

Starent Networks, Corp.
Form 10-K
February 27, 2009
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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, 2008

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: 001-33511

STARENT NETWORKS, CORP.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation or organization)

04-3527533
(I.R.S. Employer
Identification No.)

30 International Place

Tewksbury, MA 01876

(Address of principal executive offices) (zip code)

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(978) 851-1100

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Exchange Act:

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, \$0.001 par value per share	The Nasdaq Global Market

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes No

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 the 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 a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
(Do not check if a smaller reporting company)

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

The aggregate market value of the registrant's common stock held by non-affiliates of the registrant (without admitting that any person whose shares are not included in such calculation is an affiliate) based on the last reported sale price of the common stock on June 30, 2008 (the last trading day of the registrant's second fiscal quarter of 2008) was \$492.4 million.

As of February 23, 2009, there were 70,295,099 shares of the registrant's \$0.001 par value per share common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

The registrant intends to file a definitive Proxy Statement pursuant to Regulation 14A within 120 days of the end of the fiscal year ended December 31, 2008. Portions of such Proxy Statement are incorporated by reference into Part III of this Annual Report on Form 10-K.

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STARENT NETWORKS, CORP.

YEAR ENDED DECEMBER 31, 2008

ANNUAL REPORT

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K, including the information incorporated by reference herein, contains, in addition to historical information, forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These forward-looking statements are based on our current expectations, assumptions, estimates and projections regarding our business and industry, and we do not undertake an obligation to update our forward-looking statements to reflect future events or circumstances. We may, in some cases, use words such as project, believe, anticipate, plan, expect, estimate, intend, continue, should, would, could, potentially, will, may or similar words and expressions that convey uncertainty of future events or outcomes to identify these forward-looking statements. Forward-looking statements in this Annual Report on Form 10-K may include statements about:

our ability to attract and retain customers;

our financial performance;

our development activities;

the advantages of our technology as compared to that of others;

our ability to establish and maintain intellectual property rights;

our ability to retain and hire necessary employees and appropriately staff our operations;

our ability to manage growth, both in the United States and internationally;

the spending of our proceeds from public offerings of our common stock; and

our cash needs.

The outcome of the events described in these forward-looking statements is subject to known and unknown risks, uncertainties and other factors, including the factors set forth in Item 1A Risk Factors in this Annual Report on Form 10-K, that could cause actual results to differ materially from the results anticipated by these forward-looking statements. You should read these factors and the risks described in other documents that we file from time to time with the Securities and Exchange Commission, or SEC, in conjunction with the audited consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K.

References to Starent Networks, Corp. , registrant , we , us , our and similar pronouns refer to Starent Networks, Corp. and its consolidated subsidiaries.

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PART I

Item 1. Business Overview

Starent Networks is a leading provider of infrastructure hardware and software products and services that enable mobile operators to deliver multimedia services to their subscribers. We have created hardware and software products that provide core network functions and services, including access from a wide range of radio networks to the operator's packet core network. Our products and services also provide management of subscriber sessions moving between networks and application of billing and other session policies. Our products and services provide high performance and system intelligence by combining significant computing power, memory and traffic handling capabilities with a flexible, high availability operating system and other proprietary software. Our products integrate multiple network functions and services needed for the delivery of advanced multimedia services, such as video, Internet access, voice-over-IP, e-mail, mobile TV, photo sharing and gaming.

Consumers and professionals are increasingly using mobile phones and other multimedia handheld devices to stay connected to each other, to access the Internet, to utilize business applications and for entertainment. At the same time, mobile operators are experiencing declining profits from voice services and increasing competitive pressures. To address these changes, mobile operators are deploying or planning to deploy next-generation wireless networks, such as third generation and fourth generation, or 3G/4G, networks, that are capable of delivering high quality, mobile multimedia services to subscribers. In deploying these new networks, mobile operators are seeking packet core network products and services that can deliver higher performance and functionality than has been available from products repurposed from wireline applications.

We have developed our multimedia core network hardware platforms, the ST16 and the ST40, and our proprietary software specifically to address the needs of packet-based mobile networks. Our products are designed to provide mobile operators with new revenue opportunities while also reducing their costs. Our products possess a high degree of system intelligence that allows a mobile operator to understand the details of each subscriber session, enabling individual subscriber management and network traffic flow control. Our products also offer high performance capabilities, such as high capacity, significant data processing rates and high transaction rates, which increase the efficiency of the network and enhance the mobile subscriber's experience. To increase reliability, our platforms employ hardware redundancy and high-availability software techniques. By integrating several network functions into a single element, we allow mobile operators to simplify their networks. We designed our products to be access independent so they can function across a range of 2.5G, 3G and 4G mobile and wireless radio access networks.

We sell our hardware and software products to leading mobile operators around the world both directly and through OEMs, system integrators and distributors. We were founded in 2000 and our products were first used commercially by a mobile operator in the first quarter of 2003. Since 2003, our products have been deployed by over 85 mobile operators in 35 countries.

Our principal executive offices are located at 30 International Place, Tewksbury, MA 01876. Our telephone number is (978) 851-1100.

Industry Background

Mobile operators today are experiencing some of the most dramatic changes to their business models since the advent of mobile communications. These changes are the result of increased competition among mobile operators, the decline in average revenue per subscriber from voice communications and the rapid increase in mobile subscriber demand for a wide range of multimedia services. To address each of these trends, mobile operators are increasing the data services provided through their networks. For example, for 2008 Verizon Wireless reported that total data revenues of \$10.7 billion were up 44% over 2007, and in the fourth quarter data revenues represented 26.8% of all service revenues.

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Several factors are accelerating the growth of data-rich multimedia traffic on mobile wireless networks. The number of mobile subscribers worldwide continues to grow as established markets experience increases in subscriber penetration and developing countries adopt mobile communications more rapidly. For example, according to Wireless Intelligence, an independent research firm, the number of worldwide mobile connections is expected to grow 48% from 3.9 billion in 2008 to 5.9 billion in 2012. Another factor is our increasingly mobile and interconnected society in which information is accessible and communications are available at any time regardless of location. Moreover, as individuals and enterprises become accustomed to increased access to multimedia services on the Internet, including video, music downloads, multimedia messaging and continuous information and news, there is an increasing desire to have mobile access to these services. Also contributing to the growth in traffic is the proliferation of mobile devices designed for multimedia services, such as the Apple iPhone, Blackberry Storm, Google phone, and many other smart phones, personal digital assistants, laptop computers and other handheld devices.

The Evolution of Mobile Voice and Data Networks

Over the years, mobile operators have aggressively upgraded their networks in response to the demands created by the growth in voice and multimedia services. In particular, mobile operators made significant investments in upgrading from 2G to 3G radio access technologies that can provide greater bandwidth needed to increase voice capacity and deliver high bandwidth data services. Current forecasts, however, indicate that, the tightening financial market is impacting capital expenditures, but not the multimedia core network. According to Infonetics, while total infrastructure spending is expected to decline from \$46.3 billion in 2008 to \$43.1 billion in 2011, packet core spending is forecasted to steadily grow through these years. This increase in spending is primarily driven by the replacement of older packet core network elements and capacity expansion triggered by strong mobile broadband traffic growth.

The two principal radio access interfaces in use today are Code Division Multiple Access, or CDMA, which is used primarily in the United States and Asia, and Global System for Mobile Communications/Universal Mobile Telecommunications System, or GSM/UMTS, which is used in most markets around the world. CDMA mobile operators are currently upgrading to CDMA2000 1X, 1xEV-DO Rev. 0 and 1xEV-DO Rev. A, while GSM/UMTS operators are migrating to High Speed Packet Access, or HSPA. Additionally, many operators are exploring, planning to deploy or even beginning to deploy more advanced fourth generation, or 4G, access technologies, such as Mobile WiMax and Long Term Evolution/System Architecture Evolution, or LTE/SAE.

In addition to upgrading the radio access portion of their networks, mobile operators are deploying packet-based technology to supplement or replace circuit-based technology. Traditional circuit networks, which were developed for voice communications, establish a dedicated circuit for each call. Circuit networks are relatively inefficient and do not allow for high-bandwidth multimedia services. Packet networks split traffic into multiple pieces of data, or packets, that are routed over an Internet Protocol, or IP, network, eliminating the need to establish a dedicated circuit for each call or session. The use of a packet core network increases network efficiency and lowers operating costs, while enabling an operator to deliver multimedia services. As more multimedia services are deployed, more traffic will flow over the packet network. Over time, we expect mobile operators will convert entirely to packet networks not only for data services but also for voice communications.

As mobile operators implement more multimedia services on their packet networks, they are looking to further standardize the delivery of these services. New core network architecture standards are being developed, such as IP Multimedia Subsystem, or IMS. These standards will also be implemented by wireline operators. The implementation of these new delivery architecture standards by both mobile and wireline operators will provide an opportunity for fixed-mobile convergence, which is the ability of a subscriber to have a uniform service experience as they move between a mobile network, such as a 3G network, and a wireline or a fixed wireless network, such as WiFi. With the convergence of mobile and wireline networks, telecommunications operators will be able to provide services to users irrespective of their location, access technology and communications device.

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The Need for Intelligent and Robust Network Products and Services

As mobile networks transition to next-generation access technologies and become increasingly packet-based, many mobile operators want their networks to be intelligent. An intelligent network provides mobile operators with the ability to inspect data packets from individual transactions in detail. This deep packet inspection allows the mobile operator to shape each subscriber session using quality of service, bandwidth allocation and traffic flow control. This ability to actively manage network traffic flows allows mobile operators to deliver a consistent experience as subscribers roam through a mobile network or move across different types of networks. In order to deploy reliable and intelligent mobile networks that provide a high quality subscriber experience and are able to handle increasing amounts of network traffic, operators require infrastructure products and services that:

Identify and manage individual communications sessions. The network needs to be able to identify, manage and manipulate each subscriber session by applying policy and charging decisions based on the mobile operator's business model or subscriber policies.

Handle significant traffic. As multimedia services dramatically increase the volume of network traffic, networks must be capable of handling this traffic without diminishing the subscriber experience. This capability will require significant computing power and data processing rates.

Simplify the network. As mobile operators provide an increasing number of services and capabilities, they will need to simplify their networks so they can limit the deployment of costly new equipment each time a new service or capability is added.

Deliver quality of service, reliability and availability. As mobile subscribers pay a premium for advanced multimedia services, they will demand that these advanced services be high quality, reliable and available whenever the subscriber wants to access them.

Support multiple radio access technologies and subscriber management. As mobile networks evolve to include different access technologies, mobile operators need the ability to provide the same services regardless of access mode and to apply common subscriber management tools, such as billing and subscriber authentication, across multiple access networks.

Are easy to upgrade. As networks continue to evolve rapidly, operators must be able to easily and cost effectively integrate new access technologies and services with their existing networks and increase capacity.

Historically, mobile operators deploying packet networks have been required to retrofit network infrastructure hardware and software originally designed for wireline networks. These products have included repurposed network switches, routers and off-the-shelf enterprise servers, none of which are able to sufficiently satisfy the needs of mobile operators to deliver efficient and reliable multimedia services.

While routers and network switches are capable of forwarding packets of information, they lack the integrated processing power, memory and software needed to examine individual packets and apply defined business policies and subscriber services to them. To overcome these shortcomings, mobile operators typically connect the repurposed switches and routers with numerous enterprise servers in order to provide services such as deep packet inspection, virtual private networks and firewalls. These multi-element configurations require network traffic to make multiple hops through different networks and equipment for the additional services. This can cause network traffic delays and limit subscriber and network visibility. These delays result in slower transmission speeds, a lower quality experience for the subscriber and potentially lower service use. These delays also have a negative impact on real-time services, such as voice and streaming video.

These multi-element configurations can increase network complexity, resulting in a product that is difficult and expensive to scale and often costly to operate. This complexity makes the deployment of new network functions and the addition of new subscriber services time-consuming and expensive because it often requires a new configuration. Additionally, the need for redundancy to improve service reliability further increases both the

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complexity and the cost of these multi-element configurations. Even with additional redundancy, the complexity of these systems creates multiple potential points of failure, and engineering a multi-element product that can handle the large volumes of traffic on a typical mobile operator's network can be difficult.

Our Solutions

We have introduced new, purpose-built network infrastructure products comprised of both high-performance hardware and software that address the specific challenges faced by mobile operators in offering multimedia services. Our products fulfill a number of network functions that enable carriers to deliver multimedia services across a range of network architectures. Unlike repurposed multi-element configurations, our integrated products and services were designed specifically to provide the high capacity, data processing rates, computer processing capability and software required to meet the needs of mobile operators in offering packet-based multimedia services.

Our hardware and software products and services provide six key, integrated capabilities that create enhanced revenue opportunities and facilitate reduced costs for mobile operators:

Intelligence to shape the subscriber experience. Our products' system intelligence allows mobile operators to manage each subscriber session, which is critical for creating, delivering and charging for differentiated services, while enhancing the subscriber experience. Our products combine custom software with significant processing power and memory to conduct a detailed inspection of each subscriber session and to associate that session with a subscriber need, operator service requirement or operator business policy.

High performance. Our products improve the performance of a mobile operator's network by enhancing the network's capabilities and efficiencies. Our products are able to handle increasing amounts of network traffic to support a large number of subscribers on one platform. They also provide high bandwidth and data processing rates for improved traffic capacity and flow, which increases network efficiency and performance. In addition, the high call transaction rates provided by our products enhance scalability, reduce unwanted delays in network traffic and allow the subscriber to have quick access to network services.

Simple and flexible network architecture. Our products allow mobile operators to integrate a number of network functions and enhanced services into a single hardware platform. In addition to providing network functions such as access, management of subscriber sessions moving between networks and application of billing and other session policies, our platforms are capable of integrating advanced services, such as enhanced charging and billing, firewall protection, security and content filtering. We refer to these services as in-line services. Traditionally such services would be deployed out of line from the session stream in a server farm elsewhere in the network. By integrating both network functions and in-line services, mobile operators can simplify the design of their networks, more rapidly deploy services and improve the flow of network traffic, while also reducing costs.

Reliability and redundancy. Our system architecture provides a high level of resiliency and protects the subscriber's experience. All of our platforms' system resources, including those used for redundancy, can be shared. Our platforms employ hardware redundancy as well as high-availability software techniques, such as session recovery, fault containment and state replication, to maximize network uptime, maintain subscriber sessions and retain billing information. The self-healing attributes of our software architecture protect the system by anticipating failures and creating mirror processes. Also, our products allow mobile operators to implement geographic redundancy.

