entity should be included in the consolidated financial statements of the entity. The provisions of FIN 46R were effective immediately for all new arrangements entered into after December 31, 2003. The Company does not have any financial interests in variable interest entities created prior to December 31, 2003, for which the provisions of FIN 46R would become effective on January 1, 2004. Accordingly, the provisions of FIN 46R became effective for the Company in the first quarter of 2004. The adoption of FIN 46R did not have a material impact on the Company's consolidated financial statements.

(t) Reclassifications

Certain amounts in prior years' financial statements and related notes have been reclassified to conform to the 2004 presentation.

(2) Acquisitions

During the three years ended December 31, 2004, the Company made a number of purchase acquisitions. The consolidated financial statements include the operating results of each business from the date of acquisition. The Company records the estimated acquisition related liabilities at the date of acquisition. For material acquisitions, the Company obtains third-party valuation reports to assist in the valuation of the acquired intangible assets. For each acquisition, amounts were allocated to purchased in-process research and development and intangible assets as described below.

Purchased In-Process Research and Development

The Company recorded charges for purchased in-process research and development of \$8.6 million and \$0.1 million during the years ended December 31, 2004 and 2002, respectively. The amounts allocated to purchased in-process research and development were determined through established valuation techniques used in the high-technology communications industry and were expensed upon acquisition, because technological feasibility had not been established and no future alternative uses existed. The values assigned to purchased in-process research and development were determined by identifying the ongoing research projects for which technological feasibility had not been achieved and assessing the state of completion of the research and development effort. The most significant and uncertain assumptions that affected the valuations were market events and risks outside of the Company's control such as trends in technology, government regulations, market size and growth, and future product introduction by competitors.

The state of completion was determined by estimating the costs and time incurred to date relative to those costs and time to be incurred to develop the purchased in-process research and development into commercially viable products, estimating the resulting net cash flows only from the percentage of research and development efforts complete at the date of acquisition, and discounting the net cash flows back to their present value. The risk adjusted discount rate included a factor that took into account the uncertainty surrounding the successful development of the purchased in-process technology projects. Historical margins and expense levels were estimated to improve over time, assuming that the technology was successfully developed and the Company's ability to generate economies of scale and operating leverage as revenue continued to grow.

Purchased Technology

The Company recorded purchased technology related to acquisitions of \$9.2 million, and \$2.2 million during the years ended December 31, 2004, and 2003, respectively. To determine the values of purchased technology, the expected future cash flows of the existing developed technologies were discounted taking into account the characteristics and applications of the product, the size of existing markets, growth rates of existing and future markets, as well as an evaluation of past and anticipated product lifecycles.

(a) Sorrento Networks Corporation

In July 2004, the Company completed the acquisition of Sorrento Networks Corporation in exchange for total consideration of \$98.0 million, consisting of common stock valued at \$57.7 million, options and warrants to purchase common stock valued at \$12.3 million, assumed liabilities of \$27.0 million, and acquisition costs of \$1.0 million. The Company acquired Sorrento to obtain its line of optical transport products and enhance its competitive position with cable operators. One of the Company's directors is a partner of a venture capital firm which is a significant stockholder of Zhone, and which also held warrants to purchase Sorrento common stock that were assumed by Zhone.

The purchase consideration was allocated to the fair values of the assets acquired as follows: net tangible assets—\$23.4 million, amortizable intangible assets—\$14.8 million, purchased in-process research and development—\$2.4 million, goodwill—\$57.2 million and deferred compensation—\$0.2 million. The amount allocated to purchased in-process research and development was charged to expense during the third quarter of 2004, because technological feasibility had not been established and no future alternative uses for the technology existed. The estimated fair value of the purchased in-process research and development was determined using a discounted cash flow model, based on a discount rate which took into consideration the stage of completion and risks associated with developing the technology. Of the amount allocated to amortizable intangible assets, \$9.2 million was allocated to core technology, which is being amortized over an estimated useful life of five years. The remaining \$5.6 million was allocated to customer relationships, which is being amortized over an estimated useful life of four years.

Assumed liabilities related to the Sorrento acquisition totaled \$27.0 million, the most significant component of which was long-term debt and debentures totaling \$15.8 million. Following the consummation of the acquisition, the Company sold certain excess facilities acquired from Sorrento. The net proceeds were used to repay the associated long term debt of \$4.1 million and convertible debentures of \$2.5 million. The assumed liabilities also included employee severance and exit costs totaling \$1.6 million, which were recorded based on Emerging Issues Task Force 95-3, "Recognition of Liabilities in Connection with a Purchase Business Combination". A rollforward of the EITF 95-3 related activity was comprised as follows (in thousands):

| | <u>Severance</u> | <u>Exit Costs</u> | <u>Total</u> |
|--|------------------|-----------------------|--------------|
| Liability recorded at acquisition date | \$ 1,255 | \$ 320 | \$ 1,575 |
| Cash payments | (1,236) | (314) | (1,550) |
| Balance at December 31, 2004 | <u>\$ 19</u> | <u>\$ 6</u> | <u>\$ 25</u> |

The remaining costs accrued under EITF 95-3 are expected to be paid by the first half of 2005.

(b) Gluon Networks, Inc.

In February 2004, the Company acquired certain assets of Gluon Networks, Inc. in exchange for total consideration of \$6.5 million, consisting of common stock valued at \$5.7 million, \$0.7 million of cash and \$0.1 million of acquisition related costs. One of the Company's directors is a partner of a venture capital firm which is a significant stockholder of Zhone, and which was also a significant stockholder of Gluon. The transaction was accounted for as an asset acquisition rather than a business combination, since only

assets were acquired, which consisted primarily of Gluon’s intellectual property. Gluon was a development stage company that had developed a product for customer trials but had not generated any revenue to date. The Company agreed to acquire Gluon’s intellectual property and hired approximately ten of the former Gluon employees. The Company intends to incorporate elements of the Gluon technology into its future product offerings.

The purchase price for the Gluon transaction was allocated to purchased in-process research and development—\$6.2 million, and acquired workforce—\$0.3 million. The amount allocated to purchased in-process research and development was charged to expense during the first quarter of 2004, because technological feasibility had not been established and no future alternative uses for the technology existed. The estimated fair value of the purchased in-process research and development was determined using a discounted cash flow model, based on a discount rate which took into consideration the stage of completion and risks associated with developing the technology. Because the transaction did not constitute a business combination, no goodwill was recorded and a portion of the purchase price was allocated to the acquired workforce, which was being amortized over a two year period. An impairment charge of \$0.2 million was subsequently recorded in the second quarter of 2004 relating to the Gluon acquired workforce, because the majority of the former Gluon employees were no longer employed by the Company.

(c) Tellium, Inc.

In November 2003, the Company completed the acquisition of Tellium, Inc. in exchange for total consideration of approximately \$173.3 million, consisting of common stock valued at \$119.4 million, options and warrants to purchase common stock valued at \$7.9 million, assumed liabilities of \$42.8 million, and acquisition costs of \$3.2 million. The transaction was treated as a reverse merger for accounting purposes, in which the Company was treated as the acquirer based on factors including the relative voting rights, board control, and senior management composition.

The purchase consideration was allocated to the fair values of the assets and liabilities acquired as follows (in thousands):

| | |
|------------------------------------|------------------|
| Tangible assets acquired | \$144,441 |
| Goodwill | 25,703 |
| Deferred compensation | 3,185 |
| | <u>\$173,329</u> |

The Company entered into the agreement with Tellium primarily to improve its liquidity through the assumption of cash and to gain access to the capital markets through the assumption of Tellium’s reporting entity as an SEC registrant. The tangible assets acquired in this transaction consisted principally of cash.

Accrued liabilities related to this acquisition totaled \$42.8 million, the most significant components of which included management and employee severance related accruals of \$22.8 million, an assumed line of credit of \$8.0 million, and facilities related exit costs of \$2.4 million. Subsequent to the date of the acquisition, the Company repaid the line of credit and made payments of \$16.0 million to settle the tax liabilities associated with the forgiveness of the pre-existing loans made to the senior management of Tellium, as had been contemplated in the merger negotiations between the Company and Tellium. Following the consummation of the acquisition, the Company discontinued the development efforts related to the technology acquired from Tellium. As a result, the Company terminated substantially all of the former Tellium employees and announced its intention to exit the Tellium headquarters facility. During 2004, the Company recorded an adjustment to decrease goodwill by \$0.3 million relating to the resolution of certain liabilities associated with office closures and other costs, offset by additional severance incurred as a result of the resolution of a contingent liability. A roll forward of the EITF 95-3 related activity was comprised as follows (in thousands):

| | <u>Severance</u> | <u>Facility Exit Costs</u> | <u>Total</u> |
|--|------------------|--------------------------------|-----------------|
| Liability recorded at acquisition date | \$ 22,816 | \$ 2,372 | \$ 25,188 |
| Cash payments | <u>(19,574)</u> | <u>—</u> | <u>(19,574)</u> |
| Balance at December 31, 2003 | 3,242 | 2,372 | 5,614 |
| Cash payments | (3,462) | (1,639) | (5,101) |
| Adjustments | <u>400</u> | <u>(83)</u> | <u>317</u> |
| Balance at December 31, 2004 | <u>\$ 180</u> | <u>\$ 650</u> | <u>\$ 830</u> |

The remaining costs accrued under EITF 95-3 are expected to be paid by the first half of 2005.

(d) NEC eLuminant Technologies

In February 2003, the Company acquired NEC eLuminant Technologies, Inc. (“eLuminant”), a subsidiary of NEC USA, Inc., in exchange for total consideration of approximately \$13.6 million consisting of \$10.1 million in stock, \$3.2 million in assumed liabilities and \$0.3 million in acquisition costs. The Company issued approximately 4.2 million shares of Series B redeemable convertible preferred stock. The value of the preferred stock issued was determined based on the results of a third party appraisal. The purchase consideration was allocated to the fair values of the assets acquired as follows (in thousands):

| | |
|---------------------------------|-----------------|
| Receivables and inventory | \$ 4,652 |
| Intangible assets | 4,840 |
| Goodwill | <u>4,083</u> |
| | <u>\$13,575</u> |

Of the amount allocated to amortizable intangibles assets, \$2.2 million was allocated to developed technology, \$1.7 million to customer list, and \$1.0 million to patents and trademarks, which are being amortized over an estimated useful life of three years.

eLuminant developed a family of multiplexers and digital loop carrier products. The primary reasons for the acquisition of eLuminant were to gain access to its product portfolio, strengthen the Company’s customer base and increase the Company’s workforce with experienced personnel. As of December 31, 2004, there were no accrued liabilities related to this acquisition.