Support multiple radio access technologies. Our products are capable of supporting multiple radio access technologies, including CDMA, GSM/UMTS and WiMax. This capability allows mobile operators to deliver a uniform service experience to subscribers from a single platform, simplifying the network and limiting operator costs.

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Well positioned for future technology upgrades. While designed for use in today's mobile networks, our products are also readily upgradeable to respond to evolving mobile operator environments or requirements, such as IMS. Our platforms can typically provide new network functions or enhanced services through a software upgrade. This simplifies service deployment and network operations, while reducing potentially costly upgrades resulting from the investment in new network elements each time a new technology is introduced.

Our Strategy

Our objective is to strengthen our leadership in the mobile network infrastructure market by enabling mobile operators to enhance the subscribers' experience, playing a key role in the migration to an all-packet core network and providing products and services that offer new and increased revenue opportunities for mobile operators. Principal elements of our strategy include the following:

Extend our technological leadership. We believe we have market leading products and services today, and we will continue to invest in research and development to maintain our leadership position through the introduction of new products and enhancements to existing products. We are focusing our research and development efforts on improvements to capacity, data processing rates and service flexibility, as well as capabilities to add new network functions and enhanced services. We will also use new technologies, such as advanced processing chips, as they become available to increase the performance, capacity and functionality of our products.

Increase market penetration. Mobile operators continue to increase network coverage and capacity, as well as their service offerings. These changes offer new and expanded sales opportunities both to our existing customers and to potential new customers. Given the earlier transition to high-bandwidth networks by CDMA2000 mobile operators, we have achieved our highest number of deployments in this market. Recently, more GSM/UMTS operators have transitioned or upgraded to high speed data networks which have resulted in additional deployments of our products in these networks. However, significantly more operators worldwide currently utilize GSM/UMTS than CDMA technologies. We believe a significant opportunity for growth is from sales to the GSM/UMTS operators as they continue to transition to high-bandwidth networks, such as HSPA. We intend to increase our penetration of both CDMA and GSM/UMTS operators.

Expand into evolving markets. To maintain our leadership in the mobile infrastructure market, we plan to address new radio access network architectures and technologies, such as Mobile WiMax, Femtocell, LTE/SAE and IMS. Because one of the key features of our platforms is access independence—the flexibility and power to deploy a single hardware platform across multiple access architectures and technologies—we will continue to invest in preserving our products' ability to support new technologies. Additionally, we will continue to participate in industry standards development organizations to contribute to the development of new network standards and architectures.

Increase the number of features. We plan to continue to develop new features based on specific customer requests and anticipated market needs. We generally charge our customers for additional standard and custom features.

Expand our sales channels. We have developed direct relationships with many leading mobile operators, including those serviced by our OEMs, system integrators and distributors. We intend to continue to expand these relationships and pursue new mobile operator relationships to sell our products. At the same time, our OEM, system integrator and distributor relationships have allowed us to reach a broad mobile operator market. We intend to continue to pursue new OEM, system integrator and distributor relationships and to expand our direct sales force.

Continue to offer a high level of support. We believe that one critical factor of our success has been our willingness to respond to specific customer requirements and offer a rapid and thorough resolution.

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of mobile operator issues. We focus exclusively on the mobile multimedia core network and, as a result, are able to provide focused support and technical expertise. We intend to continue to offer a high level of support to our customers.

Our Products

Our products consist of the ST16 and ST40 hardware platforms, proprietary software that allows the ST16 and ST40 to be configured for specific network functions, software that enables operators to provide in-line services and the Starent Web EMS, a web-based element management system that allows a mobile operator to monitor and operate the ST16 and ST40 through a graphical user interface.

ST16 and ST40 Multimedia Core Platforms

The ST16 has been deployed since 2003 and the ST40 has been deployed since 2007. The ST16 and ST40 are robust hardware platforms that combine high capacity, availability and performance with subscriber and network intelligence. The ST16 and ST40 are radio access-independent and can be deployed in multiple mobile network environments, including CDMA2000 1X, 1xEV-DO Rev. 0 and Rev. A, GPRS, UMTS, HSPA and Mobile WiMax networks. The ST16 and ST40 are capable of providing multiple network functions and in-line services.

The ST16 and ST40 each consists of a chassis, application or processing cards and line cards. The application or processing cards provide system management and process all network functions and services. The line cards provide the physical connection to the network.

The ST16 platform is well suited to meet the needs of most multimedia networks. The ST40 platform offers increased performance capabilities and capacity required by mobile operators for high demand, high capacity, multimedia networks.

Network Functions

The ST16 and ST40 can be configured with software packages to provide each of, or a combination of, the following network functions:

GGSN. The Gateway GPRS Support Node, or GGSN, is the network element on a GSM/GPRS or UMTS/HSPA packet core network that performs multimedia session establishment and termination, accounting and traffic routing.

Home Agent. The Home Agent is the network element on the subscriber's home network that effectively allows the subscriber to be reachable at its home address even when the subscriber is not attached to its home network. The Home Agent enables multimedia service mobility between multiple networks.

PDSN/FA. The Packet Data Serving Node/Foreign Agent, or PDSN/FA, is the network element on a CDMA2000 packet core network that performs multimedia session establishment and termination, accounting and traffic routing. When enabled, PDSN/FA can also provide re-direction to the subscriber's home network through communications with the Home Agent.

Starent Session Control Manager. The Starent Session Control Manager is an integrated network element that enables multimedia services such as voice-over-IP and IP television. The Starent Session Control Manager integrates a Session Initiation Protocol Proxy/Registrar, Call Session Control Functionality and Policy Agent to perform voice-over-IP routing, translation and mobility, admission control, authentication and registration.

ASN Gateway. The Access Service Network, or ASN, Gateway, is the network element in a Mobile WiMax packet data network that performs multimedia session establishment and termination, authentication, accounting and traffic or services routing between radio access and packet core network.

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Additional Functionality Configuration for ST40. Our ST40 platform offers the following additional functionality:

SGSN. The Serving GPRS Support Node, or SGSN, is the network element that will track the location of mobile devices on a GPRS or UMTS network and route packet traffic to that location.

PDIF and PDG. The Packet Data Interworking Function, or PDIF, and the Packet Data Gateway, or PDG, are network elements on CDMA2000 and UMTS packet core networks, respectively, that will perform multimedia session establishment and termination, accounting, secure tunneling and traffic routing from a WiFi network.

IPSG. The Internet Protocol Services Gateway, or IPSG, is the network element that will be capable of implementing services, such as enhanced charging and billing, intelligent traffic control or content filtering, in the packet core network behind a PDSN, GGSN, ASN Gateway or other elements.

Femto Network Gateway. We have announced the Femto Network Gateway, which offers additional functionality for our ST40 platform. A Femto network is comprised of a small base station, called a femtocell, which is installed in a customer's home and connects to a high-speed internet connection to improve wireless coverage of mobile devices, and a Femto Network Gateway. The Femto Network Gateway is an element in a Femto network that terminates IPsec/IKEv2 tunnels from Femtocells, which carries both authentication information and user data, and aggregates traffic from multiple Femtocells into the mobile operator's core network using standard interfaces.

Each of the ST16 and the ST40 is able to support one or more of these functions as required by the mobile operator in a single piece of equipment by enabling appropriate software features. As a result, the ST16 and the ST40 provide converged, universal services to multiple access technologies, which can be more cost effective and easier to manage than the deployment of many single-purpose access gateways.

In-line Services

The ST16's and ST40's processing power and abundant memory are designed to enable mobile operators to integrate multiple in-line service capabilities into the core network. In-line services that we currently offer or plan to offer in the future include enhanced charging and billing, intelligent traffic control, application detection and control, stateful firewall and content filtering. Mobile operators can deploy in-line services along with required core network functions such as a PDSN, GGSN, Home Agent or ASN Gateway. Deploying these service functions in-line with the core network can provide more efficient network traffic flows and a more secure and satisfying subscriber experience. Additionally, in-line services allow a mobile operator more flexibility and greater simplicity in designing their networks because they have fewer network elements, such as servers, load balancers, firewalls and routers to deploy and support. This can lead to a higher degree of network optimization, lower operating costs and a higher level of service assurance.

Starent Web EMS

The Starent Web Element Management System, or EMS, is a centralized service and network element management product that controls the ST16 and ST40. Starent Web EMS is a multi-service element manager, which provides fault, configuration, accounting, performance and security functions through a graphical user interface. Starent Web EMS enables mobile operators to monitor, manage and control the performance of the ST16 and ST40, as well as integrate and interoperate with other components and network management systems. The Starent Web EMS also provides a variety of performance and operation records based on mobile operator defined parameters.

Our Technology

We have spent over eight years developing and constantly improving our technology and products. This development includes our custom hardware platforms, our operating system, each network function we support,

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in-line service capabilities, our element management system and many customer-required features. Our technology integrates system intelligence, service flexibility, high availability and high-performance within products that can distribute all service tasks across the entire platform. In addition, as we have deployed our products with many of the world's largest mobile operators, we have been tasked to address operator specific requirements. These requirements, such as geographic redundancy and custom accounting and protocol development, have required significant development.

Platform Architecture

Each of the ST16's and ST40's uses a distributed architecture that allows it to allocate tasks or system actions across the entire platform. This distributed architecture provides for simplicity, ability to handle increasing amounts of network traffic and improved reliability, manageability and performance over alternative bladed architectures. A bladed architecture, where each processing card, or blade, has a distinct functionality, requires the addition of new blades for new services and each service would require a unique blade for redundancy. We believe the distributed architecture of our products enables more efficient hardware usage with enhanced performance characteristics. Additionally, the application of billing and other session policies control and packet forwarding paths are separated on different processing resources. This separation of processes improves the ability to handle increasing amounts of network traffic and traffic flow efficiencies while diminishing latency, or delay, within the session, and ensuring faster session setup and handoff. As a result, mobile operators can deploy more efficient mobile networks that can handle a greater number of concurrent sessions with less hardware.

System Intelligence

Our products and services provide mobile operators with the ability to inspect data packets from individual transactions in great detail. This deep packet inspection allows the ST16 and the ST40 to intelligently shape each subscriber session using quality of service, bandwidth allocation and traffic flow control, which in turn allows mobile operators to actively manage network traffic flows to improve the subscriber's experience.

The ST16 and ST40 also offer service steering, which allows mobile operators to efficiently steer or route each session through appropriate services based on key policies for that particular session or subscriber.

The ST16's and ST40's system intelligence provides mobile operators with the following key capabilities:

- increased information granularity and flexibility for billing, network planning and usage trend analysis;

- information sharing with external application servers that perform value-added processing;

- use of subscriber-specific attributes to launch unique applications on a per-subscriber basis;

- extension of management of session information as subscribers move between networks to applications that are not mobility aware;
and

- enabling policy, charging and Quality of Service and similar features.

Service Assurance

The ST16 and ST40 employ hardware redundancy as well as high-availability software techniques, such as session recovery, fault containment, and state replication, to maximize network uptime, maintain the subscriber session and retain billing information. In addition to the high-availability software techniques, the following service availability features are included with the ST16 and ST40:

- task checkpoint and migration;

M:N or 1:1 redundancy for all hardware elements;

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geographic redundancy;

on-line software upgrades; and

dynamic hardware removal and additions while the product is operating, or hot swapability.

Multi-access Technologies

The use of multiple radio access technologies by mobile operators should be invisible to the subscriber. This seamless mobility between different access technologies enables mobile services to be maintained as the subscriber moves from one access technology to another. For example, as a subscriber using their mobile device on a 3G network enters an airport, they can be seamlessly connected to a higher-bandwidth WiFi network, if available. The architecture of our platforms is designed to support multiple radio access networks, and is capable of doing so in a single platform.

Starent Operating System

Our operating system software is based on a Linux software kernel, which provides a robust, proven software environment offering design flexibility. We have implemented significant customization and other elements to the Linux software kernel to design the operating system for high availability, service flexibility and high-performance.

Our operating system has the following key features:

Scalable control and data operations. System resources can be allocated separately for application of billing and other session policies and packet forwarding paths. For example, resources could be dedicated to performing routing or security control functions while other resources are dedicated to processing subscriber session traffic. As network or service requirements grow and call models change, hardware resources can be easily added to provide more processing power. This method of being able to handle increased network traffic, known as scalability, simplifies service deployment and network expansion.

Fault containment. The system isolates faults at a low level. In addition, processing tasks are distributed, so if an unrecoverable software fault occurs the entire processing capabilities for that task are not lost. Subscriber session processes can be sub-grouped into collections of sessions, so that if a problem is encountered in one sub-group, subscribers in another sub-group will not be affected by that problem.

Self healing. The self-healing attributes of the software architecture protects the system by anticipating failures and creating mirror processes locally or across resource card boundaries to continue the operation with little or no disruption of service. This architecture allows the system to perform at a high level of resiliency and protect subscriber data sessions while also ensuring accounting data integrity for the mobile operator.

Process distribution. All system tasks or processes can be distributed across the platform processing cards to fit the needs of the network model or specific processing requirements. Because tasks or processes are not required to be assigned to a specific card, system scalability and redundancy is significantly simplified.

Leverages third party software components. The use of the Linux operating system kernel enables the reuse of many well-tested, stable, core software elements such as protocol stacks, management services and application programs.

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Supports dynamic hardware removal/additions. By migrating tasks from one resource card to another using software controls, application cards can be removed or replaced while our product is operating, or hot swapped, to dynamically add capacity or perform maintenance operations without service interruption.

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Multiple context support. The system can be fully virtualized to support multiple logical instances of each service. This eliminates the possibility of any one domain disrupting operations for all subscribers in the event of a failure.

Customer Support and Services

We provide wide-ranging and highly interactive support through our system engineering organization, including pre-sales consultation, network testing and trialing, network design, installation, third party product integration, operation, post-sales maintenance and training. Our support organization provides 24x7 operational support. This support team consists of resources located throughout the world which provide our customers timely access to our support technicians and engineers.

We provide our customers with a variety of training courses on the deployment, operation and maintenance of our products. Training is performed in our Technical Education Center located in Tewksbury, Massachusetts or at the customer's location. These courses generally range from two to five days and cover a variety of topics from product overview and installation through configuration and maintenance.

Sales and Marketing

We market and sell our products to mobile operators through our direct sales organization and indirectly through our OEMs, system integrators and distributors. In 2008, 90% of our revenues were from direct sales and 10% were from sales through OEMs, system integrators and distributors. In 2007, 69% of our revenues were from direct sales and 31% were from sales through OEMs, system integrators and distributors. In 2006, 50% of our revenues were from direct sales and 50% were from sales through OEMs, system integrators and distributors.

Direct Sales

Our direct sales organization focuses on selling to leading mobile operators throughout the world. We have sales personnel in a number of markets throughout the world, including the United States, Australia, Brazil, Canada, China, France, Germany, India, Japan, Korea, Mexico, Spain and the United Kingdom.

OEM, System Integrator and Distributor Relationships

We have developed relationships with a number of OEMs, system integrators and distributors, including Alcatel-Lucent, Motorola, Nortel Networks, Samsung Electronics and ITOCHU Techno-Solutions Corporation, also known as CTC. In some cases, these relationships have allowed us to reach a broader mobile operator market than was possible through our direct sales efforts. We believe that OEMs benefit from these relationships by leveraging our research and development expertise, reducing the time-to-market for new products and realizing incremental revenues from the sale of complementary hardware, software and services resulting from the incorporation of our technology into their product offerings. The system integrators and distributors with whom we have relationships specialize in building integrated products for mobile operators by putting together components from different vendors. Typically, when an OEM, system integrator or distributor services a large mobile operator, we also maintain a direct relationship with the operator, which facilitates offering our customer support and services program.

Marketing and Product Management

Our marketing and product management organizations focus on defining our product requirements, educating our mobile operator customers and our OEMs, system integrators and distributors, media and analysts on our technology, building brand awareness and supporting the efforts of the sales organization. We market our products through industry events, public relations efforts, collateral materials and on our Internet site. We participate in industry events, including management presentations on the topics of broadband mobile wireless network technologies and the efficient delivery of multimedia services. We believe the combination of these efforts creates awareness of us and our products and technologies.

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Our primary customers are mobile operators located throughout the world that are deploying or seeking to deploy packet-based multimedia services over next generation networks. We also sell our products to OEMs and system integrators.

Over 85 mobile operators in more than 35 countries, including leading mobile operators using the CDMA, GSM/UMTS and WiMax radio access technology, have deployed our products.

In each of years ended December 31, 2008, 2007 and 2006, we derived more than 90% of our revenues from our top five customers. In 2008, we had two customers, Sprint/Nextel and Verizon Wireless, that each represented more than 10% of our revenues. In 2007, we had three customers, CTC, Sprint/Nextel and Verizon Wireless, that each represented more than 10% of our revenues. In 2006, Nortel Networks and Verizon Wireless each represented more than 10% of our revenues. We terminated our OEM relationships with Nortel Networks in December 2006 and March 2007. In May 2008, we entered into a distribution agreement with Nortel Networks.

Information with respect to the percentage of our revenues based on customers' geographical locations is set forth below:

	Year Ended December 31,		
	2008	2007	2006
United States and Canada	91%	76%	87%
Japan	5	13	4
Korea	3	9	1
Rest of world	1	2	8
Total	100%	100%	100%

Information with respect to our long-lived assets by geographic location is set forth below:

	At December 31,	
	2008	2007
United States	\$ 21,059	\$ 15,614
India	7,857	4,676
Rest of world	716	162
Total	\$ 29,632	\$ 20,452

Research and Development

Our technology requires continued investment to maintain our leadership position. Accordingly, we believe that a strong research and development program is critical to our business. Our research and development organization focuses on designing, developing and enhancing our products as well as the technology underlying our products, investigating new technologies, performing testing and quality assurance activities and integrating our products with third-party products, if necessary.

As of December 31, 2008, we had 95 research and development personnel in the United States and 354 research and development personnel in India. Our research and development organization has extensive industry experience that provides us with the core competencies required to deliver products suitable for global mobile operator networks. Our employees' expertise includes:

carrier-class equipment design and manufacturing;

IP networking:

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mobile networking;

voice and multimedia services;

element management; and

wireless access.

We have made substantial investments in product and technology development since we were founded in 2000. Research and development expenses totaled \$51.6 million in 2008, \$38.9 million in 2007 and \$26.0 million in 2006.

Manufacturing

We outsource the manufacturing of our ST16 and ST40 products to Plexus Corp., a global provider of subcontracting services. Plexus fulfills our manufacturing requirements in Boise, Idaho, and has other locations across the United States at which our requirements also may be fulfilled. Once products are manufactured, they are sent to our headquarters in Tewksbury, Massachusetts, where we perform final assembly and quality control testing to ensure reliability. We believe that outsourcing our manufacturing enables us to conserve working capital, better adjust to fluctuations in demand and provide for timely delivery to our customers.

Although there are multiple sources for most of the component parts of our products, some components are sourced from single or, in some cases, limited sources. For example, Plexus purchases through electronics distributors various types of central processors, network processors, switch fabrics, oscillators and memory devices from various component manufacturers, including Broadcom Corporation, Intel Corporation and Vitesse Semiconductor Corporation, which are presently Plexus' sole sources for these particular components. We typically do not have a written agreement with any of these component manufacturers to guarantee the supply of the key components used in our products, and we do not require Plexus to have a written agreement with these component manufacturers. We regularly monitor the supply of the component parts and the availability of alternative sources. We provide forecasts to Plexus so that it can source the key components in advance of their anticipated use, with the objective of maintaining an adequate supply of these key components for use in the manufacture of our products. In addition, we maintain a small inventory of key components that we believe are most critical to the manufacturing process.

Competition

The market for mobile network infrastructure products is highly competitive and rapidly evolving. The market is subject to changing technology trends, shifting customer needs and expectations and frequent introduction of new products. With the growth and adoption of mobile multimedia services, we expect competition to continue and intensify for all our products and in all our target markets.

We believe there are a number of important factors to compete effectively in our market, including:

products and services that are highly reliable and provide high performance;

scalability and service integration capabilities;

system intelligence;

breadth of network interoperability, access independence and standards support;

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high level of customer support and customer interaction; and

competitive pricing.

Our primary competitors consist of major network infrastructure providers, including Cisco Systems, Inc. and UTStarcom, Inc. in the CDMA2000 market and Cisco Systems, Huawei Technologies Co., Ltd., LM

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Ericsson Telephone Co. and Nokia Siemens Networks B.V. in the GSM/UMTS market. As next-generation technologies such as Mobile WiMax, Femtocell and IMS develop, we expect to compete in those new markets with some of these existing competitors as well as with new competitors. In our sales to OEM customers, we face the competitive risk that OEMs might seek to develop in-house alternative products to those currently provided by us. Additionally, OEMs might elect to source technology from our competitors.

Our current and potential competitors may have significantly greater financial, technical, marketing and other resources than we do and may be able to devote greater resources to the development, promotion, sale and support of their products. Our competitors may have more extensive customer bases and broader customer relationships than we do, including relationships with our potential customers. In addition, these competitors may have longer operating histories and greater name recognition than we do. Our competitors may be in a stronger position to respond quickly to new technologies and may be able to market and sell their products more effectively. Moreover, if one or more of our competitors were to merge or partner with another of our competitors, the change in the competitive landscape could adversely affect our customer relationships and competitive position or otherwise affect our ability to compete effectively.

Intellectual Property

Our success depends in part upon our ability to obtain and maintain proprietary protection for our products, technology and know-how, to operate without infringing the proprietary rights of others and to prevent others from infringing our proprietary rights. Our policy is to seek to protect our proprietary position by, among other methods, filing United States and foreign patent applications related to our proprietary technology, inventions and improvements that are important to the development of our business. We also rely on trade secrets, know-how, continuing technological innovation and in-licensing opportunities to develop and maintain our proprietary position.

As of December 31, 2008, we owned a total of 5 United States patents and 46 United States utility patent applications. With respect to 24 of these 51 United States patents and United States utility patent applications, we have filed additional foreign counterparts, patents and/or applications.

The expiration date for each of our issued United States patents range from 2022 to 2026. The patent positions of companies like ours are generally uncertain and involve complex legal and factual questions. Our ability to maintain and solidify our proprietary position for our technology will depend on our success in obtaining effective patent claims and enforcing those claims once granted. We do not know whether any of our patent applications or those patent applications that we license will result in the issuance of any patents. Our issued patents and those that may issue in the future, or those licensed to us, may be challenged, invalidated or circumvented, which could limit our ability to stop competitors from marketing related products or shorten the term of patent protection that we may have for our products. In addition, the rights granted under any issued patents may not provide us with competitive advantages against competitors with similar technology. Furthermore, our competitors may independently develop similar technologies or duplicate any technology developed by us. Because of the extensive time required for development, testing and regulatory review of a potential product, it is possible that, before any of our products under development can be commercialized, any related patent may expire or remain in force for only a short period following commercialization, thereby reducing any advantage of the patent.

We rely, in some circumstances, on trade secrets to protect our technology. Trade secrets, however, are difficult to protect. We seek to protect our proprietary technology and processes, in part, by confidentiality agreements with our employees, consultants, scientific advisors and other contractors. These agreements may be breached, and we may not have adequate remedies for any breach. In addition, our trade secrets may otherwise become known or be independently discovered by competitors. To the extent that our employees, consultants or contractors use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions.

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We use trademarks on some of our products and believe that having distinctive marks may be an important factor in marketing our products. We have registered our Starent® and ST16® marks in the United States. Our other trademarks include the Starent Networks logo ST40 and VIM. We have also registered some of our marks in a number of foreign countries. Although we have a foreign trademark registration program for selected marks, we may not be able to register or use such marks in each foreign country in which we seek registration.

Employees

As of December 31, 2008, we had 774 full-time employees. Of our employees, 293 are located in the United States and 481 are located in other geographical regions of the world. We consider our current relationship with our employees to be good. None of our employees is represented by labor unions or has collective bargaining agreements.

Available Information

Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 are available free of charge on our website (www.starentnetworks.com) under the Investors section as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. In addition, we also include on our website our code of business conduct and ethics, corporate governance guidelines and the charters for each of the audit, compensation and nominating and corporate governance committees of our board of directors. In addition, we intend to disclose on our website any amendments to, or waivers from, our code of business conduct and ethics that are required to be publicly disclosed pursuant to rules of the SEC. We are not including the information contained on our website as part of, or incorporating it by reference into, this report. You may read and copy materials that we have filed with the SEC at the SEC's public reference room located at 450 Fifth Street, N.W., Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. In addition, our SEC filings are available to the public on the SEC's website (www.sec.gov).

Item 1A. Risk Factors

These are risks and uncertainties that could cause actual results to differ materially from the results contemplated by the forward-looking statements contained in this Annual Report on Form 10-K. Because of these factors, as well as other variables affecting our operating results, past financial performance should not be considered as a reliable indicator of future performance and investors should not use historical trends to anticipate results or trends in future periods. These risks are not the only ones facing us. Please also see SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS earlier in this Annual Report on Form 10-K. The following discussion highlights certain risks which may affect future operating results. These are the risks and uncertainties we believe are most important for our existing and potential stockholders to consider. Additional risks and uncertainties not presently known to us, which we currently deem immaterial or which are similar to those faced by other companies in our industry or business in general, may also impair our business operations. If any of the following risks or uncertainties actually occurs, our business, financial condition and operating results would likely suffer.

Risks Related to Our Business and Industry

We compete in new and rapidly evolving markets and have a limited operating history, which makes it difficult to predict our future operating results.

We were incorporated in August 2000, and deployed our first commercial product in the first quarter of 2003. We have a limited operating history in an industry characterized by rapid technological change, changing customer needs, evolving industry standards and frequent introductions of new products and services. We believe our limited operating history and the characteristics of our industry make it difficult to forecast our future

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operating results. You should consider and evaluate our prospects in light of risks faced by companies such as ours, which include challenges in accurate financial planning as a result of limited historical data and the uncertainties resulting from a relatively limited time period in which to implement and evaluate our business strategies, as compared to companies with longer operating histories.

Our past operating results have fluctuated significantly, and likely will continue to fluctuate significantly, which makes it difficult to predict our operating results and could cause our operating results to fall below expectations.

Our operating results have historically fluctuated significantly from period to period and we expect our operating results to continue to fluctuate due to a variety of factors, many of which are outside of our control. As a result, comparing our operating results on a period-to-period basis may not be meaningful. You should not rely on our past results as an indication of our future performance. If our revenues or operating results fall below the expectations of investors or securities analysts or below any guidance we may provide to the market, the price of our common stock could decline.

In addition to other risk factors listed in this Risk Factors section, factors that may affect our operating results include:

fluctuations in demand, sales cycles and prices for our products and services;

reductions in customers' budgets for mobile network infrastructure purchases and delays in their purchasing decisions;

the timing of recognizing revenue in any given period as a result of software revenue recognition rules;

the sale of our products in the timeframes we anticipate, including the number and size of orders in each period;

the level of our customer concentration and our ability to generate purchases in any particular period from large customers;

our ability to develop, introduce and ship in a timely manner new products and product enhancements that meet customer requirements;

the timing of product releases or upgrades by us or by our competitors;

any significant changes in the competitive dynamics of our markets, including new entrants or substantial discounting of products;

our ability to control costs, including our operating expenses and the costs of the components we purchase;

costs related to litigation, claims and other contingencies;

increases in our effective tax rate due to the use of substantially all of our accumulated net operating loss carryforwards in prior periods;

fluctuations in exchange rates; and

general economic conditions in our domestic and international markets.

We depend on a limited number of customers for a substantial portion of our revenues. The loss of a key customer or any significant adverse change in the size or terms of orders from a key customer could significantly reduce our revenues.

We derive a substantial portion of our revenues from a limited number of customers partly due to the nature of the mobile communications industry. For example, for the year ended December 31, 2008, we had two customers that each accounted for more than 10% of our revenues and in the aggregate represented 81% of our revenues and in 2007 we had three customers that each accounted for more than 10% of our revenues and in the aggregate represented more than 75% of our revenues. In addition, we do not have long-term volume purchase

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contracts with our customers or other commitments that ensure future sales of our products to existing customers. The loss of any key customer, or our inability to generate anticipated revenue from them, would significantly and adversely affect our business, financial condition and results of operations. In addition, a change in the timing or size of a purchase by any one of our key customers can result in significant variations in our revenue and operating results from period to period. Our operating results for the foreseeable future will continue to depend on our ability to effect sales to a small number of customers. Any revenue growth will depend on our success selling additional products to our large customers and expanding our customer base to include additional customers that deploy our products in large-scale networks serving significant numbers of subscribers.