(e) Vpacket Communications, Inc.

In July 2002, the Company acquired Vpacket Communications, Inc., in exchange for total consideration of \$19.2 million consisting of \$15.5 million in stock and \$3.7 million in assumed liabilities. The Company issued approximately 4.6 million shares of Series B redeemable convertible preferred stock. The purchase consideration was allocated based on fair values as follows (in thousands):

| | |
|-------------------------------|-----------------|
| Cash acquired | \$21,926 |
| Other net liabilities assumed | <u>(2,752)</u> |
| | <u>\$19,174</u> |

Vpacket developed and marketed a voice/data router and a network management system that allowed service providers to deliver converged voice and data services while leveraging their existing data network infrastructure. The Vpacket product is complementary to the Zhone portfolio of products. The IP-based router is a strategic fit with the Company's product line. Vpacket had encountered significant difficulty in marketing the voice/data router and had sold limited quantities. In accordance with EITF 98-3, *Determining Whether a Nonmonetary Transaction Involves Receipt of Productive Assets of a Business*, the transaction was accounted for as an asset purchase rather than a business combination as the Company will not support the acquired or developed technology in the future. Since the technology is expected to be discontinued and generate minimal cash flows, no value was ascribed. Prior to the acquisition, two of the Company's directors were members of the board of directors of Vpacket. Two of the Company's directors were also affiliated with groups which were stockholders of Vpacket. See Note 10.

Accrued liabilities related to this acquisition totaled \$3.7 million. These included compensation-related liabilities of \$0.6 million, facility costs of \$2.6 million and direct transaction costs of \$0.5 million. As of December 31, 2004 and 2003, accrued liabilities related to this acquisition were less than \$0.1 million and \$1.0 million, respectively, primarily related to facility costs.

(f) Pro forma Combined Results of Operations

The following table reflects the unaudited pro forma combined results of operations of the Company on the basis that the acquisition of Sorrento took place at the beginning of each year presented and the acquisition of Tellium and eLuminant took place at the beginning of 2003 (in thousands, except per share amounts):

| | <u>2004</u> | <u>2003</u> |
|--|-------------|-------------|
| Net revenue | \$107,715 | \$ 137,031 |
| Net loss | (62,598) | (118,365) |
| Net loss per share—basic and diluted | (0.67) | (1.30) |
| Number of shares used in computation—basic and diluted | 93,566 | 91,265 |

The pro forma financial information is not necessarily indicative of the operating results that would have occurred, had the acquisitions been consummated as of the beginning of each year presented, nor are they necessarily indicative of future operating results. The 2003 information above includes the historical revenue and expenses relating to Tellium; however, the Company does not expect to generate any revenue from sales of the former Tellium products and expects the ongoing operating expenses relating to Tellium to be relatively insignificant.

(3) Long-lived Assets, Goodwill and Other Acquisition-Related Intangible Assets

As of January 1, 2002, the Company adopted SFAS No. 142, *Goodwill and Other Intangible Assets*. SFAS No. 142 requires that goodwill no longer be amortized, but should be tested for impairment at least annually. The Company completed its transitional and first annual goodwill impairment test as of January 2002 and November 2002, respectively. As the Company has determined that it operates in a single segment with one operating unit,

the fair value of its reporting unit was performed at the Company level using a combination of the income, or discounted cash flows, approach and the market approach, which utilizes comparable companies' data. At November 2004 and 2003, the Company performed the annual goodwill impairment test using the market approach, reflecting the fact that the Company's stock was publicly traded following the consummation of the Tellium merger. No impairment charges have been recorded since the adoption of SFAS No. 142.

At December 31, 2004 and 2003, the Company had goodwill with a carrying value of \$157.2 million and \$100.3 million, respectively.

Changes in the carrying amount of goodwill since the adoption of SFAS No. 142 were as follows (in thousands):

| | <u>Year ended December 31,</u> | |
|-------------------------|--------------------------------|------------------|
| | <u>2004</u> | <u>2003</u> |
| Beginning balance | \$100,337 | \$ 70,828 |
| Goodwill acquired | 57,193 | 29,786 |
| Adjustments | (298) | (277) |
| Ending balance | <u>\$157,232</u> | <u>\$100,337</u> |

In accordance with SFAS No. 144, the Company reviews long-lived assets, including intangible assets other than goodwill, for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable based on expected undiscounted cash flows attributable to that asset. The amount of any impairment is measured as the difference between the carrying value and the fair value of the impaired asset.

During the second quarter of 2004, the Company recorded an impairment charge of \$0.2 million relating to the Gluon acquired workforce, because the majority of the former Gluon employees were no longer employed by the Company.

During the fourth quarter ended December 31, 2002, the Company identified impairment indicators, which included a significant reduction in forecasted revenues and excess equipment and building capacity caused by the restructuring during the year. The commercial real estate market in the San Francisco Bay Area also had been negatively impacted by the downturn in the economy. Accordingly, the Company performed, with the assistance of independent valuation experts, an impairment review of its other intangible assets and long-lived assets. The results of the impairment review resulted in an impairment charge of \$50.8 million, which consisted of the following components: land, buildings and construction in process—\$40.5 million, other property and equipment—\$9.8 million, and other assets—\$0.5 million. The impairment charge resulted in the elimination of historical accumulated depreciation and amortization for the long-lived assets that were written down. The remaining balances are being depreciated and amortized over their remaining useful lives as determined by the Company subsequent to the write-down.

The Company estimated the fair value of its long-lived assets based on a combination of the market, income and replacement cost approaches. In the application of the impairment testing, the Company was required to make estimates of future operating trends and resulting cash flows and judgments on discount rates and other variables.

In the second quarter of 2002, the Company discontinued its wireless product line which included the analog wireless design previously acquired from OptaPhone Networks. As a result, the Company recorded a noncash impairment charge of \$0.7 million because the estimated undiscounted future cash flows of these assets was less than the carrying value of the purchased intangibles related to OptaPhone Networks.

Details of the Company's acquisition-related intangible assets are as follows (in thousands):

| | December 31, 2004 | | | |
|----------------------------|--------------------------|---------------------------------|------------------------|-------------------------------------|
| | <u>Gross Amount</u> | <u>Accumulated Amortization</u> | <u>Net</u> | <u>Weighted Average Useful Life</u> |
| Developed technology | \$35,596 | \$(33,103) | \$ 2,493 | 3.7 |
| Core technology | 21,342 | (13,028) | 8,314 | 5.0 |
| Others | 16,570 | (9,530) | 7,040 | 3.9 |
| Total | <u>\$73,508</u> | <u>\$(55,661)</u> | <u>\$17,847</u> | |

| | December 31, 2003 | | | |
|----------------------------|--------------------------|---------------------------------|------------------------|-------------------------------------|
| | <u>Gross Amount</u> | <u>Accumulated Amortization</u> | <u>Net</u> | <u>Weighted Average Useful Life</u> |
| Developed technology | \$35,596 | \$(29,907) | \$ 5,689 | 3.7 |
| Core technology | 12,104 | (9,683) | 2,421 | 5.0 |
| Others | 11,008 | (6,241) | 4,767 | 3.6 |
| Total | <u>\$58,708</u> | <u>\$(45,831)</u> | <u>\$12,877</u> | |

Amortization expense of other acquisition-related intangible assets was \$10.1 million, \$7.9 million and \$15.3 million for the years ended December 31, 2004, 2003 and 2002, respectively.

Projected amortization expense for the fiscal years ending December 31, is as follows (in thousands):

| | |
|--------------------|------------------------|
| 2005 | \$ 7,635 |
| 2006 | 3,507 |
| 2007 | 3,238 |
| 2008 | 2,543 |
| 2009 | 924 |
| Total | <u>\$17,847</u> |

(4) Balance Sheet Detail

Balance sheet detail as of December 31, 2004 and 2003 is as follows (in thousands):

| | <u>2004</u> | <u>2003</u> |
|--|-----------------|-----------------|
| Inventories: | | |
| Raw materials | \$28,918 | \$19,681 |
| Work in process | 6,269 | 3,088 |
| Finished goods | 2,165 | 1,512 |
| | <u>\$37,352</u> | <u>\$24,281</u> |
| Property and equipment: | | |
| Land | \$ 6,321 | \$ 6,321 |
| Buildings | 13,920 | 13,920 |
| Machinery and equipment | 3,817 | 3,303 |
| Computers and acquired software | 2,683 | 1,174 |
| Furniture and fixtures | 428 | 402 |
| Leasehold improvements | 343 | 299 |
| | <u>27,512</u> | <u>25,419</u> |
| Less accumulated depreciation and amortization | 4,545 | 2,834 |
| | <u>\$22,967</u> | <u>\$22,585</u> |

Depreciation and amortization expense associated with property and equipment amounted to \$1.4 million, \$1.4 million and \$8.2 million for the years ended December 31, 2004, 2003, and 2002, respectively.