Moreover, many of our key customers are large mobile operators that have substantial purchasing power and leverage in negotiating contractual arrangements with us. These customers may require us to agree to terms and conditions that could result in increased costs and decreased revenues that could adversely affect our operating results.

We rely on a single line of products focused on a single market. If the market for those products does not develop as we anticipate, our revenues may decline or fail to grow, which would adversely affect our operating results.

We derive, and expect to continue to derive, all of our revenues from a single line of products that provide network functions and services to mobile operators' packet core networks. The market for our products is relatively new and still evolving, and it is uncertain whether our products will achieve and sustain high levels of demand and market acceptance. Our success will depend to a substantial extent on the willingness of mobile operators to continue to implement packet-based, multimedia network infrastructure. Factors that could impair the rate of growth of multimedia networks include:

lower than anticipated demand by subscribers for multimedia services;

budgetary constraints of mobile operators;

uncertainties on the part of mobile operators as to the particular 3G or 4G access technologies they select for deployment in their networks; and

delays in the development or availability of all the network elements necessary for the mobile operator to deploy its next-generation multimedia network.

If mobile operators do not continue to implement packet core networks, the market for our products may not continue to develop or may develop more slowly than we expect, either of which would significantly adversely affect our revenues and profitability.

The market in which we compete is highly competitive and competitive pressures from existing and new companies may have a material adverse effect on our business, revenues, growth rates and market share.

We compete in a highly competitive industry that is influenced by many factors, including customer demands for:

reliable, high performance products;

system ability to handle increasing amounts of network traffic and service integration capabilities;

system intelligence;

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breadth of network interoperability, access independence and standards support;

high levels of customer support and customer interaction; and

competitive pricing.

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We expect competition in the mobile network infrastructure industry to intensify significantly in the future. Other companies may introduce new products in the markets we serve or intend to enter. This competition could result in increased pricing pressure, reduced profit margins, increased sales and marketing expenses and failure to increase, or the loss of, market share, any of which would likely seriously harm our business, operating results or financial condition.

Competitive products may in the future have better performance, lower prices and broader acceptance than our products. Our primary competitors include Cisco Systems, Inc., Huawei Technologies Co., Ltd., LM Ericsson Telephone Co., and Nokia Siemens Networks B.V., each of which has a longer operating history, greater name recognition, a larger customer base and significantly greater financial, technical, sales, marketing and other resources than we do. Potential customers may prefer to purchase from their existing suppliers rather than a new supplier regardless of product performance or features. In addition, many of our competitors have a broader range of products and may be able to offer concessions to potential customers on bundled purchases that we are not able to match because we currently offer only a single line of products. We also face competition from a number of companies with more limited market share either generally or by geography and newer market entrants.

If our market continues to develop and expand, we could face increased competition from other established companies, as well as emerging companies. For example, OEMs, system integrators and distributors currently selling our products could market products and services that compete with our products and services. In addition, some of our competitors have made acquisitions or entered into partnerships or other strategic relationships with one another to offer a more comprehensive solution than they individually had offered. We expect this trend to continue as companies attempt to strengthen or maintain their market positions in an evolving industry and as companies enter into partnerships, or are acquired. Many of the companies driving this consolidation trend have significantly greater financial, technical and other resources than we do and are better positioned to acquire and offer complementary products and technologies. The companies resulting from these possible consolidations may create more compelling product offerings and be able to offer greater pricing flexibility, making it more difficult for us to compete effectively, including on the basis of price, sales and marketing programs, technology or product functionality. Continued industry consolidation may adversely impact customers' perceptions of the viability of smaller and even medium-sized technology companies and consequently customers' willingness to purchase from such companies. These pressures could materially adversely affect our business, operating results and financial condition.

Our sales cycles can be long and unpredictable, and our sales efforts require considerable time and expense.

Our sales cycles typically are long and unpredictable, and our sales efforts require considerable time and expense. Our sales efforts involve educating our customers about the use and benefit of our products, including their technical capabilities and potential cost savings. Customers typically undertake a significant evaluation process before making a purchase, in some cases over twelve months. We spend substantial time and resources in our sales efforts without any assurance that our efforts will produce any sales. In addition, product purchases are frequently subject to budget constraints, multiple approvals, and unplanned administrative, processing and other delays. Our long sales cycle may cause our revenues and operating results to fluctuate significantly.

Demand for our products depends on the rate that mobile operators expand and enhance their mobile networks in order to provide multimedia services.

Our future success as a provider of network infrastructure products and services for mobile operators ultimately depends on the continued growth of the mobile communications industry and, in particular, the continued deployment and expansion of mobile multimedia services. Increased demand by mobile subscribers for voice communications and multimedia services delivered over mobile network systems will be necessary to justify capital expenditure commitments by mobile operators to invest in the improvement and expansion of their networks. Demand for multimedia services might not continue to increase if there is limited availability or

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market acceptance of mobile devices designed for such services, the multimedia content offered through mobile networks does not attract widespread interest or the quality of service available through mobile networks does not meet customer expectations. If long-term expectations for mobile multimedia services are not realized or do not support a sustainable business model, operators may not commit significant capital expenditures to upgrade their networks to provide these services, the demand for our products and services will decrease, and we may not be able to sustain or increase our levels of revenues or profitability in the future.

A significant portion of our future revenues depends on our ability to further penetrate the GSM/UMTS market and our failure to do so could significantly interfere with our future growth.

The two principal radio access interfaces in use today for mobile communications are Code Division Multiple Access, or CDMA, and Global System for Mobile Communications/Universal Mobile Telecommunications System, or GSM/UMTS. To date, we have achieved our highest number of deployments in the CDMA market, which has transitioned faster to high-bandwidth networks. However, significantly more operators worldwide currently utilize GSM/UMTS than CDMA technologies. In order to continue our growth, we believe it is important that we continue to expand into the GSM/UMTS market. To date, we have established relationships with a number of GSM/UMTS operators, and we intend to devote significant sales and marketing resources to further penetrate the GSM/UMTS market. If GSM/UMTS operators do not transition or delay their transition to high-bandwidth networks, or if we are unable to establish relationships with additional GSM/UMTS operators, we may not be able to grow our business as expected and our results of operations will be adversely affected.

We rely on OEMs, system integrators and distributors to sell some of our products, and our failure to develop and manage our distribution channels could adversely affect our business.

For our sales to mobile operators, we rely in part on establishing and maintaining successful relationships with original equipment manufacturers, or OEMs, system integrators and distributors. Our revenues depend in part on the effective performance of these distribution relationships. By utilizing these indirect sales channels we may have less contact with the end users of our products, thereby potentially making it more difficult for us to establish brand awareness, ensure proper delivery and installation of our products, service ongoing customer requirements and respond to evolving customer needs. Developing relationships with qualified OEMs, system integrators and distributors and training them in our technology and product offerings requires significant time and resources. In order to develop and expand our distribution channels, we must continue to scale and improve our processes and procedures that support our OEM, system integrator and distributor relationships, including investment in systems and training. We have no minimum purchase commitments with any of our OEMs, system integrators or distributors, and our contracts with them do not prohibit them from offering products or services that compete with ours. Our competitors may be effective in providing incentives to existing and potential OEMs, system integrators and distributors to favor their products or to prevent or reduce sales of our products. Our OEMs, system integrators and distributors may choose not to offer our products exclusively or at all. Our failure to establish and maintain successful relationships with our OEMs, system integrators and distributors could adversely affect our business, operating results and financial condition.

If network functions and services similar to those offered by our products are incorporated into existing or new mobile network infrastructure products, demand by mobile operators for our products may diminish.

Mobile network infrastructures are continually evolving with changing industry standards and the introduction of new technologies and network elements. Network functions and services provided by our products located within the packet core network may be provided by different network elements within these networks. Other providers of mobile network infrastructure products may add network functions and services provided by our products to their existing products or offer new products with similar characteristics for different parts of the network infrastructure.

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The inclusion of, or the announcement of an intent to include, functionality and services perceived to be similar to those offered by our products in competitor products within or outside the packet core network could have an adverse effect on our ability to market and sell our products. Furthermore, even if the network functions and services offered by our competitors are more limited than those provided by our products, a significant number of customers may elect to accept limited functionality or services in lieu of adding our products to their network. The adoption of these competitive products or different approaches to network infrastructure by mobile operators could have an adverse effect on our business, operating results and financial condition.

The applications of existing or future accounting standards could result in significant fluctuations in our operating results.

We recognize our revenue in accordance with AICPA Statement of Position, or SOP, 97-2, *Software Revenue Recognition*, and related amendments and interpretations and SOP 98-9, *Modification of SOP 97-2, Software Revenue Recognition with Respect to Certain Transactions*. Under these accounting standards, even if we deliver products to, and collect cash from, a customer in a given fiscal period, we may be required to defer recognizing revenue from the sale of such product until a future period when all the conditions necessary for revenue recognition have been satisfied. Conditions that can cause delays in revenue recognition include arrangements that have undelivered elements for which we have not yet established vendor specific objective evidence of fair value; requirements that we deliver services for significant enhancements or modifications to customize our software for a particular customer; or material customer acceptance criteria. Our customer contracts typically include one or more of these types of conditions. Therefore, we often must defer revenue recognition for a period of time after our products are delivered and billed to a customer, and such deferral may extend over one or more fiscal quarters. The period of deferral, if any, depends on the specific terms and conditions of each customer contract, and therefore it is difficult for us to predict with accuracy at the beginning of any fiscal period the amount of revenues that we will be able to recognize from anticipated customer shipments in that period. Moreover, any changes in interpretations and guidance as to SOP 97-2 could have a significant effect on our reported financial results.

We may have difficulty acquiring new customers due to the high costs of switching mobile network infrastructure providers or equipment.

Mobile network operators typically make substantial investments when deploying mobile network infrastructure. Once a mobile network operator has deployed infrastructure for a particular portion of their network, it is often difficult and costly to switch to another vendor's infrastructure. Unless we are able to persuasively demonstrate that our products offer performance, functionality or cost advantages that materially outweigh a customer's expense of switching from a competitor's product, it will be difficult for us to generate sales once that competitor's equipment has been deployed. Accordingly, if a customer has already deployed a competitor's product for their network infrastructure, it may be difficult for us to sell our products to that customer.

Our ability to sell our products is highly dependent on the quality of our support and services offerings, and our failure to offer high quality support and services would have a material adverse effect on our sales and results of operations.

Once our products are deployed within our customers' networks, our customers depend on our support organization to resolve issues relating to our products. A high level of support is critical for the successful marketing and sale of our products and future enhancements. If we, or our OEMs, system integrators or distributors, do not effectively assist our customers in deploying our products, help our customers quickly resolve post-deployment issues, and provide effective ongoing support, it would adversely affect our ability to sell our products to existing customers and could harm our reputation with potential customers. In addition, as we expand our operations internationally, our support organization will face additional challenges, including those associated with delivering support, training and documentation in languages other than English. As a result, our failure to maintain high quality support and services could have a material adverse effect on our business, operating results and financial condition.

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The mobile network infrastructure industry is, and likely will continue to be, characterized by rapid technological changes in networks and standards, which will require us to develop new products and product enhancements, and could render our existing products obsolete.

Mobile operators have been aggressively upgrading their networks, and new industry standards for access technologies, such as third generation, or 3G, and more advanced fourth generation, or 4G, technologies continue to evolve. Continuing technological changes in the mobile communications industry and in the mobile network infrastructure industry could undermine our competitive position or make our products obsolete, either generally or for particular types of services. Our future success will depend upon our ability to accurately predict and respond to new technology standards. We must develop and introduce a variety of new capabilities and enhancements to our existing product offerings, as well as introduce new product offerings, to address the changing standards and technological needs of the network infrastructure market. A failure to accurately predict and respond to evolving technologies, to introduce on a timely basis new products and enhancements in response to evolving technologies and standards, or to address changing needs in our current markets or expand into new markets may cause existing and potential customers to forego purchases of our products or purchase from our competitors. The introduction of new products embodying new technologies or the emergence of new industry standards could render our existing products uncompetitive from a pricing standpoint, obsolete or unmarketable.

Our products are complex and may take longer to develop than anticipated and we may not recognize revenues from new products or product enhancements until after we have incurred significant development costs.

Some of our products must be tailored to meet customer specifications. As a result, we often develop new features and enhancements to our products. These product enhancements often take substantial time to develop because of their complexity and because customer specifications sometimes change during the development cycle. We often do not recognize revenue from our new products or enhancements until we have incurred significant development costs, and our operating results will suffer if sales of new products or enhancements fail to meet expectations.

There is no assurance that our research and development investments will lead to successful new products or enhancements.

We will continue to invest in research and development for the introduction of new products and enhancements to existing products designed to improve the capacity, data processing rates and features of our products and services. We must also continue to develop new features and functionality for our products based on specific customer requests and anticipated market needs. However, research and development in the mobile network infrastructure industry is complex, expensive and subject to uncertainty. We believe that we must continue to dedicate a significant amount of resources to our research and development efforts to maintain our competitive position. If we continue to expend a significant amount of resources on research and development and our efforts do not lead to the successful introduction of products or product enhancements that are competitive in the marketplace, there could be a material adverse effect on our business, operating results, financial condition and market share. We may not be able to anticipate market needs and develop products and product enhancements that meet those needs, and any new products or product enhancements that we introduce may not achieve any significant degree of market acceptance.

If our products do not interoperate with our customers' networks, installations will be delayed or cancelled, which would harm our business.

Our products must interoperate with our customers' existing networks, which often have different specifications, utilize multiple protocol standards and products from multiple vendors and contain multiple generations of products that have been added over time. If we find errors in the existing software or defects in the hardware used in our customers' networks or problematic network configurations or settings, as we have in the

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past, we may have to modify our software or hardware so that our products will interoperate with our customers' networks. This could cause longer installation times for our products or order cancellations and could harm our relationship with existing and future customers, any of which would adversely affect our business, operating results and financial condition.

In addition, our customers may require that we demonstrate that our products interoperate with network elements offered by our competitors, and we may need our competitors' cooperation to conduct such testing and validation. Any unwillingness of our competitors to cooperate with us in performing these interoperability tests or our inability to demonstrate interoperability would likely have an adverse effect on our ability to market our products.

Our products are highly technical and may contain undetected software or hardware errors, which could cause harm to our reputation and adversely affect our business.

Our products are highly technical and complex. When deployed, they are critical to the mobile operator networks. Our products have contained and may contain undetected errors, defects or security vulnerabilities. Some errors in our products may only be discovered after a product has been installed and used by mobile operators. Any errors, defects or security vulnerabilities discovered in our products after commercial release could result in loss of revenues or delay in revenue recognition, loss of customers and increased service cost, any of which could adversely affect our business, operating results and financial condition. In addition, we could face claims for product liability, tort or breach of warranty, including claims relating to changes to our products made by our OEMs, system integrators or distributors. Our contracts with customers generally contain provisions relating to warranty disclaimers and liability limitations, which may be ineffective. Defending a lawsuit, regardless of its merit, is costly and may divert management's attention away from the business and adversely affect the market's perception of us and our products. In addition, if our business liability insurance coverage is inadequate or future coverage is unavailable on acceptable terms or at all, our operating results and financial condition could be adversely impacted.

We are susceptible to shortages or price fluctuations in our supply chain. Any shortages or price fluctuations in components used in our products could delay shipment of our products, which could materially adversely affect our business.

Shortages in components that we use in our products are possible and our ability to predict the availability of such components may be limited. Some of these components are available only from single or limited sources of supply. The process of qualifying alternate sources for components, if available at all, may be time consuming, difficult and costly. In addition, the lead times associated with certain components are lengthy and preclude rapid changes in quantity requirements and delivery schedules. Any growth in our business or the economy is likely to create greater pressures on us and our suppliers to project overall component demand accurately and to establish appropriate component inventory levels. In addition, increased demand by third parties for the components we use in our products may lead to decreased availability and higher prices for those components. We carry very little inventory of our products and product components, and we rely on our suppliers to deliver necessary components to our contract manufacturer in a timely manner based on forecasts we provide. We generally rely on purchase orders rather than long-term contracts with our suppliers. As a result, even if available, we may not be able to secure sufficient components at reasonable prices or of acceptable quality to build products in a timely manner, which would seriously impact our ability to deliver products to our customers, and our business, operating results and financial condition would be adversely affected.

We depend on a single contract manufacturer with whom we do not have a long-term supply contract, and changes to this relationship may result in delays or disruptions that could harm our business.

We depend on Plexus Corp., an independent contract manufacturer, to manufacture and assemble our products. We rely on purchase orders with our contract manufacturer and do not have long-term supply

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arrangements in place. As a result, our contract manufacturer is not obligated to supply products to us for any specific period, quantity or price. Our orders may represent a relatively small percentage of the overall orders received by our contract manufacturer from its customers. As a result, fulfilling our orders may not be considered a priority by our contract manufacturer in the event the contract manufacturer is constrained in its ability to fulfill all of its customer obligations in a timely manner.

It is time consuming and costly to qualify and implement a contract manufacturer relationship. Therefore, if our contract manufacturer suffers an interruption in its business, or experiences delays, disruptions or quality control problems in its manufacturing operations, or we have to change or add additional contract manufacturers, our ability to ship products to our customers would be delayed and our business, operating results and financial condition would be adversely affected.

If we fail to predict accurately our manufacturing requirements, we could incur additional costs or experience manufacturing delays that could harm our business.

We provide demand forecasts to our contract manufacturer. If we overestimate our requirements, our contract manufacturer may assess charges or we may have liabilities for excess inventory, each of which could negatively affect our gross margins. Conversely, because lead times for required materials and components vary significantly and depend on factors such as the specific supplier, contract terms and the demand for each component at a given time, if we underestimate our requirements, our contract manufacturer may have inadequate materials and components required to produce our products, which could interrupt manufacturing of our products and result in delays in shipments and deferral or loss of revenues.

If we fail to retain our key personnel, we may not be able to achieve our anticipated level of growth and our business could suffer.

Our future depends, in part, on our ability to attract and retain key personnel, including the continued contributions of our executive officers and other key technical personnel, each of whom would be difficult to replace. In particular, Ashraf M. Dahod, our president, chief executive officer and chairman is critical to the management of our business and operations, as well as the development of our strategic direction. The loss of services of Mr. Dahod or other executive officers or key personnel or the inability to continue to attract qualified personnel could have a material adverse effect on our business. Mr. Dahod is not a party to an employment agreement with us and, therefore, may terminate his employment with us at any time, with no advance notice. The replacement of Mr. Dahod would involve significant time and expense and may significantly delay or prevent the achievement of our business objectives.

Competition for our employees is intense, and we may not be able to attract and retain the highly skilled employees that we need to support our business.

Competition for highly skilled technical personnel is extremely intense and we continue to face difficulty identifying and hiring qualified personnel in many areas of our business. In particular, we face significant challenges hiring and retaining personnel in India for research and development activities because the market for such personnel is increasingly competitive. We may not be able to hire and retain such personnel at compensation levels consistent with our existing compensation and salary structure. Many of the companies with which we compete for hiring experienced employees have greater resources than we have and may be able to offer more attractive terms of employment. In addition, we invest significant time and expense in training our employees, which increases their value to competitors who may seek to recruit them. If we fail to retain our employees, we could incur significant expenses replacing employees and the quality of our products and services and our ability to provide such products and services could diminish, resulting in a material adverse affect on our business. Furthermore, in making employment decisions, particularly in high-technology industries, candidates often consider the value of the equity they are to receive in connection with their employment. Therefore, significant volatility in the price of our stock may adversely affect our ability to attract or retain personnel.

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Our international sales and operations subject us to additional risks that may adversely affect our operating results.

Over the last several years, we derived a significant portion of our revenues from customers outside the United States, and we continue to expand our international operations. As of December 31, 2008, approximately 62% of our employees were located outside of the United States, including 401 employees located in India. In addition, we have sales and technical support personnel in numerous countries worldwide. We expect to continue to add personnel in additional countries. Any continued expansion into international markets will require significant resources and management attention and will subject us to new regulatory, economic and political risks, and we cannot be sure that any further international expansion will be successful. Among the risks we believe are most likely to affect us with respect to our international operations are:

the difficulty of managing and staffing international offices and the increased travel, infrastructure and legal compliance costs associated with multiple international locations;

difficulties in enforcing contracts and collecting accounts receivable and longer payment cycles, especially in emerging markets;

our ability to comply with differing technical standards and certification requirements outside North America;

reduced protection for intellectual property rights in some countries;

new and different sources of competition;

internationalization of our products to meet local customs or the needs of local marketing organizations;

compliance with multiple, conflicting, and changing laws and regulations, including employment, tax, trade, privacy, and data protection laws and regulations;

laws and business practices, which may vary from country to country and may favor local competitors; and

tariffs and trade barriers, import/export controls and other regulatory or contractual limitations on our ability to sell or develop our products in certain foreign markets.

Our operating results and cash flows are subject to fluctuations due to changes in foreign currency exchange rates, particularly changes in the British pound sterling, the Euro and the Indian rupee. These fluctuations could negatively affect our operating results and could cause our net income or loss to vary from quarter to quarter. We do not currently engage in currency hedging activities to limit the risk of exchange rate fluctuations.

As we continue to expand our business globally, our success will depend, in large part, on our ability to anticipate and effectively manage these and other risks associated with our international operations. Our failure to manage any of these risks successfully could harm our international operations and reduce our international sales, adversely affecting our business, operating results and financial condition.

We may need additional capital in the future, which may not be available to us on favorable terms, or at all, and may dilute your ownership of our common stock.

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We have historically relied on outside financing and cash from operations to fund our operations, capital expenditures and expansion. We may require additional capital from equity or debt financing in the future to:

take advantage of strategic opportunities including more rapid expansion of our business or the acquisition of complementary products, technologies or businesses; and

develop new products or enhancements to existing products.

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We may not be able to secure timely additional financing on favorable terms, or at all. The terms of any additional financing may place limits on our financial and operating flexibility. If we raise additional funds through further issuances of equity, convertible debt securities or other securities convertible into equity, our existing stockholders could suffer significant dilution in their percentage ownership of our company, and any new securities we issue could have rights, preferences and privileges senior to those of holders of our common stock. If we are unable to obtain adequate financing or financing on terms satisfactory to us, if and when we require it, our ability to grow or support our business and to respond to business challenges could be significantly limited.

We may engage in future acquisitions that could disrupt our business, cause dilution to our stockholders and harm our business, operating results or financial condition.

We have, from time to time, evaluated acquisition opportunities and may pursue acquisition opportunities in the future. We have very little experience consummating acquisitions, and therefore our ability as an organization to make acquisitions is unproven. We may not be able to find suitable acquisition candidates and we may not be able to complete acquisitions on favorable terms, if at all. If we do complete acquisitions, we may not ultimately strengthen our competitive position or achieve our goals, or such acquisitions may be viewed negatively by customers, financial markets or investors. In addition, any acquisitions that we make could lead to difficulties in integrating personnel and operations from the acquired businesses and in retaining and motivating key personnel from these businesses. Acquisitions may disrupt our ongoing operations, divert management from day-to-day responsibilities, increase our expenses or adversely impact our business, operating results and financial condition. Future acquisitions may reduce our cash available for operations and other uses and could result in an increase in amortization expense related to identifiable assets acquired, potentially dilutive issuances of equity securities or the incurrence of debt, which could harm our business, operating results and financial condition.

If we fail to manage future growth effectively, our business could be harmed.

We have expanded our operations significantly since inception and anticipate that further significant expansion will be required. For example, our revenues increased from \$59.7 million in 2005 to \$254.1 million in 2008, and the number of our employees increased from 200 at the beginning of 2005 to 774 as of December 31, 2008. This growth has placed significant demands on our management, as well as our financial and operational resources. If we do not effectively manage our future growth, the efficiency of our operations and the quality of our products could suffer, which could adversely affect our business and operating results. To effectively manage this growth, we will need to continue to:

implement appropriate operational, financial and management controls, systems and procedures, including continued implementation of our enterprise-wide financial system;

expand our manufacturing capacity and scale of production;

expand our sales, marketing and distribution infrastructure and capabilities, in the United States and internationally; and

provide adequate training and supervision to maintain high quality standards.

Failure to maintain effective internal controls over financial reporting and disclosure controls and procedures could adversely affect our business and the market price of our common stock, and impair our ability to timely file our SEC reports.

The Sarbanes-Oxley Act requires, among other things, that we maintain effective internal control over financial reporting and disclosure controls and procedures. In particular, for the year ended December 31, 2008, we performed system and process evaluation and testing of our internal control over financial reporting to allow management and our independent registered public accounting firm to report on the effectiveness of our internal control over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act. Our compliance with

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Section 404 will continue to require that we incur substantial expense and expend significant management time on compliance-related issues. If we or our independent registered public accounting firm identify deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, the market price of our stock could decline and we could be subject to sanctions or investigations by the NASDAQ Stock Market, the Securities and Exchange Commission or other regulatory authorities, which would require additional financial and management resources.

Disruptions in financial markets may adversely impact availability and cost of credit and business and consumer spending patterns.

Disruptions in the financial markets have had and may continue to have an adverse effect on the U.S. and world economy, which could negatively impact business and consumer spending patterns. Current tightening of credit in financial markets also adversely affects the ability of our customers and suppliers to obtain financing for significant purchases and operations and could result in a decrease in or cancellation of orders for our products. In particular, the availability of financing may be critical to the expansion plans of mobile operators. Further, changes in employment and consumer spending patterns may slow the adoption of data-enabled wireless devices and reduce the growth of data traffic for mobile operators, which could result in delays or cancellations of upgrades and new purchases of our products. There is no assurance that government responses to the disruptions in the financial markets will restore business and consumer confidence, stabilize the markets or increase liquidity and the availability of credit.

We are subject to governmental export and import controls that could subject us to liability or impair our ability to compete in international markets.

Our products are subject to United States export controls and may be exported outside the United States only with the required level of export license or through an export license exception, because we incorporate encryption technology into our products. In addition, various countries regulate the import of certain encryption technology and have enacted laws that could limit our ability to distribute our products or could limit our customers' ability to implement our products in those countries. Changes in our products or changes in export and import regulations may create delays in the introduction of our products in international markets, prevent our customers with international operations from deploying our products throughout their networks or, in some cases, prevent the export or import of our products to certain countries altogether. Any change in export or import laws and regulations, shifts in approach to the enforcement or scope of existing laws and regulations, or change in the countries, persons or technologies targeted by such regulations, could result in decreased use of our products by, or in our decreased ability to export or sell our products to, existing or potential customers with international operations. Any decreased use of our products or limitation on our ability to export or sell our products would likely adversely affect our business, operating results and financial condition.

We are subject to U.S. laws and regulations that prohibit certain practices that may be common in certain foreign countries in which we operate; failure to adhere to these laws and regulations could negatively affect our business and operating results.

Our international operations are subject to certain U.S. laws and regulations applicable to us, including the Foreign Corrupt Practices Act. Moreover, local laws and customs in many countries differ significantly from those in the United States. In many foreign countries, particularly in those with developing economies, it is common for others to engage in business practices that are prohibited by our internal policies and procedures or United States regulations applicable to us. Although we implement policies and procedures designed to ensure compliance with these laws and policies, there can be no assurance that all of our employees, contractors and agents will not take actions in violation of them. Violations of laws or key control policies by our employees, contractors or agents could result in financial reporting problems, fines, penalties, or prohibition on the importation or exportation of our products and could adversely affect our business and operating results.

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Compliance with environmental matters and worker health and safety laws could be costly, and noncompliance with these laws could have a material adverse effect on our results of operations, expenses and financial condition.

Some of our operations use substances regulated under various federal, state, local and international laws governing the environment and worker health and safety, including those governing the discharge of pollutants into the ground, air and water, the management and disposal of hazardous substances and wastes, and the cleanup of contaminated sites. Some of our products are subject to various federal, state, local and international laws governing chemical substances in electronic products. We could be subject to increased costs, fines, civil or criminal sanctions, third-party property damage or personal injury claims if we violate or become liable under environmental and/or worker health and safety laws.