During the year ended December 31, 2002, the Company revised the estimated useful lives of laboratory and manufacturing equipment from lives that ranged from 3 to 10 years to lives that range from 10 to 30 years. These fixed assets continue to be depreciated on a straight-line basis. The effect of this change resulted in a decrease to the net loss for the year ended December 31, 2002 of approximately \$0.6 million, or a decrease of \$0.11 per share applicable to holders of common stock. Beginning in the year ended December 31, 2003, the effect of this change decreases depreciation expense by approximately \$0.2 million annually.

| | <u>2004</u> | <u>2003</u> |
|--|-----------------|-----------------|
| Accrued and other liabilities: | | |
| Accrued contract manufacturing costs | \$ 6,353 | \$ 8,723 |
| Accrued warranty | 5,839 | 5,856 |
| Accrued compensation | 2,104 | 1,900 |
| Accrued acquisition costs | 1,198 | 5,578 |
| Deferred revenue | 2,999 | 1,430 |
| Other | 5,445 | 7,708 |
| | <u>\$23,938</u> | <u>\$31,195</u> |

The Company accrues for warranty costs based on historical trends for the expected material and labor costs to provide warranty services. Warranty periods are generally one year from the date of shipment. The following table summarizes the activity related to the product warranty liability during the years ended December 31, 2004 and 2003 (in thousands):

| | |
|--|-----------------|
| Balance at December 31, 2002 | \$ 6,040 |
| Charged to operations | 349 |
| Warranty reserve from acquired companies | 2,037 |
| Reductions | <u>(2,570)</u> |
| Balance at December 31, 2003 | \$ 5,856 |
| Charged to operations | 355 |
| Warranty reserve from acquired companies | 1,600 |
| Reductions | <u>(1,972)</u> |
| Balance at December 31, 2004 | <u>\$ 5,839</u> |

(5) Debt

Debt consisted of the following as of December 31, 2004 and 2003 (in thousands):

| | <u>2004</u> | <u>2003</u> |
|--|-----------------|-----------------|
| Secured real estate loan due April 2006 | \$32,061 | \$32,897 |
| Convertible debentures assumed in Sorrento acquisition due August 2007 | 9,252 | — |
| Notes payable assumed in Tellium acquisition | — | 494 |
| | <u>41,313</u> | <u>33,391</u> |
| Less current portion of long-term debt | <u>1,378</u> | <u>1,351</u> |
| | <u>\$39,935</u> | <u>\$32,040</u> |

Aggregate debt maturities as of December 31, 2004 were \$1.4 million in fiscal 2005, \$31.1 million in fiscal 2006, and \$8.8 million in fiscal 2007. In addition, the Company had \$14.5 million and \$4.8 million outstanding under its line of credit agreement at December 31, 2004 and 2003, respectively.

In April 2001, the Company borrowed \$35.0 million under a secured real estate loan facility with a financial institution. The maturity date of the loan is April 1, 2006. Borrowings under the loan accrue interest at 8.3% for the first six months and are adjusted biannually based on the six-month LIBOR rate, with the floor being 8% and the ceiling 14.3%. The interest rate was 8% as of December 31, 2004. The agreement required the Company to keep \$6.0 million of restricted cash as security for all obligations of the Company under the loan agreement. In October 2003, the Company converted \$6.0 million of restricted cash held as security for obligations under this loan agreement to a letter of credit under its line of credit agreement with another financial institution (see discussion below). As of December 31, 2004 and 2003, the debt is collateralized by land and buildings with a net book value of \$19.3 million and \$20.0 million, respectively. Such amounts reflect the adjusted carrying value after the impairment charge recorded during the year ended December 31, 2002 (Note 3).

In July 2004, the Company assumed convertible debentures of \$11.7 million relating to the acquisition of Sorrento, with an interest rate of 7.5%. The outstanding principal amount of the convertible debentures was \$9.3 million as of December 31, 2004 and matures in August 2007. The debentures are callable by the Company at any time, and can be converted into common stock at the option of the holder at a conversion price of \$6.02 per share.

In February 2004, the Company entered into a one year line of credit agreement under the terms of which the lender committed a maximum of \$25.0 million on a secured, revolving basis. Under this line of credit agreement, \$14.5 million was outstanding at December 31, 2004, and an additional \$9.1 million was committed as security for obligations under the Company's secured real estate loan facility and other letters of credit. Borrowings under the line of credit agreement bear interest at the financial institution's prime rate or LIBOR plus 2.9%, at the Company's election. The interest rate was 5.25% at December 31, 2004.

In March 2005, the Company entered into an amendment to its existing revolving credit facility with Silicon Valley Bank providing for a one year extension of the term of the existing facility and an increase in the size of the facility from \$25 million to \$35 million (the "Amended Facility"). Under the Amended Facility the Company has the option of either borrowing funds at agreed upon rates of interest or selling specific accounts receivable to Silicon Valley Bank, on a limited recourse basis, at agreed upon discounts to the face amount of those accounts receivable, so long as the aggregate amount of outstanding borrowings and financed accounts receivable does not exceed \$35 million. The amounts borrowed will bear interest, payable monthly, at a floating rate that, at the Company's option, is either (1) Silicon Valley Bank's prime rate, or (2) the sum of the LIBOR rate plus 2.9%; provided that in either case, the minimum interest rate is 4.0%. The Amended Facility contains certain financial covenants and customary affirmative covenants and negative covenants.

In December 2002, the Company entered into a line of credit agreement under the terms of which the lender committed a maximum of \$25.0 million on a secured, revolving basis. Amounts advanced under the credit facility were subject to underlying eligible accounts receivable. The agreement expired in February 2004. Under the terms of the original agreement, borrowings accrued interest at prime plus 2%. At December 31, 2003, the interest rate was 6.5%. A fee of 0.5% was assessed on any undrawn amounts. As of December 31, 2003, borrowings under the line of credit agreement were \$4.8 million. In addition, \$6.0 million of the remaining credit line was committed as security for the Company's obligations under its secured real estate loan facility and \$0.1 million was committed as security for other letters of credit issued by the Company.

In November 2003, the Company assumed a line of credit of \$8.0 million and certain notes payable totaling \$1.3 million through its acquisition of Tellium. The Company repaid the line of credit and notes payable totaling \$0.8 million prior to December 31, 2003. The outstanding notes payable of \$0.5 million at December 31, 2003 had an interest rate of 4.8% and were paid in installments through February 2004.

In October 2003, the Company terminated its master purchase agreement with CIT Vendor Leasing Fund, or CIT. The master purchase agreement provided for the establishment of reserves to offset potential credit losses suffered by CIT. In January 2001, the Company borrowed \$12.5 million under a secured loan facility from CIT. The Company received \$10.0 million in proceeds from the borrowing and the remaining \$2.5 million was

contributed to the loss reserve and was recorded as sales and marketing expense in 2001. Under the termination of the master purchase agreement with CIT in 2003, the Company was able to recover the \$2.5 million loss reserve which was used to pay off the remaining \$2.4 million loan balance with CIT. As a result of the termination of the master purchase agreement in 2003, the Company recorded a credit to sales and marketing expense equal to the amount of the loss reserve recovery.

In February 2003, the Company entered into a secured note and warrant purchase agreement with certain purchasers that provided that the Company may borrow up to \$30.0 million from such purchasers, of which \$25.0 million was committed to, pursuant to the issuance of promissory notes. Each promissory note will bear interest at five percent per year and will mature on the date which is the earlier of one year from the date of issuance, the closing of an equity financing with an aggregate gross offering price of at least \$10.0 million, or upon an event of liquidation or default. No amounts were borrowed under the secured note and warrant purchase agreement and the facility was terminated following the closing of the merger with Tellium in November 2003.

(6) Stockholders' Equity (Deficit)

(a) Overview and Equity Restructuring

As of December 31, 2004, the Company's equity capitalization consisted of 94.1 million shares of common stock. As of December 31, 2003, following the consummation of the merger with Tellium, the Company's equity capitalization consisted of 76.6 million shares of common stock outstanding, with no shares of preferred stock outstanding. Upon the consummation of the merger with Tellium, all of the outstanding shares of Zhone Series AA and Series B convertible preferred stock were converted into common stock, and the stockholders of Zhone received 0.47 of a share of Tellium common stock for each outstanding share of Zhone common stock. Immediately following the exchange, the combined company was renamed Zhone Technologies, Inc.

In July 2002, the Company consummated an equity restructuring (the "equity restructuring") in which all of the outstanding Zhone Series A preferred stock with a liquidation preference of \$500.0 million was converted to Series AA preferred stock with a liquidation preference of \$250.0 million. In addition, all of the Zhone common stock was subject to a 10 for 1 reverse split (the "Reverse Split"). All references to preferred share, common share and per common share amounts have been retroactively restated to reflect the Reverse Split and the effect of the Tellium merger.

(b) Common Stock

At December 31, 2004, the Company had 900 million shares of common stock authorized for issuance, of which 94.1 million shares were issued and outstanding.

At inception, the Company issued to its founders 4.7 million shares of its common stock at \$0.002 per share. In October 1999, the Company's board of directors approved amendments to the Company's certificate of incorporation to increase the number of authorized shares of common stock to 141.0 million and approved a 7.5-for-1 stock split of all issued and outstanding common stock. Certain of the Series A redeemable convertible preferred stockholders had purchase rights for the 35.3 million shares resulting from the stock split, at the original purchase price paid per share upon the voluntary termination of employment with the Company by any of the founders, which rights would have lapsed over a 4-year period through June 30, 2003. These rights were terminated as part of the Company's equity restructuring.

In connection with this restructuring, all of the Company's common stock was subject to a 10 for 1 reverse split. All of the common stock held by the founders was exchanged for an aggregate 3.5 million shares of common stock, of which 3.4 million were subject to a Company right of repurchase, at \$0.002 per share, which lapsed monthly from July 1, 1999 to July 1, 2003.

In conjunction with the Reverse Split, the Company sold 2.6 million shares of common stock to certain founders under a Restricted Stock Purchase Agreement. Such shares were subject to a Company right of repurchase at \$0.21 per share, which lapsed monthly from July 1, 1999 to July 1, 2003. The Company issued

full recourse promissory notes (founders' promissory notes), with the principal balance and accrued and unpaid interest income due and payable in July 2006. Interest accrues under the notes at the rate of 5.50% per annum, compounded annually. Due to the Company's experience with previous full recourse promissory notes, the founders' promissory notes were treated as nonrecourse promissory notes and recorded as compensation expense during fiscal 2002.

As of December 31, 2004 and 2003, none of the shares issued to certain founders were subject to repurchase by the Company.

(c) Redeemable Convertible Preferred Stock

During the year ended December 31, 2003, the Company had Series AA and Series B redeemable convertible preferred stock outstanding and was recording accretion relating to this preferred stock as described below. All outstanding shares of preferred stock were converted to common stock prior to the consummation of the Tellium merger in November 2003.

Prior to April 17, 2003 the Company was accreting the redeemable convertible preferred stock to its stated redemption price. In 2003 and 2002, the Company accrued, by charging paid in capital, \$12.7 million and \$22.2 million respectively, on all outstanding Series AA and Series B redeemable stock. Upon elimination of the redemption feature for Series AA and Series B preferred shares, the Company stopped recording accretion on the convertible preferred stock.

In conjunction with the Company's original capitalization, in November 1999, the Company had issued 58.8 million shares of Series A redeemable convertible preferred stock to an investor group in exchange for a maximum available capital commitment of \$500.0 million (the "Capital Commitment"). The purchase price per share was variable and was based on total actual capital contributions received by the Company at any point in time, divided by the 58.8 million shares of Series A redeemable convertible preferred stock. If the full Capital Commitment of \$500.0 million was received, the maximum purchase price per share would be \$8.51.

As of December 31, 2002, the Company had received cash capital contributions of \$500.0 million, and the collateralized note commitment, which equates to a purchase price per share of \$8.51. Draws on the available Capital Commitment required approval by the Company's board of directors. The difference between the consolidated balance sheet carrying value and the redemption value of preferred stock represents issue costs. The carrying value was being accreted to the redemption value by charges against additional paid-in capital over the period to redemption using the effective-interest method.

In conjunction with the Reverse Split in July 2002, the Company issued 29.4 million shares of Series AA redeemable convertible preferred stock with a redemption amount of \$250.0 million and cancelled 58.8 million shares of Series A redeemable convertible preferred stock with a redemption amount of \$500.0 million. The Company recorded the Series AA at its estimated fair value of \$126.5 million as of that date. Accordingly, the Company reclassified the difference of \$360.6 million between the carrying value of the Series A of \$487.1 million and the fair value of the Series AA as additional paid-in capital. The carrying value of the Series AA was being accreted ratably to the redemption amount of \$250.0 million over the period to redemption. At, or any time after, November 1, 2004, 2005 and 2006, the redemption was scheduled to occur in three annual installments equal to not less than 33.3%, 66.7%, and 100%, respectively. For purposes of the calculation, the Company assumed an equal amount of redemption at the end of each annual installment period.

In July 2002, the Board of Directors authorized the issuance of up to 8.0 million shares of Series B redeemable convertible preferred stock at a purchase price of \$4.31. In July 2002, the Company issued 4.6 million shares of Series B redeemable convertible preferred stock in connection with the Vpacket acquisition. In August 2002, the Company issued 0.8 million shares of Series B redeemable convertible preferred stock in exchange for 31,170 shares of exercised and unvested common stock options with an exercise price of \$25.53 or higher.

Subject to certain antidilutive provisions, the Series AA and Series B redeemable convertible preferred stock were convertible at the option of the holder into the same number of shares of common stock. The Series AA and Series B redeemable convertible preferred stock would be automatically converted into common stock in the event of an affirmative election of the holders of at least a majority of the outstanding shares of redeemable convertible preferred stock, voting as separate classes, or a public offering, with gross proceeds of at least \$50.0 million and a per share offering price of at least \$8.51 per share. The Series AA and Series B redeemable convertible preferred stock voted with the common stock on an as-if-converted basis on all matters submitted for approval by the Company's stockholders. Dividends, if any, would have been paid in an amount per share of Series AA and Series B preferred stock (on an as-if-converted basis) equal to dividends paid on the common stock, if and when declared by the board of directors. In addition, the Series AA and Series B preferred stock carried liquidation preferences upon any liquidation, dissolution or winding-up of the Company, generally equal to the sum of the original purchase price, all declared or unpaid dividends thereon, and in the case of Series AA only, the amount such holder would have received in such liquidation on an as-converted basis.

(d) Warrants

At December 31, 2004, the Company had a total of 3,030,424 warrants to purchase common stock outstanding at a weighted average exercise price of \$9.20 per share. During the three years ended December 31, 2004, warrants were issued or assumed by the Company as described below.

In July 2004, through the acquisition of Sorrento, the Company assumed fully vested warrants to purchase 2,677,595 shares of the Company common stock at a weighted average of \$4.42 per share. These warrants were valued using the Black-Scholes option pricing model and the resulting fair value of \$7.1 million was included in the purchase price for the acquisition.

In June 2004, the Company issued warrants to the City of Oakland to purchase 16,450 shares of the Company's common stock at an exercise price of \$6.49 per share. These warrants were issued in connection with the repricing of warrants previously issued to the City of Oakland. The fair value of the warrants was calculated using the Black-Scholes model and a charge of \$21,000 was recorded in general and administrative expenses.

In November 2003, through the acquisition of Tellium, the Company assumed fully vested warrants to purchase 250,000 shares of the Company's common stock at \$56.00 per share, and fully vested warrants to purchase 78,390 shares of the Company's common stock at \$12.12 per share. These warrants were valued using the Black-Scholes option pricing model and the resulting fair value of \$0.3 million was included in the purchase price for the acquisition.

During 2003, the Company issued other fully vested warrants to purchase 10,340 shares at exercise prices ranging from \$4.31 to \$191.49 per share. These warrants expire at dates ranging from May 2008 through October 2008. The fair value of the warrants totaling \$43,000 was calculated using the Black-Scholes model and charged to operating expenses for services received.

In December 2002, in connection with its \$25.0 million line of credit agreement, the Company issued an immediately exercisable warrant to purchase up to 65,149 shares of the Company's Series B preferred stock, at an exercise price of \$4.31 per share. The warrant expires in December 2009. The fair value of the warrant of approximately \$0.2 million was calculated using the Black-Scholes model and was charged to interest expense in 2002.

(e) Stock Option Plans

The Company currently has several stock option plans, under which a total of 4.0 million shares of common stock are available for grant. The plans provide for the grant of incentive stock options, nonstatutory stock options, restricted stock awards and other stock-based awards to officers, employees, directors, consultants and advisors of the Company. Options may be granted at an exercise price less than,

equal to or greater than the fair market value on the date of grant, except that any options granted to a 10% shareholder must have an exercise price equal to at least 110% of the fair market value of the Company's common stock on the date of grant. The Board of Directors determines the term of each option, the option exercise price, and the vesting terms. Stock options generally expire ten years from the date of grant and vest over four years.

Through the acquisition of Tellium in November 2003, the Company assumed several stock option plans, including the 2002 Stock Incentive Plan, the Amended and Restated Special 2001 Stock Incentive Plan, and the 2001 Stock Incentive Plan, under which a total of 3.1 million shares were available for grant at December 31, 2004. The Board of Directors in November 2003 amended the Plans to change the name from Tellium to Zhone. In 2004, stock options were primarily issued under the 2001 Stock Incentive Plan. On January 1 of each year, if the number of shares available for grant under the 2001 Stock Incentive Plan is less than 5% of the total number of shares of common stock outstanding as of that date, the shares available for grant under the plan are automatically increased by the amount necessary to make the total number of shares available for grant equal to 5% of the total number of shares of common stock outstanding, or by a lesser amount as determined by the Board of Directors.

Prior to the Tellium merger, stock options were primarily issued under the Company's 1999 Stock Option Plan, which was not assumed by the surviving entity and effectively terminated. Options granted under the 1999 Stock Option Plan remain in effect as originally granted. Options granted under this plan were immediately exercisable, subject to a repurchase option at the original exercise price paid per share which lapses over the original vesting schedule of options. As of December 31, 2004, 130,654 shares were subject to repurchase at a weighted average price of \$2.16 per share. As of December 31, 2003, 205,948 shares were subject to repurchase at a weighted average price of \$1.94 per share.

Through the acquisition of Sorrento in July 2004, the Company assumed several stock option plans, including the Osicom Technologies, Inc. 1988 Stock Plan, Amended and Restated Osicom Technologies, Inc. 1997 Incentive and Non-Qualified Stock Option Plan, Sorrento Networks Corporation 2000 Stock Incentive Plan, and the 2003 Equity Incentive Plan, under which a total of 0.9 million shares were available for grant as of December 31, 2004, however the Company no longer intends to issue stock option grants under these Plans.

The Company assumed the 2002 Employee Stock Purchase Plan ("ESPP") from Tellium, and the Board of Directors in November 2003 amended the Plan to change the name from Tellium to Zhone. As of December 31, 2004, 1.3 million shares were available for future issuance. On January 1 of each year, the number of shares reserved for issuance under the ESPP is automatically increased by 2.5% of the total number of shares of common stock outstanding as of the end of the previous year, provided that the aggregate number of shares issued over the term of the ESPP does not exceed 1.5 million shares. The ESPP reserve was automatically increased by 500,000 shares on January 1, 2003. Eligible employees may purchase common stock at a price equal to 85% of the lower of the fair market value of the common stock at the beginning of each offering period or the end of each purchase period. Participation is limited to 10% of an employee's eligible compensation not to exceed amounts allowed by the Internal Revenue Code. Employees of the Company became eligible to participate in the plan on January 1, 2004. In 2004, the Company issued 0.1 million shares under the ESPP.

In February 2003, the Company commenced a voluntary offer to eligible employees to exchange certain outstanding stock options to purchase shares of common stock from the Company's 1999 Stock Option Plan, including all stock options issued during the six-month period ended February 4, 2003, for the Company's promise to grant new stock options. In August 2003, the Company granted 210,448 options to purchase common stock at an exercise price of \$2.98 per share. The options granted are immediately exercisable and vest over a 4-year period.