In January 2003, the European Union, or EU, issued two directives relating to chemical substances in electronic products. The Waste Electrical and Electronic Equipment Directive, referred to as WEEE, requires producers of electrical goods to pay for specified collection, recycling, treatment and disposal of past and future covered products. The deadline for enacting and implementing the WEEE directive was August 13, 2004, although extensions were granted in some countries. Producers became financially responsible under WEEE related legislation beginning in August 2005. The other directive, the Restriction on the use of certain Hazardous Substances, referred to as RoHS, restricts lead and other hazardous substances in electronic equipment placed on the EU market after July 1, 2006. If we fail to continue to comply with these directives, we may suffer a loss of revenues, be unable to sell our products in certain markets and countries, be subject to penalties and fines or suffer a competitive disadvantage. Similar legislation could be enacted in other jurisdictions, including in China, Japan or the United States, and the scope of new legislation with respect to currently unregulated substances is uncertain. Costs to comply with WEEE or RoHS related legislation or similar future legislation, if applicable, could include costs associated with modifying our products, recycling and other waste processing costs, legal and regulatory costs and insurance costs. We are currently in compliance with these directives; however, we have incurred significant costs related to compliance with current requirements. The costs to comply with current and future environmental and worker health and safety laws may have a material adverse effect on our results of operations, expenses and financial condition.

Risks Related to Our Intellectual Property

Our ability to compete and the success of our business could be jeopardized if we are unable to rely on our patent rights.

Our success and ability to compete depends in part upon our ability to obtain protection in the United States and other countries for our products by establishing and maintaining intellectual property rights relating to or incorporated into our technology and products. We own a variety of patents and patent applications in the United States and corresponding patents and patent applications in foreign jurisdictions. However, we have not obtained patent protection in each market in which we plan to compete. To date, our patent portfolio has not prevented other companies from competing against us, and we do not know how successful we would be if we sought to enforce our patent rights against suspected infringers. Our pending and future patent applications may not issue as patents or, if issued, may not issue in a form that will be advantageous to us. Even if issued, patents may be challenged, narrowed, invalidated or circumvented, which could limit our ability to stop competitors from marketing similar products or limit the length of term of patent protection we may have for our products. Changes in either patent laws or in interpretations of patent laws in the United States and other countries may diminish the value of our intellectual property or narrow the scope of our patent protection. Any circumstance or change that results in patent protection not being available for our products could adversely affect our business, financial condition and results of operations.

If we are unable to protect the confidentiality of our unpatented proprietary information and know-how, the value of our technology and products could be adversely affected.

In addition to patented technology, we rely upon unpatented proprietary technology, processes and know-how. We generally seek to protect this information in part by confidentiality agreements with our employees,

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consultants and third parties. These agreements may be breached, and we may not have adequate remedies for any such breach. In addition, our trade secrets may otherwise become known or be independently developed by competitors. If we are unable to protect the confidentiality of our proprietary information and know-how, the value of our technology and products could be adversely affected, which could in turn adversely affect our business, financial condition and results of operations.

Claims by others that we infringe their proprietary technology could force us to incur significant costs.

Third parties have asserted, and may assert in the future, claims that our products infringe patents or patent applications under which we do not hold licenses or other rights. Third parties may own or control these patents and patent applications in the United States and abroad. These third parties have brought, and could in the future bring, claims against us that would cause us to incur substantial expenses and, if successfully asserted against us, could cause us to pay substantial damages. Further, if a patent infringement suit were brought against us, we could be forced to stop or delay manufacturing or sales of the product that is the subject of the suit. In addition, we could be forced to redesign the product that uses any allegedly infringing technology.

We are presently defending two lawsuits brought by UTStarcom, Inc. In February 2005, UTStarcom filed a lawsuit asserting infringement of a patent in the United States District Court for the Northern District of California relating to a prepaid billing function we provided to one of our customers. This patent lawsuit by UTStarcom has been stayed pending a reissue proceeding of the patent asserted in the case. After the reissue proceeding, the stay of the lawsuit likely will be lifted and the lawsuit may proceed. If this occurs, we will continue to defend ourselves in this litigation, which will require a significant investment of time and financial resources. A finding that we have infringed this patent may require us to pay damages based on our past sale of the prepaid billing function and, in addition, may force us to limit or cease development, manufacturing and sales of the prepaid billing function. This could adversely affect our business, financial condition and results of operations.

In May 2007, UTStarcom filed a lawsuit against us and a number of our employees and former employees in the United States District Court for the Northern District of Illinois. UTStarcom has amended its complaint several times and, as amended, alleges in the re-filed version of its Fourth Amended Complaint violations of the Illinois Trade Secrets Act, conspiracy to misappropriate trade secrets, infringement of patents assigned to UTStarcom, intentional interference with UTStarcom's business relations and declarations of ownership relating to one of our patents and certain of our patent applications, copyright infringement, breach of restrictive covenants against the employee and former employee defendants, and aiding and abetting the employee and former employee defendants' breach of fiduciary duty of loyalty and the employment agreements. The complaint contains allegations, among others, that a number of former employees of a business unit UTStarcom acquired, who subsequently worked for us, took UTStarcom's trade secrets with them and improperly used those trade secrets to develop, manufacture and market our 3G wireless products, and that such products incorporate UTStarcom confidential technical information, including UTStarcom's proprietary virtual private network and EV-DO features. UTStarcom further alleges that we have disclosed UTStarcom's trade secrets in one of our patents and seven of our patent applications, and that this patent and these patent applications legally belong to UTStarcom based on the inventors' previous work at the business unit acquired by UTStarcom. In this lawsuit, UTStarcom seeks unspecified monetary damages, punitive damages, injunctive relief, declarations of ownership relating to the specified patent and patent applications owned by us, findings of misappropriation of trade secrets, patent infringement and copyright infringement, costs and attorneys fees. We intend to continue to vigorously defend ourselves in this litigation. The defense of this lawsuit and the prosecution of our counterclaims will require significant investment of time and financial resources. A finding in UTStarcom's favor in this lawsuit may require us to pay substantial damages based on the past sales of our ST16 product, may force us to pay royalties on past or future sales of our ST16 or ST40 products, may force us to limit or cease development, manufacturing and sales of the ST16 and ST40, which are our only product platforms, may require that key employees be transferred to other positions or functions, or temporarily prohibited from working for us, and may result in the loss or assignment of ownership of a specified patent and seven patent applications owned by us. This could adversely affect our business, financial condition and results of operations.

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We cannot assure you that in the future other third parties will not assert that our technology violates their intellectual property rights or that we will not be the subject of a material intellectual property dispute. Regardless of the merit of any particular claim that our technology violates the intellectual property rights of others, responding to such claims may require us to:

incur substantial expenses and expend significant management efforts;

pay damages;

cease making, licensing or using products that are alleged to incorporate the intellectual property of others;

enter into potentially unfavorable royalty or license agreements in order to obtain the right to use necessary technologies; and

expend additional development resources to redesign our products.

We may also be required to indemnify customers, distributors or systems integrators for their use of the intellectual property associated with the current suit or for other third-party products that are incorporated into our products and that infringe the intellectual property rights of others. If we are unable to resolve our legal obligations by settling or paying an infringement claim or a related indemnification claim as described above, we may be required to refund amounts that we had received under the contractual arrangement with the customers, distributors or systems integrators.

In addition to infringement claims against us, we may become a party to other types of patent litigation and other proceedings, including interference proceedings declared by the United States Patent and Trademark Office and opposition proceedings in the European Patent Office, regarding intellectual property rights with respect to our products and technology. The cost to us of any patent litigation or other proceeding, even if resolved in our favor, could be substantial. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace. Patent litigation and other proceedings may also require significant commitments of time by our management.

Our use of open source could impose limitations on our ability to commercialize our products.

We incorporate open source software into our products. Although we monitor our use of open source software closely, the terms of many open source licenses to which we are subject have not been interpreted by United States or foreign courts, and there is a risk that such licenses could be construed in a manner that imposes unanticipated conditions or restrictions on our ability to commercialize our products. In such event, we could be required to seek licenses from third parties in order to continue offering our products, to re-engineer our products or to discontinue sales of our products, any of which could materially adversely affect our business.

We rely on the availability of licenses for intellectual property from third parties, and if these licenses are not available to us on commercially reasonable terms, product sales and development may be delayed.

We incorporate certain third-party technologies, including software programs, into our products and may need to utilize additional third-party technologies in the future. However, licenses to relevant third-party technology may not continue to be available to us on commercially reasonable terms, or at all. Therefore, we could face delays in product releases until alternative technology can be identified, licensed or developed, and integrated into our current products. These delays, if they occur, could materially adversely affect our business.

Item 1B. Unresolved Staff Comments

Not applicable.

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Item 2. Properties

Our corporate headquarters is located in Tewksbury, Massachusetts, where we occupy an approximately 56,000 square foot facility under a lease expiring in February 2011 and 16,000 square feet in a separate facility under a lease expiring January 2013. We use these facilities for administration, research and development, as well as for quality control, testing and shipping of our products. We also own a building in Pune, India and lease a facility in Bangalore, India that we use for research and development activities.

We also lease sales and development offices in Buzzards Bay, Massachusetts; Chicago, Illinois; Overland Park, Kansas; Reston, Virginia; Redmond, Washington; Rio de Janeiro, Brazil; Toronto, Canada; Beijing, China; Tokyo, Japan; Mexico City, Mexico; Seoul, South Korea; Paris, France and London, United Kingdom. We believe that our current facilities are sufficient for our current needs. We intend to add new facilities or expand existing facilities as we add employees or expand our markets, and we believe that suitable additional or substitute space will be available as needed to accommodate any such expansion of our operations.

Item 3. Legal Proceedings

We are presently defending two lawsuits brought against us by UTStarcom, Inc. In February 2005, UTStarcom filed a complaint against us in the United States District Court for the Northern District of California seeking unspecified damages and injunctive relief. The complaint alleges infringement by us of UTStarcom's U.S. Patent No. 6,829,473, entitled "Roaming and Hand-Off Support for Prepaid Billing for Wireless Data Networks," which we refer to as the "473 patent." In May 2005, we answered the complaint, denied the infringement allegations contained in the complaint, and filed counterclaims against UTStarcom seeking a declaratory judgment that we did not infringe the "473 patent and that the "473 patent was invalid and unenforceable. In July 2005, we filed an amended answer and counterclaims to the "473 patent complaint. In December 2006, UTStarcom filed a reissue patent application relating to the "473 patent. In January 2007, by agreement of the parties, the District Court stayed the case pending the outcome of UTStarcom's reissue application relating to the "473 patent. In June 2007, we filed a request for *inter partes* re-examination of all claims of the "473 patent with the United States Patent and Trademark Office on sixteen different grounds. In August 2007, the Patent and Trademark Office granted our request for *inter partes* re-examination of all claims on all sixteen grounds. In November 2007, the Patent and Trademark Office merged the reissue and re-examination proceedings. A first office action was issued on December 22, 2008, and responses to the office action have been submitted. We believe that we have meritorious defenses against any resulting reissued patent, and we are prepared to vigorously defend the "473 patent case through trial.

In May 2007, UTStarcom filed an additional complaint against us and a number of our employees and former employees in the United States District Court for the Northern District of Illinois alleging violations of the Illinois Trade Secrets Act, infringement of five patents assigned to UTStarcom, intentional interference with UTStarcom's business relations and declarations of ownership relating to one of our patents and three of our patent applications. The complaint contains allegations, among others, that a number of former employees of a business unit UTStarcom acquired, who subsequently worked for us, took UTStarcom's trade secrets with them and improperly used those trade secrets to develop, manufacture and market our 3G wireless products, and that such products incorporate various UTStarcom confidential technical information, including UTStarcom's proprietary virtual private network and EV-DO features. UTStarcom further alleges that we have disclosed UTStarcom's trade secrets in one of our patents and three of our patent applications, and that this patent and these patent applications legally belong to UTStarcom based on the inventors' previous work at the business unit acquired by UTStarcom. In August 2007, we and the current and former employee defendants filed our answers to the complaint. We also filed counterclaims for tortious interference with prospective economic advantage, malicious prosecution, a declaration that the patents-in-suit are invalid and not infringed, and a declaration that one of the patents-in-suit is unenforceable due to inequitable conduct. In December 2007, UTStarcom filed an amendment to the complaint, which added new claims for declaration of ownership of four more of our patent applications, copyright infringement, breach of restrictive covenants against the employee and former employee defendants, and aiding and abetting the employee and former

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employee defendants' breaches of the duty of loyalty and the employment agreements. The amendment to the complaint also added another employee as a defendant. On January 4, 2008, we filed a motion to dismiss, or in the alternative for a more definite statement regarding, the trade secret, copyright, breaches of restrictive covenants, and aiding and abetting claims of the amendment to the complaint. UTStarcom filed its opposition to our motion on January 22, 2008, and we filed our reply on January 29, 2008. On May 20, 2008, the Court granted our motion, in part, and ordered UTStarcom to provide a more definite statement of its claims. On May 30, 2008, UTStarcom filed a Third Amended Complaint. On June 9, 2008, we moved to dismiss the trade secret, copyright, breaches of restrictive covenants, and aiding and abetting claims (Counts I, VI, and VIII-XV) of the Third Amended Complaint, for failure to comply with the Court's order to provide a more definite statement of those claims. On July 23, 2008, the Court granted our motion and dismissed the claims that were the subject of the motion. On August 1, 2008, UTStarcom filed a Motion for Leave to Amend the Complaint to Provide a More Definite Statement and Clarification of the 7/23 Order. On August 11, 2008, the Court granted UTStarcom leave to file a Fourth Amended Complaint. UTStarcom filed a Fourth Amended Complaint on August 27, 2008. In addition, on August 26, 2008, we filed a motion for summary judgment of noninfringement of U.S. Patent No. 7,173,905, which the Court has taken under advisement. On August 27, 2008, UTStarcom filed a motion to dismiss our third, fourth, and fifth counterclaims for unenforceability of the asserted patents, tortious interference with prospective economic advantage, and malicious prosecution, respectively.

We filed a motion to strike and dismiss the Fourth Amended Complaint on September 15, 2008. The Court granted our motion to strike the Fourth Amended Complaint on September 24, 2008, and, on the same day, granted UTStarcom leave to re-file the version of the Fourth Amended Complaint which was previously attached as an exhibit to its motion for leave to amend the complaint filed on August 1, 2008. UTStarcom re-filed this version of its Fourth Amended Complaint on September 25, 2008. We filed a motion to dismiss certain counts of UTStarcom's latest Fourth Amended Complaint on October 14, 2008. On December 5, 2008, the Court granted UTStarcom's motion to dismiss in part, dismissing our counterclaim for malicious prosecution and denying UTStarcom's motion to dismiss our third and fourth counterclaims for unenforceability of the asserted patents and tortious interference with prospective economic advantage. On January 6, 2009, we moved to amend our counterclaims to add a claim for trade secret misappropriation against UTStarcom. The Court granted this motion, and UTStarcom answered the counterclaim on January 26, 2009. The Court has set a ruling date of March 4, 2009 on our motion to dismiss certain counts of UTStarcom's Fourth Amended Complaint. Discovery is proceeding. No trial date has been set. In this lawsuit, UTStarcom seeks unspecified monetary damages, punitive damages, injunctive relief, declarations of ownership relating to the specified patent and patent applications owned by us, findings of misappropriation of trade secrets, patent infringement and copyright infringement, costs and attorneys fees. We believe we have meritorious defenses to each of UTStarcom's claims in this lawsuit and we are prepared to vigorously defend the lawsuit.