A summary of the activity under all of the Company's stock option plans for the three years ended December 31, 2004 is as follows:

| | <u>Options</u> | <u>Weighted average exercise price</u> |
|---|------------------|--|
| Outstanding as of December 31, 2001 | 678,455 | \$38.51 |
| Granted | 1,781,005 | 0.32 |
| Canceled | (446,780) | 29.77 |
| Exercised | <u>(209,488)</u> | 3.96 |
| Outstanding as of December 31, 2002 | 1,803,192 | 7.89 |
| Granted | 1,647,534 | 4.00 |
| Assumed from Tellium | 2,973,640 | 4.17 |
| Canceled | (760,141) | 16.45 |
| Exercised | <u>(796,611)</u> | 1.62 |
| Outstanding as of December 31, 2003 | 4,867,614 | 4.03 |
| Granted | 4,903,349 | 3.30 |
| Assumed from Sorrento | 1,830,424 | 35.66 |
| Canceled | (1,698,321) | 33.56 |
| Exercised | <u>(640,103)</u> | 1.62 |
| Outstanding as of December 31, 2004 | <u>9,262,963</u> | \$ 4.55 |

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

| <u>Exercise price</u> | <u>Shares outstanding</u> | <u>Weighted average remaining contractual life (years)</u> | <u>Weighted average Exercise price</u> | <u>Shares exercisable</u> | <u>Weighted average Exercise price</u> |
|-----------------------|---------------------------|--|--|---------------------------|--|
| \$ 0.21 – \$0.68 | 815,373 | 7.3 | \$ 0.23 | 815,373 | \$ 0.23 |
| \$ 1.36 – \$2.28 | 1,106,361 | 3.8 | \$ 2.18 | 1,065,298 | \$ 2.19 |
| \$ 2.35 – \$3.08 | 818,746 | 8.1 | \$ 2.72 | 501,966 | \$ 2.69 |
| \$ 3.09 – \$3.19 | 2,687,587 | 9.6 | \$ 3.09 | 173,294 | \$ 3.10 |
| \$ 3.20 – \$ 3.65 | 2,068,826 | 8.8 | \$ 3.30 | 1,233,421 | \$ 3.22 |
| \$ 3.66 – \$ 5.48 | 1,320,761 | 8.6 | \$ 5.03 | 1,039,996 | \$ 5.28 |
| \$ 8.40 – \$1,094.45 | 445,309 | 4.5 | \$34.86 | 437,295 | \$35.00 |
| \$ 0.21 – \$1,094.45 | <u>9,262,963</u> | 8.0 | \$ 4.55 | <u>5,266,643</u> | \$ 5.54 |

The weighted average fair value at grant date of options granted for the years ended December 31, 2004, 2003 and 2002 was \$3.30, \$3.53 and \$3.06 per share, respectively, and the weighted average remaining contractual life of options outstanding at December 31, 2004, 2003 and 2002 was 8.0, 6.9 and 9.1 years, respectively.

(f) Stock-Based Compensation

In connection with its stock option grants, the Company recorded stock-based compensation expense of \$1.6 million, \$1.2 million and \$10.8 million for the years ended December 31, 2004, 2003 and 2002, respectively. For employee stock options, such amounts are based on the difference at the grant date between the exercise price of each stock option granted and the fair value of the underlying common stock. The resulting deferred stock compensation is amortized over the vesting periods of the applicable options, generally over four years. For each period presented, the amortization of deferred stock compensation expense is offset by a benefit due to the reversal of previously recorded stock compensation expense on forfeited shares.

Stock-based compensation expense for the three years ended December 31, 2004 was comprised as follows (in thousands):

| | <u>Year ended December 31</u> | | |
|---|-------------------------------|-----------------|------------------|
| | <u>2004</u> | <u>2003</u> | <u>2002</u> |
| Amortization of deferred compensation | \$1,734 | \$ 6,533 | \$ 21,585 |
| Benefit due to reversal of previously recorded stock compensation expense on forfeited shares | (135) | (5,526) | (14,417) |
| Compensation expense (benefit) relating to non-employees | 7 | 142 | (643) |
| Compensation expense relating to cancellation of prior notes receivable and issuance of notes receivable | — | — | 2,536 |
| Compensation expense relating to exchange of stock options | — | 4 | 1,773 |
| | <u>\$1,606</u> | <u>\$ 1,153</u> | <u>\$ 10,834</u> |

During the years ended December 31, 2004, 2003 and 2002, the Company issued options to consultants to purchase 13,760, 28,200 and 46,675 shares of common stock, respectively. The options are immediately exercisable and expire 10 years from the date of grant. Certain options granted in 2003 and 2002 are subject to a vesting period of generally 4 years. The Company values these options using the Black-Scholes model. The options subject to vesting are revalued at each balance sheet date to reflect their current fair value. The Company may record a benefit due to a fluctuation in fair value of the Company's common stock. The following assumptions were used in determining the fair value of the consultant options for the years ended December 31, 2004, 2003, and 2002: contractual life of 10 years; risk-free interest rate of 3.5%, 4.3%, and 4.0%, respectively; volatility of 84%; and expected dividend yield of 0%.

(7) Other Income (Expense), Net

Other income (expense), net for the years ended December 31, 2004, 2003 and 2002 consisted of (in thousands):

| | <u>Year ended December 31</u> | | |
|------------------------------|-------------------------------|------------------|------------------|
| | <u>2004</u> | <u>2003</u> | <u>2002</u> |
| Interest expense | \$(3,991) | \$(3,944) | \$(9,478) |
| Interest income | 1,311 | 400 | 350 |
| Other income (expense) | 1,119 | 992 | (306) |
| | <u>\$(1,561)</u> | <u>\$(2,552)</u> | <u>\$(9,434)</u> |

(8) Net Loss Per Share

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

| | Year ended December 31 | | |
|--|------------------------|-------------------|--------------------|
| | 2004 | 2003 | 2002 |
| Numerator: | | | |
| Net loss | \$(35,646) | \$(17,175) | \$(108,567) |
| Accretion on preferred stock | — | (12,700) | (22,238) |
| Net loss applicable to holders of common stock | <u>\$(35,646)</u> | <u>\$(29,875)</u> | <u>\$(130,805)</u> |
| Denominator: | | | |
| Weighted average common stock outstanding | 85,909 | 16,358 | 5,803 |
| Adjustment for common stock issued subject to repurchase | (164) | (407) | (746) |
| Denominator for basic and diluted calculation | <u>85,745</u> | <u>15,951</u> | <u>5,057</u> |
| Basic and diluted net loss per share applicable to holders of common stock | <u>\$ (0.42)</u> | <u>\$ (1.87)</u> | <u>\$ (25.87)</u> |

The following table sets forth potential common stock that is not included in the diluted net loss per share calculation above because their effect would be antidilutive for the periods indicated (in thousands):

| | 2004 | Weighted Average Exercise price |
|--|--------------|------------------------------------|
| Weighted average common stock issued subject to repurchase | 164 | \$ 2.16 |
| Warrants | 3,030 | 9.20 |
| Convertible debentures | 1,537 | 6.02 |
| Outstanding stock options granted | <u>9,263</u> | 4.55 |
| | 13,994 | |
| | 2003 | Weighted Average Exercise price |
| Weighted average common stock issued subject to repurchase | 407 | \$ 1.94 |
| Warrants | 406 | 39.98 |
| Outstanding stock options granted | <u>4,868</u> | 4.03 |
| | 5,681 | |
| | 2002 | Weighted Average Exercise price |
| Convertible Preferred stock | 34,766 | \$ 7.74 |
| Weighted average common stock issued subject to repurchase | 746 | 0.34 |
| Warrants | 78 | 28.30 |
| Outstanding stock options granted | <u>1,803</u> | 7.89 |
| | 37,393 | |

As of December 31, 2004 and 2003, there were approximately 130,654 and 205,948 shares, respectively, of issued common stock subject to repurchase.

(9) Income Taxes

The following is a summary of the components of income tax expense (benefit) applicable to net loss before income taxes (in thousands):

| | Year ended December 31 | | |
|---------------|------------------------|------------------|------------|
| | 2004 | 2003 | 2002 |
| Current: | | | |
| Federal | \$— | \$(8,029) | \$— |
| State | 131 | 45 | 41 |
| Foreign | 74 | 206 | 99 |
| | <u>205</u> | <u>(7,778)</u> | <u>140</u> |
| Deferred: | | | |
| Federal | — | — | — |
| State | — | — | — |
| Foreign | — | — | — |
| | <u>—</u> | <u>—</u> | <u>—</u> |
| | <u>\$205</u> | <u>\$(7,778)</u> | <u>140</u> |

A reconciliation of the expected tax expense (benefit) to the actual tax expense (benefit) is as follows (in thousands):

| | Year ended December 31 | | | | | |
|--|------------------------|------------------------|------------------|------------------------|---------------|------------------------|
| | 2004 | | 2003 | | 2002 | |
| | Amount | Percent of pretax loss | Amount | Percent of pretax loss | Amount | Percent of Pretax loss |
| Expected tax benefit at statutory (35%) rate | \$(12,404) | (35.0)% | \$(8,733) | (35.0)% | \$(34,844) | (35.0)% |
| State taxes, net of federal effect | 86 | 0.2 | 29 | 0.1 | 27 | — |
| Increase (decrease) in tax resulting from: | | | | | | |
| Acquired in-process research and development | 856 | 2.4 | — | — | — | — |
| Stock-based compensation | 331 | 0.9 | 404 | 1.6 | 686 | 0.7 |
| Goodwill amortization and impairment | — | — | — | — | — | — |
| Change in tax contingency reserve | — | — | (8,029) | (32.2) | — | — |
| Valuation allowance | 8,707 | 24.6 | 5,472 | 21.9 | 31,813 | 31.9 |
| Foreign losses | 2,179 | 6.2 | 2,885 | 11.6 | 2,281 | 2.3 |
| Other | 450 | 1.3 | 194 | 0.8 | 177 | 0.2 |
| | <u>\$ 205</u> | <u>0.6</u> | <u>\$(7,778)</u> | <u>(31.2)</u> | <u>\$ 140</u> | <u>0.1</u> |

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting and income tax purposes. Significant components of the Company's deferred tax assets and liabilities as of December 31, 2004 and 2003 are as follows (in thousands):

| | <u>2004</u> | <u>2003</u> |
|--|------------------|------------------|
| Deferred assets: | | |
| Product, revenue-related, and other reserves | \$ 21,253 | \$ 15,695 |
| Net operating loss, capital loss, and tax credit carryforwards | 350,478 | 101,902 |
| Fixed assets and intangible assets | 63,413 | 45,727 |
| Purchased intangibles | 20,666 | (3,441) |
| Other | 1,829 | 3,226 |
| | <u>457,639</u> | <u>163,109</u> |
| Gross deferred tax assets | | |
| Less valuation allowance | <u>(457,639)</u> | <u>(163,109)</u> |
| Total deferred tax assets | <u>\$ —</u> | <u>\$ —</u> |

The Company has established a valuation allowance to reduce the deferred tax assets to a level that the Company believes is more likely than not to be realized through future taxable income. Approximately \$0.4 million of the valuation allowance for deferred tax assets is attributable to employee stock option deductions, the benefit from which will be allocated to paid-in capital rather than current income when subsequently recognized. Also, approximately \$293.0 million of the valuation allowance for deferred tax assets relates to various acquisitions, the benefit from which will be allocated to goodwill and other identifiable intangible assets related to the acquisition rather than current tax expense when subsequently recognized.

During the year ended December 31, 2004, the Company recognized a current tax expense of \$0.2 million which consisted of current state and foreign taxes.

For the years ended December 31, 2004 and 2003, the net change in the valuation allowance were increases of \$294.5 million and \$16.9 million, respectively. The Company recorded a full valuation allowance against the net deferred tax assets at December 31, 2004 and 2003 since it is more likely than not that the net deferred tax assets will not be realized due to the lack of previously paid taxes and anticipated taxable income.

As of December 31, 2004, the Company had net operating loss carryforwards for federal and California income tax purposes of approximately \$885 million and \$306 million, respectively, which are available to offset future taxable income, if any, in years through 2024 and 2014, respectively. Utilization of the Company's net operating loss carryforwards may be subject to substantial annual limitations due to the ownership change limitations provided by the Internal Revenue Code and similar state provisions. Such an annual limitation could result in the expiration of the net operating loss carryforwards before utilization.

As of December 31, 2004, the Company had capital loss carryforwards for federal and state income tax purposes of approximately \$3.8 million which are available to offset future capital gain income, if any. These capital loss carryforwards expire in various years from 2004 through 2007.

As of December 31, 2004, the Company also had research credit carryforwards for federal and state income tax purposes of approximately \$16.5 million and \$7.4 million, respectively, which are available to reduce future income taxes, if any, in years through 2024 and over an indefinite period, respectively. The Company also had enterprise zone credit carry-forwards for state income tax purposes of approximately \$0.2 million which are available to reduce future state income taxes, if any, in years through 2010.

(10) Related-Party Transactions

In July 2004, the Company completed the acquisition of Sorrento in exchange for total consideration of \$98.0 million, consisting of common stock valued at \$57.7 million, options and warrants to purchase common stock valued at \$12.3 million, assumed liabilities of \$27.0 million, and acquisition costs of \$1.0 million. The Company

acquired Sorrento to obtain its line of optical transport products and enhance its competitive position with cable operators. One of the Company's directors is a partner of a venture capital firm which is a significant stockholder of Zhone, and which also held warrants to purchase Sorrento common stock that were assumed by Zhone.

In February 2004, the Company acquired the assets of Gluon in exchange for total consideration of \$6.5 million, consisting of common stock valued at \$5.7 million, \$0.7 million of cash and \$0.1 million of acquisition related costs. One of our directors is a partner of a venture capital firm which is a significant stockholder of Zhone, and which was also a significant stockholder of Gluon.

On July 29, 2003, the Company borrowed \$2.0 million from Morteza Ejabat, Chairman and Chief Executive Officer of Zhone, and Jeanette Symons, Chief Technology Officer and Vice President, Engineering of Zhone. On August 7, 2003, the Company borrowed an additional \$2.0 million from Ms. Symons. Each of these loans had an interest rate of 12% per year and matured upon the closing of the Company's merger with Tellium. The principal balance and accrued interest for each loan were repaid in November 2003. Mr. Ejabat and Ms. Symons received interest income relating to the loans of \$35,836 and \$106,521, respectively.

In the ordinary course of business, the Company's executive officers and non-employee directors are reimbursed for travel related expenses when incurred for business purposes. The Company reimburses its Chairman and Chief Executive Officer, Morteza Ejabat, for the direct operating expenses incurred in the use of his private aircraft when used for business purposes. The amount reimbursed for these expenses was \$523,800, \$473,000 and \$472,000 during the years ended December 31, 2004, 2003 and 2002, respectively.

In July 2002, the Company cancelled \$1.9 million in notes receivable from certain employees of the Company due to repurchase of the related options to purchase shares of the Company's common stock.

In July 2002, the Company loaned \$0.6 million to its founders under promissory notes for the purchase of common stock. The notes accrue interest at a rate of 5.50% compounded annually and expire on July 11, 2006, on which date all unpaid interest and principal is due on demand.

In July 2002, the Company acquired Vpacket in exchange for total consideration of \$19.2 million. Prior to the acquisition, two of the Company's directors were also members of the board of directors of Vpacket. One of these directors was formerly affiliated with NIF Ventures, which was a stockholder in Vpacket. Another of the Company's directors is affiliated with New Enterprise Associates VIII, Limited Partnership and/or its affiliates, which was a significant stockholder of Vpacket.

In December 1999, the Company borrowed \$13.4 million from the founders. The Company repaid \$10.0 million with accrued interest in December 1999 and \$3.4 million with accrued interest in January 2000. In connection with the Premisys acquisition in December 1999, the Company borrowed \$125.0 million from a related party financial institution of which \$75.0 million was repaid with accrued interest in December 1999. The remaining \$50.0 million was repaid in full with accrued interest in 2002.

(11) Commitments and Contingencies

The Company has entered into operating leases for certain office space and equipment, some of which contain renewal options. The Company has options to purchase the leased assets at the end of the lease terms.

Future minimum lease payments under all non-cancelable operating leases with terms in excess of one year are as follows (in thousands):

| | <u>Operating leases</u> |
|------------------------------------|-------------------------|
| Year ending December 31: | |
| 2005 | \$1,111 |
| 2006 | 471 |
| 2007 | 346 |
| Total minimum lease payments | <u>\$1,928</u> |

The total minimum lease payments shown above include projected payments and obligations for leases that the Company is no longer utilizing, some of which relate to excess facilities obtained through acquisitions. At December 31, 2004, \$0.7 million was accrued relating to excess facilities. Rent expense under operating leases totaled \$3.4 million, \$3.5 million and \$4.9 million for the years ended December 31, 2004, 2003, and 2002, respectively. Sublease rental income totaled \$0.2 million, \$0.2 million and \$1.1 million for the years ended December 31, 2004, 2003 and 2002, respectively.

In connection with the acquisition of Sorrento in July 2004, the Company recorded assumed liabilities for possible contingencies related to the resolution of an employee defined benefit pension plan dispute. In 2000, Sorrento sold one of its subsidiaries to Entrada Networks, Inc. In connection with this transaction, Entrada assumed all responsibility for a defined benefit plan for the employees of the Sorrento subsidiary that was sold to Entrada. Although Entrada is the sponsor of the benefit plan, it disclaims responsibility for the minimum funding contributions to the benefit plan and insists that the Company is responsible for any liability related thereto. The Company has reserved an estimated amount which the Company believes is sufficient to cover potential claims regarding the resolution of the benefit plan dispute. The Company also acquired restricted cash of \$0.5 million related to the settlement of these claims.

The Company has agreements with various contract manufacturers which include inventory repurchase commitments for excess material based on the Company's sales forecasts. The Company has recorded a liability for estimated charges of \$4.5 million related to these arrangements as of December 31, 2004 and 2003.

The Company has issued letters of credit to ensure its performance or payment to third parties in accordance with specified terms and conditions, which amounted to \$0.4 million as of December 31, 2004. The Company has recorded restricted cash of \$0.3 million related to the amounts outstanding under these letters of credit.

(12) Litigation

As a result of the merger with Tellium, the Company became a defendant in a securities class action lawsuit. On various dates between approximately December 10, 2002 and February 27, 2003, numerous class-action securities complaints were filed against Tellium in the United States District Court for the District of New Jersey. On May 19, 2003, a consolidated amended complaint representing all of the actions was filed. The complaint alleges, among other things, that Tellium and its then-current directors and executive officers, and its underwriters, violated the Securities Act of 1933 by making false and misleading statements or omissions in its registration statement prospectus relating to the securities offered in the initial public offering. The complaint further alleges that these parties violated the Securities Exchange Act of 1934 by acting recklessly or intentionally in making the alleged misstatements and/or omissions in connection with the sale of Tellium stock. The complaint seeks damages in an unspecified amount, including compensatory damages, costs and expenses incurred in connection with the actions and equitable relief as may be permitted by law or equity. On March 31, 2004, the Court granted Tellium's and the underwriters' motions to dismiss the complaint and allowed the plaintiffs to file a further amended complaint. On May 14, 2004, the plaintiffs filed a second consolidated and amended complaint. On June 25, 2004, the company, as Tellium's successor-in-interest, and the underwriters again moved to dismiss the complaint. The motions to dismiss have been fully briefed, and the parties are awaiting the Court's decision on the motions.

As a result of the merger with Tellium, the Company became a defendant in stockholder derivative lawsuits. On January 8, 2003 and January 27, 2003, two derivative suits were filed in the Superior Court of New Jersey by plaintiffs who purport to be stockholders of Tellium. The complaints in these actions allege, among other things, that Tellium directors breached their fiduciary duties to the company by engaging in stock transactions with individuals associated with Qwest Communications International Inc., and by making materially misleading statements regarding Tellium's relationship with Qwest. The actions seek damages in an unspecified amount, including imposition of a constructive trust in favor of Tellium for the amount of profits allegedly received through stock sales, disgorgement of proceeds in connection with the stock option exercises, damages allegedly

sustained by Tellium in connection with alleged breaches of fiduciary duties, and costs and expenses incurred in connection with the actions. These cases have been stayed by the court pending the resolution of motions to dismiss in the above-referenced federal court securities actions. The Company intends to vigorously defend the claims made in these actions, which have been consolidated.

As a result of the merger with Tellium, the Company is involved in investigations related to Qwest Communications International Inc. The Denver, Colorado regional office of the SEC is conducting two investigations titled In the Matter of Qwest Communications International Inc. and In the Matter of Issuers Related to Qwest. The first of these investigations does not appear to involve any allegation of wrongful conduct on the part of Tellium. In connection with the second investigation, the SEC is examining various transactions and business relationships involving Qwest and eleven companies having a vendor relationship with Qwest, including Tellium. This investigation, insofar as it relates to Tellium, appears to focus on whether Tellium's transactions and relationships with Qwest were appropriately disclosed in Tellium's public filings and other public statements. In addition, the United States Attorney in Denver is conducting an investigation involving Qwest, including Qwest's relationships with certain of its vendors, including Tellium. In connection with that investigation, the U.S. Attorney has sought documents and information from Tellium and has sought interviews and/or grand jury testimony from persons associated or formerly associated with Tellium, including certain of its officers. The U.S. Attorney has indicated that while aspects of its investigation are in an early stage, neither Tellium nor any of the company's current or former officers or employees is a target of the investigation. The Company is cooperating fully with these investigations. The Company is not able, at this time, to say when the SEC and/or U.S. Attorney investigations will be completed and resolved, or what the ultimate outcome with respect to the combined company will be. These investigations could result in substantial costs and a diversion of management's attention and may have a material and adverse effect on the Company's business, financial condition, and results of operations.