In addition, we are subject to other legal proceedings, claims and litigation arising in the ordinary course of business. Defending lawsuits requires significant management attention and financial resources and the outcome of any litigation, including the matters described above, is inherently uncertain. We do not, however, currently expect that the ultimate costs to resolve pending matters will have a material adverse effect on our consolidated financial position, results of operations or cash flows.

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

No matters were submitted to a vote of our security holders through solicitation of proxies or otherwise, during the fourth quarter of the fiscal year ended December 31, 2008.

Table of Contents**PART II****Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities. Market Information for Common Stock**

Our common stock commenced trading on the NASDAQ Global Market under the symbol STAR on June 6, 2007. The following table sets forth, for the periods indicated, the high and low reported sales prices of our common stock as reported on the Nasdaq Global Market:

	High	Low
2007		
Second quarter (from June 6, 2007)	\$ 17.00	\$ 13.29
Third Quarter	\$ 24.11	\$ 13.55
Fourth Quarter	\$ 31.67	\$ 16.02
2008		
First Quarter	\$ 17.39	\$ 10.97
Second Quarter	\$ 18.24	\$ 10.50
Third Quarter	\$ 14.00	\$ 11.56
Fourth Quarter	\$ 12.70	\$ 7.60

On February 23, 2009, the last sale price of our common stock as reported on the NASDAQ global market, was \$13.86.

Dividend Policy

We have never paid or declared any cash dividends on our common stock. We currently intend to retain earnings, if any, to finance the growth and development of our business, and we do not expect to pay any cash dividends on our common stock in the foreseeable future. Payment of future dividends, if any, will be at the discretion of the board of directors and will depend on our financial condition, results of operations, capital requirements, restrictions contained in current or future financing instruments and other factors the board deems relevant.

Stockholders

As of February 23, 2009, there were 240 holders of record of our common stock.

Equity Compensation Information

Information regarding our equity compensation plans and the securities authorized for issuance thereunder is set forth in Part III, Item 12 below.

Use of Proceeds from Registered Securities

In June 2007, we completed an initial public offering of common stock pursuant to a Registration Statement on Form S-1 (Registration No. 333-141092) which the SEC declared effective on June 5, 2007. Pursuant to the registration statement, we registered the offering and sale of an aggregate of 12,115,067 shares of our common stock, of which 10,580,226 shares were sold by us including 1,580,226 shares sold in connection with the underwriters' option described below, and 1,534,841 shares were sold by certain stockholders, at a price of \$12.00 per share. The underwriters exercised their option to purchase the additional 1,580,226 shares of our common stock at the initial public offering price of \$12.00 per share on June 8, 2007 and the offering closed on June 11, 2007. The underwriters for the offering were Goldman, Sachs & Co., Lehman Brothers, JPMorgan and Thomas Weisel Partners LLC.

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We raised a total of \$127.0 million in gross proceeds from the initial public offering, or approximately \$116.0 million in net proceeds after deducting underwriting discounts and commissions of \$8.9 million and other estimated offering costs of approximately \$2.1 million. The selling stockholders received a total of approximately \$18.4 million in gross proceeds from the initial public offering or approximately \$17.1 million of net proceeds after deducting the underwriting discounts. We have invested the remaining net proceeds in cash and cash equivalents, primarily money-market mutual funds. None of the remaining net proceeds were paid, directly or indirectly, to directors, officers, persons owning ten percent or more of our equity securities, or any of our other affiliates.

In October 2007, we completed a public offering of common stock pursuant to a Registration Statement on Form S-1 (Registration No. 333-146717) which the SEC declared effective on October 31, 2007. Pursuant to the registration statement, we registered the offering and sale of an aggregate of 8,000,000 shares of our common stock, of which 3,880,000 shares were sold by us and 4,120,000 shares were sold by certain stockholders, at a price of \$24.00 per share. The underwriters for the offering were Goldman, Sachs & Co., Lehman Brothers, JPMorgan and Thomas Weisel Partners LLC.

We raised a total of \$93.1 million in gross proceeds from the public offering, or approximately \$88.1 million in net proceeds after deducting underwriting discounts and commissions of \$4.4 million and other estimated offering costs. The selling stockholders received a total of approximately \$98.9 million in gross proceeds from the public offering or approximately \$94.2 million of net proceeds after deducting the underwriting discounts. We have invested the remaining net proceeds in cash and cash equivalents, primarily money-market mutual funds. None of the remaining net proceeds were paid, directly or indirectly, to directors, officers, persons owning ten percent or more of our equity securities, or any of our other affiliates.

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The following tables summarize our consolidated financial data for the periods presented. You should read the following selected consolidated financial data in conjunction with our consolidated financial statements and the related notes thereto and the Management's Discussion and Analysis of Financial Condition and Results of Operations section of this Annual Report.

We have derived the statement of operations data below for the years ended December 31, 2008, 2007 and 2006 and the balance sheet data as of December 31, 2008 and 2007 from our audited consolidated financial statements included in this Annual Report. We derived the consolidated financial data for the years ended December 31, 2005 and 2004 and as of December 31, 2006, 2005 and 2004 from our audited financial statements which are not included in this Annual Report. Our historical results for any prior period are not necessarily indicative of results to be expected for any future period.

	Year Ended December 31,				
	2008	2007	2006	2005	2004
	(in thousands)				
Statement of Operations Data:					
Revenues	\$ 254,076	\$ 145,797	\$ 94,350	\$ 59,660	\$ 34,395
Cost or revenues	55,989	38,363	27,726	13,643	13,445
Gross profit	198,087	107,434	66,624	46,017	20,950
Operating expenses:					
Research and development	51,557	38,868	25,980	18,107	13,303
Sales and marketing	71,526	46,434	30,311	19,785	18,445
General and administrative	22,824	15,340	8,515	7,352	3,185
Total operating expenses	145,907	100,642	64,806	45,244	34,933
Income (loss) from operations	52,180	6,792	1,818	773	(13,983)
Other income (expense), net	6,768	6,090	2,237	644	95
Income (loss) before income tax benefit (expense)	58,948	12,882	4,055	1,417	(13,888)
Income tax benefit (expense)	1,576	(1,413)	(413)	(513)	(160)
Net income (loss)	\$ 60,524	\$ 11,469	\$ 3,642	\$ 904	\$ (14,048)
Net income (loss) per share applicable to common stockholders:					
Basic	\$ 0.87	\$ 0.13	\$ (0.62)	\$ (0.97)	\$ (3.28)
Diluted	\$ 0.82	\$ 0.12	\$ (0.62)	\$ (0.97)	\$ (3.28)
Weighted-average shares used in computing net income (loss) per common share:					
Basic	69,497	40,901	7,026	6,642	6,197
Diluted	74,252	47,044	7,026	6,642	6,197
	As of December 31,				
	2008	2007	2006	2005	2004
	(in thousands)				
Balance Sheet Data:					
Cash, cash equivalents and short-term investments	\$ 369,351	\$ 233,599	\$ 60,154	\$ 37,489	\$ 20,819
Working capital	303,860	243,269	19,848	41,490	10,002

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Total assets	528,217	349,379	104,267	84,353	63,892
Indebtedness				33	197
Redeemable convertible preferred stock			130,270	122,282	97,043
Total stockholders' equity (deficit)	338,201	254,939	(105,511)	(103,202)	(97,092)

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

Overview

Starent Networks is a leading provider of infrastructure hardware and software products and services that enable mobile operators to deliver multimedia services to their subscribers. We have created hardware and software products that provide core network functions and services, including access from a wide range of radio networks to the operator's packet core network. Our products and services also provide management of subscriber sessions moving between networks and application of billing and other session policies. Our products and services provide high performance and system intelligence by combining significant computing power, memory and traffic handling capabilities with a flexible, high availability operating system and other proprietary software. Our products integrate multiple network functions and services needed for the delivery of advanced multimedia services, such as video, Internet access, voice-over-IP, e-mail, mobile TV, photo sharing and gaming.

Our products consist of both hardware and software and can be configured to meet a number of customer needs. We sell our products and services to mobile operators around the world both directly and indirectly through our relationships with original equipment manufacturers, or OEMs, system integrators and distributors.

In June 2007, we completed an initial public offering of our common stock in which we sold and issued 10,580,226 shares of our common stock, including 1,580,226 shares sold by us pursuant to the underwriters' full exercise of their over-allotment option, at a price of \$12.00 per share. We raised a total of \$127.0 million in gross proceeds from the initial public offering, or \$116.0 million in net proceeds after deducting underwriting discounts and commissions and other offering expenses. In connection with the initial public offering, all outstanding shares of our convertible preferred stock automatically converted into an aggregate of 44,287,985 shares of our common stock.

In November 2007, we completed an underwritten public offering of 8,000,000 shares of our common stock at a price to the public of \$24.00 per share. Of the shares sold in the offering, 3,880,000 shares were sold by us and 4,120,000 shares were sold by certain selling stockholders. We received total net proceeds from the November 2007 public offering of approximately \$88.1 million, after deducting underwriting discounts and commissions and offering expenses. We did not receive any proceeds from the sale of shares by the selling stockholders.

We maintain our corporate headquarters in Tewksbury, Massachusetts, and have sales and development offices in various locations worldwide. We conduct our research and development activities at two locations in India and two locations in the United States. As of December 31, 2008, we had 774 employees worldwide. Our revenues for the years ended December 31, 2008, 2007 and 2006 were \$254.1 million, \$145.8 million and \$94.4 million, respectively. Our net income for the years ended December 31, 2008, 2007 and 2006 was \$60.5 million, \$11.5 million and \$3.6 million, respectively.

Revenues

Our revenues consist of both product revenues and service revenues. We derive product revenues from the sale of our hardware products and the licensing of our software. Service revenues are generated from:

 maintenance and technical support associated with our software;

 hardware repair and maintenance services; and

 implementation, training and professional services.

We recognize revenue in accordance with Statement of Position, or SOP, 97-2, *Software Revenue Recognition* and SOP 98-9, *Modification of SOP 97-2, Software Revenue Recognition, With Respect to Certain Transactions*. Accordingly, revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred, the price is fixed or determinable and collection is probable.

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Mobile operators can purchase our products and license our software in various configurations, depending on their requirements for capacity, features and protocols. Typically, a mobile operator will use a small amount of equipment for testing and trial purposes and, once testing is complete, will purchase the necessary products to meet their initial capacity and feature requirements. As their capacity requirements increase, operators may purchase additional hardware or license additional software. The level of our sales is significantly influenced by the extent to which mobile operators make capital investments to enhance and expand their networks to provide multimedia services. Mobile operators' capital investments will be influenced by the demand for multimedia services by their customers.

We offer our products and services through our direct sales force to mobile operators and indirectly through relationships with OEMs, system integrators and distributors. The OEMs, system integrators and distributors generally purchase our products after they have received a purchase order from their customers and do not maintain an inventory of our products in anticipation of sales to their customers.

We believe our revenues will vary significantly from period to period as a result of the following:

Fluctuations in the timing of customer orders. Mobile operators require significant lead times to incorporate changes and enhancements into their networks to ensure the various network components are interoperable. These lead times and interoperability testing requirements result in an extended sales cycle and can lead to uneven purchasing patterns. In addition, our reliance on a relatively small number of customers contributes to the variability of our revenues.

The timing of revenue recognition in relation to the shipment of products. Our products contain software which is not incidental to our products. Therefore, we recognize revenue pursuant to the requirements of SOP 97-2. These requirements often cause us to defer recognition of revenue for a significant period of time after shipment, as a consequence of certain features of our customer arrangements (such as customer acceptance provisions), as well as the requirement that we establish company-specific evidence of the fair values of our products and services.

The variability of our revenues directly impacts our operating results in any particular period since a significant portion of our operating costs, such as personnel costs, depreciation expense and sales commissions are either fixed in the short term or may not vary proportionately with recorded revenues.

Cost of Revenues

Cost of revenues consists of costs of products sold and services provided. Cost of products consists primarily of payments to a third party manufacturer for purchased materials and services as well as internal costs, such as salaries and benefits related to personnel, provisions for inventory obsolescence, related overhead and share-based compensation. The use of an outsourced manufacturer enables us to conserve working capital, adjust to fluctuations in demand and provide for timely delivery to our customers. Cost of services consists primarily of salaries, benefits and share-based compensation related to professional services and technical support personnel, product repair costs, depreciation and related overhead.

Gross Profit

Our gross profit has been, and will be, affected by many factors, including the demand for our products and services, the average selling price of our products, which in turn depends on the mix of product configurations sold, new product introductions, the region of the world in which our customers are located, the volume and costs of manufacturing our hardware products and the cost associated with implementing our products in our customer networks.

Operating Expenses

Our operating expenses consist primarily of personnel costs, including salaries, commissions, bonuses, share-based compensation and related benefits and taxes; prototype costs related to the design and development

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of new products and enhancement of existing products; and consulting, travel and depreciation expenses. The expenses are classified into the following categories for reporting purposes: research and development, sales and marketing and general and administrative. The following is a brief description of the key types of expenses in each of these categories:

Research and development expense consists primarily of personnel costs, prototype costs, consulting services and depreciation. Research and development activities, including hardware and software development and quality assurance testing, primarily occur at two locations in the United States and two locations in India.

Sales and marketing expense consists primarily of personnel costs, consulting services, travel and marketing programs such as trade shows. Commissions are a significant component of our sales personnel costs and are recorded as expense when earned, which is not necessarily directly proportionate to the amount of revenues recorded.

General and administrative expense consists primarily of personnel costs related to our executive, finance, legal, human resource and information technology organizations, professional fees, insurance and other related overhead expenses.

Other Income (Expense)

Other income (expense) primarily consists of interest income earned on cash and short-term investments. We have historically invested our cash in money market funds and other short-term, high-grade investments.