The Company is subject to other legal proceedings, claims and litigation arising in the ordinary course of business. While the outcome of these matters is currently not determinable, management does not expect that the ultimate costs to resolve these matters will have a material adverse effect on the Company's consolidated financial position or results of operations. However, litigation is subject to inherent uncertainties, and unfavorable rulings could occur. If an unfavorable ruling were to occur, there exists the possibility of a material adverse impact on the results of operations of the period in which the ruling occurs, or future periods.

(13) Employee Benefit Plan

The Company maintains a 401(k) plan for its employees whereby eligible employees may contribute up to a specified percentage of their earnings, on a pretax basis, subject to the maximum amount permitted by the Internal Revenue Code. Under the 401(k) plan, the Company may make discretionary contributions. The Company made no discretionary contributions to the plan during the three years ended December 31, 2004.

Through the acquisition of Tellium in November 2003, the Company assumed the Tellium, Inc. 401(k) plan. In December 2003, the plan was amended thereby freezing all future contributions and eliminating any Company contribution. The plan was terminated on June 30, 2004 and the plan's assets were distributed to all participants in October 2004.

Through the acquisition of Sorrento in July 2004, the Company assumed the Sorrento Networks Corporation Retirement Savings 401(k) plan and the LuxN, Inc. 401(k) Profit Sharing Plan. Both plans were terminated on June 30, 2004 prior to the acquisition. The Sorrento Networks Corporation Retirement Savings 401(k) Plan's assets are currently being distributed to participants. The LuxN, Inc. 401(k) Profit Sharing Plan's assets await distribution.

(14) Segment Information

The Company designs, develops and markets communications hardware and software products for network service providers. The Company derives substantially all of its revenues from the sales of the Zhone product family. The Company's chief operating decision maker is the Company's Chief Executive Officer. The Chief Executive Officer reviews financial information presented on a consolidated basis accompanied by disaggregated information about revenues by geographic region for purposes of making operating decisions and assessing financial performance. The Company has determined that it has operated within one discrete reportable business segment since inception. The following summarizes required disclosures about geographic concentrations and revenue by product family.

| | Year ended December 31 | | |
|----------------------------|------------------------|-----------------|------------------|
| | 2004 | 2003 | 2002 |
| Revenue by Geography: | | | |
| United States | \$64,698 | \$65,190 | \$ 77,295 |
| Canada | 10,767 | 10,304 | 15,888 |
| Total North America | 75,465 | 75,494 | 93,183 |
| International | 21,703 | 7,644 | 19,554 |
| | <u>\$97,168</u> | <u>\$83,138</u> | <u>\$112,737</u> |
| | | | |
| | Year ended December 31 | | |
| | 2004 | 2003 | 2002 |
| Revenue by Product Family: | | | |
| SLMS | \$29,351 | \$20,927 | \$ 32,789 |
| Transport | 8,900 | — | — |
| Legacy and Service | 58,917 | 62,211 | 79,948 |
| | <u>\$97,168</u> | <u>\$83,138</u> | <u>\$112,737</u> |

(15) Quarterly Information (unaudited)

| | Year ended December 31, 2004 | | | |
|--|---------------------------------------|-------------------|-------------------|-------------------|
| | Q104 | Q204 | Q304 | Q404 |
| | (in thousands, except per share data) | | | |
| Revenue | \$ 21,033 | \$21,027 | \$ 27,006 | \$28,102 |
| Gross profit | 9,053 | 9,130 | 11,370 | 12,310 |
| Amortization and impairment of intangible assets | 2,078 | 2,330 | 2,862 | 2,862 |
| Operating loss (b) | (12,855) | (7,348) | (10,235) | (3,442) |
| Other income (expense), net | (434) | 10 | (798) | (339) |
| Net loss | <u>\$(13,385)</u> | <u>\$ (7,411)</u> | <u>\$(11,007)</u> | <u>\$ (3,843)</u> |
| Basic and diluted net loss per share | \$ (0.17) | \$ (0.10) | \$ (0.12) | \$ (0.04) |
| Weighted-average shares outstanding used to compute basic and diluted net loss per share | <u>77,266</u> | <u>77,962</u> | <u>93,767</u> | <u>93,978</u> |
| | | | | |
| | Year ended December 31, 2003 | | | |
| | Q103 | Q203 | Q303 | Q403 |
| | (in thousands, except per share data) | | | |
| Revenue | \$ 17,075 | \$20,534 | \$22,240 | \$ 23,289 |
| Gross profit (a) | 7,772 | 9,227 | 9,991 | 5,067 |
| Amortization and impairment of intangible assets | 1,784 | 2,052 | 2,053 | 2,053 |
| Operating loss | (2,228) | (3,849) | (5,679) | (10,645) |
| Other income (expense), net | (533) | (552) | (879) | (588) |
| Net loss | (2,802) | (4,457) | (3,494) | (6,422) |
| Accretion on preferred stock | (10,618) | (2,082) | — | — |
| Net loss applicable to holders of common stock | <u>\$(13,420)</u> | <u>\$ (6,539)</u> | <u>\$ (3,494)</u> | <u>\$ (6,422)</u> |
| Basic and diluted net loss per share applicable to holders of common stock | \$ (2.07) | \$ (0.95) | \$ (0.49) | \$ (0.15) |
| Weighted-average shares outstanding used to compute basic and diluted net loss per share applicable to holders of common stock | <u>6,490</u> | <u>6,914</u> | <u>7,149</u> | <u>43,251</u> |

- (a) – Gross profit for the fourth quarter ended December 31, 2003 included a charge for excess inventory of \$4.7 million, which comprised the majority of the total excess inventory charge for the year of \$6.0 million.
- (b) – Operating loss for the third quarter ended September 30, 2004 included an in process research and development charge of \$8.6 million in connection with the acquisitions of Sorrento and Gluon.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

We conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this report. The controls evaluation was done under the supervision and with the participation of management, including our Chief Executive Officer and our Chief Financial Officer. Based upon this evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, subject to the limitations noted in this Part II, Item 9A, as of the end of the period covered by this report, our disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed in our reports under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified by the SEC, and that material information relating to Zhone and its consolidated subsidiaries is made known to management, including the Chief Executive Officer and Chief Financial Officer, particularly during the period when our periodic reports are being prepared.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Management assessed the effectiveness of our internal control over financial reporting as of December 31, 2004, the end of our fiscal year. In making this assessment, management used the criteria established by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in the report entitled "Internal Control-Integrated Framework." Based on our assessment of internal control over financial reporting, management has concluded that, as of December 31, 2004, our internal control over financial reporting was effective to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with generally accepted accounting principles. Our independent registered public accounting firm, KPMG LLP, audited management's assessment and independently assessed the effectiveness of the company's internal control over financial reporting. KPMG has issued an attestation report concurring with management's assessment, which is included at the end of this Part II, Item 9A.

Inherent Limitations on Effectiveness of Controls

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

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders
Zhone Technologies, Inc.:

We have audited management's assessment, included in the accompanying Management's Report on Internal Control Over Financial Reporting that Zhone Technologies, Inc. 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). Zhone Technologies, Inc.'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 an opinion on management's assessment and an opinion on the effectiveness of the Company's internal control over financial reporting based on our audit.

We conducted our audit 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. Our audit included 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 considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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 (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) 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 (3) 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.

In our opinion, management's assessment that Zhone Technologies, Inc. maintained effective internal control over financial reporting as of December 31, 2004, is fairly stated, in all material respects, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Also, in our opinion, Zhone Technologies, Inc. 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 Committee of Sponsoring Organizations of the Treadway Commission (COSO).

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Zhone Technologies, Inc. and subsidiaries as of December 31, 2004 and 2003, and the related consolidated statements of operations, redeemable convertible preferred stock and stockholders' equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 2004, and our report dated March 14, 2005 expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG LLP

Mountain View, California.
March 14, 2005

ITEM 9B. OTHER INFORMATION

On March 15, 2005, we entered into an amendment to our existing revolving credit facility with Silicon Valley Bank providing for a one year extension of the term of the existing facility and an increase in the size of the facility from \$25 million to \$35 million (the "Amended Facility"). Under the Amended Facility we have the option of either borrowing funds at agreed upon rates of interest or selling specific accounts receivable to Silicon Valley Bank, on a limited recourse basis, at agreed upon discounts to the face amount of those accounts receivable, so long as the aggregate amount of outstanding borrowings and financed accounts receivable does not exceed \$35 million. The amounts borrowed will bear interest, payable monthly, at a floating rate that, at our option, is either (1) Silicon Valley Bank's prime rate, or (2) the sum of the LIBOR rate plus 2.9%; provided that in either case, the minimum interest rate is 4.0%. After deductions for certain administrative costs payable to Silicon Valley Bank, the purchase price for accounts receivable financed under the Amended Facility will be the face amounts discounted based on the expected number of days to collection at a discount rate equal to 1.0% above Silicon Valley Bank's prime rate. Our obligations under the Amended Facility remain secured by a security interest in substantially all of our assets, including our intellectual property. The Amended Facility contains certain financial covenants, and customary affirmative covenants and negative covenants. If we do not comply with the various covenants and other requirements under the Amended Facility, Silicon Valley Bank is entitled to, among other things, require the immediate repayment of all outstanding amounts and sell our assets to satisfy the obligations under the Amended Facility. The foregoing description of the Amended Facility does not purport to be complete and is qualified in its entirety by reference to the Amendment to Loan Documents, dated as of March 15, 2005, and the Non-Recourse Receivables Purchase Agreement, dated March 15, 2005, both of which are filed as exhibits to this Form 10-K.

On February 16, 2005, we filed a current report on Form 8-K disclosing amendments to the Zhone Technologies, Inc. 2001 Stock Incentive Plan, which had been approved by our Board of Directors and is subject to stockholder approval at our upcoming annual meeting. We are providing this supplemental disclosure to correct certain typographical errors in the Zhone Technologies, Inc. Amended and Restated 2001 Stock Incentive Plan filed as Exhibit 10.3 to the Form 8-K. The correct number shares of common stock initially reserved for issuance upon the adoption of the plan is 3,500,000 (plus certain other shares described in the plan), which amount reflects a proportionate reduction in the number of shares reserved for issuance to give effect to the one-for-four reverse stock split of our common stock in November 2003. This summary does not purport to be complete, and is qualified in its entirety by reference to the full text of the Zhone Technologies, Inc. Amended and Restated 2001 Stock Incentive Plan, which is filed as an exhibit to this Form 10-K.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

The information required by this item relating to our directors and nominees, and compliance with Section 16(a) of the Securities Exchange Act of 1934 is included under the captions “Corporate Governance Principles and Board Matters,” “Ownership of Securities—Section 16(a) Beneficial Ownership Reporting Compliance” and “Proposal 1: Election of Directors” in our definitive Proxy Statement for the 2005 Annual Meeting of Stockholders and is incorporated herein by reference.

The information required by this item relating to our executive officers is included under the caption “Executive Officers” in Part I of this Form 10-K and is incorporated by reference into this section.

We have adopted a Code of Conduct and Ethics applicable to all of our employees, directors and officers (including our principal executive officer, principal financial officer, principal accounting officer and controller). The Code of Conduct and Ethics is designed to deter wrongdoing and to promote honest and ethical conduct and compliance with applicable laws and regulations. The full text of our Code of Conduct and Ethics is published on our website at *www.zhone.com*. We intend to disclose future amendments to certain provisions of our Code of Conduct and Ethics, or waivers of such provisions granted to executive officers and directors, on our website within four business days following the date of such amendment or waiver.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item is included under the captions “Corporate Governance Principles and Board Matters—Director Compensation,” “Executive Compensation” and “Stock Performance Graph” in our definitive Proxy Statement for the 2005 Annual Meeting of Stockholders and is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this item relating to security ownership of certain beneficial owners and management, and securities authorized for issuance under equity compensation plans is included under the captions “Ownership of Securities—Beneficial Ownership Table” and “Executive Compensation—Equity Compensation Plan Information” in our definitive Proxy Statement for the 2005 Annual Meeting of Stockholders 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 Relationships and Related Transactions” in our definitive Proxy Statement for the 2005 Annual Meeting of Stockholders and is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this item is included under the captions “Proposal 2: Ratification of Appointment of Independent Auditors—Principal Accountant Fees and Services” and “Proposal 2: Ratification of Appointment of Independent Auditors—Pre-Approval Policy of the Audit Committee” in our definitive Proxy Statement for the 2005 Annual Meeting of Stockholders and is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

1. *Financial Statements*

The Index to Consolidated Financial Statements on page 43 is incorporated herein by reference as the list of financial statements required as part of this report.

2. *Exhibits*

The Exhibit Index on page 86 is incorporated herein by reference as the list of exhibits required as part of this report.

EXHIBIT INDEX

| <u>Exhibit Number</u> | <u>Description</u> |
|-----------------------|---|
| 2.1 | Agreement and Plan of Merger dated July 27, 2003 between Zhone Technologies, Inc., Zebra Acquisition Corp. and ZTI Merger Subsidiary III, Inc. (incorporated by reference to Exhibit 2.1 of registrant's Form 8-K filed on July 28, 2003) |
| 3.1 | Restated Certificate of Incorporation dated February 16, 2005 |
| 3.2 | Amended and Restated Bylaws |
| 4.1 | Form of Second Restated Rights Agreement dated November 13, 2003 (incorporated by reference to Exhibit 4.1 of registrant's Form 10-Q filed on May 14, 2004) |
| 4.2 | Form of Sorrento Networks Corporation 7.5% Senior Convertible Debenture Due August 2, 2007 (incorporated by reference to Exhibit E of Appendix A to Sorrento Networks Corporation's definitive proxy statement filed on April 16, 2003) |
| 10.1 | ZTI Merger Subsidiary III, Inc. 1999 Stock Option Plan (incorporated by reference to Exhibit 10.2 of ZTI Merger Subsidiary III, Inc.'s Form 10 filed on April 30, 2003) |
| 10.2 | Zhone Technologies, Inc. Amended and Restated 2001 Stock Incentive Plan |
| 10.3 | Zhone Technologies, Inc. Amended and Restated Special 2001 Stock Incentive Plan (incorporated by reference to Exhibit 10.28 of registrant's Form 10-Q filed on August 15, 2002) |
| 10.4 | Zhone Technologies, Inc. 2002 Stock Incentive Plan (incorporated by reference to Exhibit 4.1 of registrant's Form S-8 filed on August 28, 2002) |
| 10.5 | Zhone Technologies, Inc. 2002 Employee Stock Purchase Plan (incorporated by reference to Exhibit 4.1 of registrant's Form S-8 filed on May 21, 2002) |
| 10.6 | Form of Indemnity Agreement between Zhone Technologies, Inc. and its directors and officers (incorporated by reference to Exhibit 10.20 of registrant's Form 10-Q filed on May 14, 2004) |
| 10.7 | Employment Agreement dated October 20, 1999 between ZTI Merger Subsidiary III, Inc. and Morteza Ejabat (incorporated by reference to Exhibit 10.4 of ZTI Merger Subsidiary III, Inc.'s Form 10 filed on April 30, 2003) |
| 10.8 | Employment Agreement dated October 20, 1999 between ZTI Merger Subsidiary III, Inc. and Jeanette Symons (incorporated by reference to Exhibit 10.5 of ZTI Merger Subsidiary III, Inc.'s Form 10 filed on April 30, 2003) |
| 10.9 | Restricted Stock Purchase Agreement dated July 1, 2002 between ZTI Merger Subsidiary III, Inc. and Morteza Ejabat (incorporated by reference to Exhibit 10.6 of ZTI Merger Subsidiary III, Inc.'s Form 10 filed on July 25, 2003) |
| 10.10 | Restricted Stock Purchase Agreement dated July 1, 2002 between ZTI Merger Subsidiary III, Inc. and Jeanette Symons (incorporated by reference to Exhibit 10.7 of ZTI Merger Subsidiary III, Inc.'s Form 10 filed on April 30, 2003) |
| 10.11 | Promissory Note and Pledge Agreement dated July 11, 2002 between ZTI Merger Subsidiary III, Inc. and Morteza Ejabat (incorporated by reference to Exhibit 10.8 of ZTI Merger Subsidiary III, Inc.'s Form 10 filed on April 30, 2003) |
| 10.12 | Promissory Note and Pledge Agreement dated July 11, 2002 between ZTI Merger Subsidiary III, Inc. and Jeanette Symons (incorporated by reference to Exhibit 10.9 of ZTI Merger Subsidiary III, Inc.'s Form 10 filed on April 30, 2003) |

| <u>Exhibit Number</u> | <u>Description</u> |
|-----------------------|--|
| 10.13 | Loan and Security Agreement dated March 30, 2001 between ZTI Merger Subsidiary III, Inc. and Fremont Investment and Loan (incorporated by reference to Exhibit 10.21 of ZTI Merger Subsidiary III, Inc.'s Form 10 filed on April 30, 2003) |
| 10.14 | Pledge and Assignment of Cash Collateral Account dated March 30, 2001 between ZTI Merger Subsidiary III, Inc. and Fremont Investment and Loan (incorporated by reference to Exhibit 10.22 of ZTI Merger Subsidiary III, Inc.'s Form 10 filed on April 30, 2003) |
| 10.15 | Secured Promissory Note dated March 30, 2001 between ZTI Merger Subsidiary III, Inc. and Fremont Investment and Loan (incorporated by reference to Exhibit 10.23 of ZTI Merger Subsidiary III, Inc.'s Form 10 filed on April 30, 2003) |
| 10.16 | Amended and Restated Loan and Security Agreement dated February 24, 2004 between Zhone Technologies, Inc. and Silicon Valley Bank (incorporated by reference to Exhibit 10.21 of registrant's Form 10-Q filed on May 14, 2004) |
| 10.17 | Amendment to Loan Documents dated March 15, 2005 between Zhone Technologies, Inc. and Silicon Valley Bank |
| 10.18 | Non-Recourse Receivables Purchase Agreement dated March 15, 2005 between Zhone Technologies, Inc. and Silicon Valley Bank |
| 10.19 | Purchase and Sale Agreement with Repurchase Options dated January 20, 2000 between ZTI Merger Subsidiary III, Inc. and the Redevelopment Agency of the City of Oakland (incorporated by reference to Exhibit 10.28 of ZTI Merger Subsidiary III, Inc.'s Form 10 filed on April 30, 2003) |
| 10.20 | Strategic Alliance Agreement dated March 13, 2000 between ZTI Merger Subsidiary III, Inc. and Solectron Corporation (incorporated by reference to Exhibit 10.15 of ZTI Merger Subsidiary III, Inc.'s Form 10 filed on April 30, 2003) |
| 10.21 | Form of Asset Purchase Agreement between ZTI Merger Subsidiary III, Inc. and Solectron Corporation (incorporated by reference to Exhibit 10.16 of ZTI Merger Subsidiary III, Inc.'s Form 10 filed on April 30, 2003) |
| 10.22 | Supply Agreement dated March 13, 2000 between ZTI Merger Subsidiary III, Inc. and Solectron Corporation (incorporated by reference to Exhibit 10.17 of ZTI Merger Subsidiary III, Inc.'s Form 10 filed on April 30, 2003) |
| 21.1 | List of Subsidiaries |
| 23.1 | Consent of Independent Registered Public Accounting Firm |
| 24.1 | Power of Attorney (see signature page) |
| 31.1 | Certification of Chief Executive Officer Pursuant to Rule 13a-14(a)/15d-14(a) |
| 31.2 | Certification of Chief Financial Officer Pursuant to Rule 13a-14(a)/15d-14(a) |
| 32.1 | Section 1350 Certification of Chief Executive Officer and Chief Financial Officer |