Other income (expense) also includes gains (losses) from foreign currency transactions with international customers and our foreign subsidiaries. The functional currency of our foreign operations is the U.S. dollar. Accordingly, all assets and liabilities of these foreign subsidiaries are remeasured into U.S. dollars using the exchange rates in effect at the balance sheet date, with the exception of certain non-monetary items which are remeasured at historical rates. Revenues and expenses of these foreign subsidiaries are remeasured into U.S. dollars at the average rates in effect during the year.

Application of Critical Accounting Policies and Use of Estimates

Our financial statements are prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements and related disclosures require us to make estimates, assumptions and judgments that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ significantly from these estimates under different assumptions or conditions.

We believe that of our significant accounting policies, which are described in note 2 to the consolidated financial statements included in this Annual Report, the following accounting policies involve a greater degree of judgment and complexity. Accordingly, we believe these are the most critical to fully understand and evaluate our financial condition and results of operations.

Revenue Recognition

Our revenues are generated through fulfillment of contractual arrangements that contain multiple elements, including equipment with embedded software and services, such as installation, training, consulting and maintenance and support, or M&S. We recognize revenue in accordance with SOP 97-2 and SOP 98-9. Accordingly, revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred,

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the price is fixed or determinable and collection is probable. Certain of these requirements, most notably the customer acceptance terms generally included in our contracts and our need to establish fair values of our products and services based on facts specific to our operations, are critical to the timing and extent of our revenue recognition. As a result of these factors, the majority of our contractual arrangements result in the deferral of revenue and the time period for deferral may be significant. In addition, in certain circumstances, pricing considerations must be assessed to determine whether the price is fixed or determinable.

Product revenues consist of revenues from sales of our hardware and licensing of our software. Product sales generally include a perpetual license to our software. Product revenues are generally recognized at shipment or upon customer acceptance, if contractually required, assuming all other revenue recognition criteria are met. Typically, all of our products are sold along with product support services, which consist of software updates and product support. Software updates provide customers with rights to unspecified software product upgrades and to maintenance releases and patches released during the term of the support period. Revenues for support services are recognized on a straight-line basis over the service contract term, which is generally 12 to 24 months.

Pursuant to SOP 97-2, revenue is allocated to deliverables based on vendor specific objective evidence of fair value, or VSOE, when VSOE exists. Generally, all revenue for an arrangement is initially deferred when VSOE does not exist for any undelivered element and is subsequently recognized ratably over the contractual M&S period in cases when M&S is the only undelivered element. If VSOE exists for the undelivered elements, but not the delivered elements, revenue is recognized under the residual method set forth in SOP 98-9, which provides that revenue for the delivered elements is recognized based on the difference between the total arrangement fee and the VSOE of the undelivered elements. Revenue for the undelivered elements is then recorded as those elements are delivered. When we defer revenue in an arrangement, the related product costs are also deferred, subject to their realizability, and recognized in or over the same period as the related revenue.

The determination of VSOE is highly judgmental and is a key factor in determining whether revenue may be recognized or must be deferred and the extent to which it may be recognized once the various elements of an arrangement are delivered. We assess VSOE based on previous sales of products and services, the type and size of customer, renewal rates in contracts and the geographic location of the customer. We monitor VSOE on an ongoing basis. As noted above, most of our arrangements include multiple elements, some of which are delivered in or over future periods. Therefore, a change in our assessment of, or our inability to establish, VSOE for products or services may result in significant variation in our revenues and operating results.

Share-Based Compensation

We account for share-based compensation in accordance with Statement of Financial Accounting Standard, or SFAS, 123R, *Share-Based Payment*, which we adopted January 1, 2006. SFAS 123R requires companies to expense the fair value of employee stock options and other forms of share-based compensation. SFAS 123R requires nonpublic companies that used the minimum value method in SFAS 123 for either recognition or pro forma disclosures to apply SFAS 123R using the prospective-transition method. As such, we will continue to apply Accounting Principles Board, or APB, Opinion 25, *Accounting for Stock Issued to Employees*, and related interpretations in future periods to equity awards outstanding prior to the date of our adoption of SFAS 123R. In accordance with SFAS 123R, we recognize the compensation cost of share-based awards on a graded-vesting basis over the vesting period of the award. Effective with the adoption of SFAS 123R, we elected to use the Black-Scholes option pricing model to determine the weighted average fair value of stock options granted or modified.

We account for equity instruments issued to non-employees in accordance with the provisions of SFAS 123R (the requirements of which are consistent with those previously utilized under SFAS 123, *Accounting for Stock-Based Compensation*) and EITF Issue 96-18, *Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services*.

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Several key assumptions are made in determining the grant date fair value of our stock options, including: the grant date market value of our common stock, the rate of volatility, the risk-free interest rate and the rate of expected forfeitures. As there was no public market for our common stock prior to our initial public offering, the determination of the fair market value of our common stock was determined by our board of directors. Due to the limited trading history of our common stock, we have determined the volatility for options granted after January 1, 2006 based on an analysis of a combination of reported data for a peer group of companies that issued options with substantially similar terms and our historical data. The expected volatility of options granted has been determined using an average of the historical trading activity of our common stock, implied volatility and the historical volatility measures of this peer group of companies. The expected life of options has been determined utilizing the simplified method as prescribed by the SEC's Staff Accounting Bulletin No. 110, *Share-Based Payment*, resulting in an expected life for the years ended December 31, 2008, 2007 and 2006 of 6.25 years. The risk-free interest rate is based on a U.S. treasury instrument whose term is consistent with the expected life of the stock options. We have not paid, and do not anticipate paying, cash dividends on our shares of common stock; therefore, the expected dividend yield was assumed to be zero. In addition, SFAS 123R requires companies to utilize an estimated forfeiture rate when calculating the expense for the period. As a result, we applied an estimated forfeiture rate of 3%, based on a review of our historical forfeitures, to determine the expense recorded in our consolidated statements of operations. Significant changes in these assumptions, especially the expected life of options, forfeiture rate and volatility could have a significant impact on our results of operations.

For the year ended December 31, 2008, we recorded expense of \$16.5 million in connection with share-based awards. As of December 31, 2008, we had \$18.8 million of unrecognized expense related to non-vested stock awards that is expected to be recognized over a weighted average period of 1.4 years.

Inventory

We carry our inventory at the lower of historical cost or net realizable value assuming inventory items are consumed on a first-in, first-out basis. We recognize inventory losses based on obsolescence and levels in excess of forecasted demand. In these cases, inventory is written down to estimated realizable value based on historical usage and expected demand. Inherent in our estimates of market value in determining inventory valuation are estimates related to economic trends, future demand for our products and technical obsolescence of our products. If future demand or market conditions are less favorable than our projections, additional inventory write-downs could be required and would be reflected in the cost of revenues in the period the revision is made. To date, we have not been required to revise any of our assumptions or estimates used to determine our inventory valuations.

When products have been delivered to customers, but the product revenues associated with the arrangement have been deferred as a result of not meeting the revenue recognition criteria required by SOP 97-2, we defer the related inventory costs for the delivered items. The deferred costs for the delivered products are included in our inventory balances.

Income Taxes

We are subject to income taxes in both the United States and foreign jurisdictions and we use estimates in determining our provisions for income taxes. We account for income taxes in accordance with SFAS 109, *Accounting for Income Taxes*, which is the asset and liability method for accounting and reporting for income taxes. Under SFAS 109, deferred tax assets and liabilities are recognized based on temporary differences between the financial reporting and income tax bases of assets and liabilities using statutory rates. We provide for income taxes during interim periods based on the estimated effective tax rate for the full fiscal year, and record a cumulative adjustment to the tax provision in an interim period in which a change in the estimated annual effective tax rate is determined. There are many transactions and calculations about which the ultimate tax outcome is uncertain; as a result, our calculations involve estimates by management.

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The income tax accounting process involves estimating our actual current tax liability, together with assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included within our consolidated balance sheets. We must then assess the likelihood that our deferred tax assets will be recovered from future taxable income and, to the extent we believe that it is more likely than not that all or a portion of the deferred tax assets will not be realized, we must establish a valuation allowance as a charge to income tax expense.

As of the end of the second quarter of 2008, a full valuation allowance was recorded against our net deferred tax assets (consisting primarily of U.S. net operating loss, or NOL, carryforwards and tax credits). However, based upon our operating results over recent years and through September 30, 2008 as well as an assessment of our expected future results of operations, we determined in the third quarter of 2008 that it had become more likely than not that we would realize a substantial portion of our deferred tax assets in the U.S. As a result, we reduced our valuation allowance during the third quarter of 2008, which resulted in recognition of a deferred tax asset of \$8.6 million, a one-time income tax benefit of \$6.6 million and a \$2.0 million reserve for uncertain tax positions in the U.S., which was recorded in other long-term liabilities. The remaining valuation allowance of \$5.2 million was released in the fourth quarter of 2008 in accordance with the requirements under SFAS 109 to use an annualized effective tax rate for each interim period during the year in which a valuation allowance release has occurred, including any interim period after the valuation allowance release has been released. Significant management judgment was required to determine when the realization of our deferred tax assets was deemed more-likely-than-not. Had we not released the valuation allowance in 2008, we would have reported materially different results.

Income tax expense related to our international subsidiaries generally results from taxable income generated by the subsidiary pursuant to intercompany service agreements. We believe the compensation associated with these service agreements is reasonable in light of the level and nature of services performed by our subsidiaries. However, if a foreign tax jurisdiction or the Internal Revenue Service were to challenge these arrangements, we could be subject to additional income tax expense either in the United States or the foreign jurisdiction.

We have accumulated significant net operating losses since our inception in August 2000. Since the net operating losses have been and will be utilized to reduce taxable income, all of our tax years remain open to examination by the major taxing jurisdictions to which we are subject.

In accordance with SFAS No. 123R, our deferred tax assets do not include the excess tax benefit related to stock-based compensation in the amount of \$2.9 million as of December 31, 2008. Consistent with prior years, we use the with and without approach as described in EITF Topic No. D-32 in determining the order in which our tax attributes are utilized for book purposes. The with and without approach results in the recognition of the windfall stock option tax benefit through additional paid-in capital only after all of our other tax attributes have been considered in the annual tax accrual computation. In addition, we elected to account for the indirect benefits of stock-based compensation on items such as the research tax credit or the domestic manufacturing deduction through the consolidated statement of operations rather than through paid-in-capital.

On January 1, 2007, we adopted the provisions of FASB Interpretation, or FIN, No. 48, *Accounting for Uncertainty in Income Taxes, an interpretation of SFAS 109*. The new standard defines the threshold for recognizing the benefits of tax return positions in the financial statements as more-likely-than-not to be sustained by the taxing authorities based solely on the technical merits of the position. If the recognition threshold is met, the tax benefit is measured and recognized as the largest amount of tax benefit, in our judgment, which is greater than 50% likely to be realized. We did not recognize any change in our reserves for uncertain tax positions as a result of the adoption of this standard. At the adoption date of January 1, 2007, we had \$0.1 million of unrecognized tax benefits, the benefit of which, if recognized, would favorably affect the income tax rate in future periods. We recognize interest and penalties related to uncertain tax positions in income tax expense. At December 31, 2008, we had recorded a liability of \$2.9 million of unrecognized tax benefits, including accrued interest and penalties of \$0.2 million. If recognized, the benefit of \$2.5 million of this amount would favorably affect the income tax rate in future periods.

Table of Contents**Results of Operations***Revenues*

The following table sets forth our revenues by type and geographic location of our customers.

	Years Ended December 31,		Period-to-Period Change		Years Ended December 31,		Period-to-Period Change	
	2008	2007	\$	%	2007	2006	\$	%
(dollars in thousands)								
Revenues:								
Product	\$ 216,281	\$ 125,251	\$ 91,030	73%	\$ 125,251	\$ 81,061	\$ 44,190	55%
<i>Percentage of revenues</i>	85%	86%			86%	86%		
Service	37,795	20,546	17,249	84	20,546	13,289	7,257	55
<i>Percentage of revenues</i>	15%	14%			14%	14%		
Total revenues	\$ 254,076	\$ 145,797	\$ 108,279	74%	\$ 145,797	\$ 94,350	\$ 51,447	55%
Revenues by Customer Type:								
Direct	\$ 227,707	\$ 101,111	\$ 126,596	125%	\$ 101,111	\$ 46,964	\$ 54,147	115%
<i>Percentage of revenues</i>	90%	69%			69%	50%		
Indirect	26,369	44,686	(18,317)	(41)	44,686	47,386	(2,700)	(6)
<i>Percentage of revenues</i>	10%	31%			31%	50%		
Total revenues	\$ 254,076	\$ 145,797	\$ 108,279	74%	\$ 145,797	\$ 94,350	\$ 51,447	55%
Revenues by Geography:								
United States and Canada	\$ 230,425	\$ 110,137	\$ 120,288	109%	\$ 110,137	\$ 81,687	\$ 28,450	35%
<i>Percentage of revenues</i>	91%	76%			76%	87%		
Japan	14,386	19,395	(5,009)	(26)	19,395	4,227	15,168	359
<i>Percentage of revenues</i>	5%	13%			13%	4%		
Korea	7,542	13,171	(5,629)	(43)	13,171	662	12,509	1,890
<i>Percentage of revenues</i>	3%	9%			9%	1%		
Rest of world	1,723	3,094	(1,371)	(44)	3,094	7,774	(4,680)	(60)
<i>Percentage of revenues</i>	1%	2%			2%	8%		
Total revenues	\$ 254,076	\$ 145,797	\$ 108,279	74%	\$ 145,797	\$ 94,350	\$ 51,447	55%

Revenues increased \$108.3 million, or 74%, in the year ended December 31, 2008 compared to 2007, due to an increase in product revenues of \$91.0 million and an increase in service revenues of \$17.2 million. Product revenues, which include hardware and software, increased primarily due to product shipments in United States and Canada for which we received customer acceptances and recognized revenue in 2008 versus the same period in 2007 and, to a lesser extent, due to the higher sales price of our ST40 platform as compared to our ST16 platform. The decreases in revenues from Japan and Korea in 2008 compared to 2007 were primarily due to the delivery of specific software functionality in 2007 that did not recur in 2008, as described in the next paragraph. The \$17.2 million increase in service revenues for 2008 compared to 2007 was due to an increase in the amount of our products installed at mobile operators, which is generally the basis of maintenance and service fees. Direct revenues increased \$126.6 million, or 125%, primarily due to increased sales to existing customers and to the transition of certain customers formerly serviced through Nortel Networks to a direct relationship with us. The decrease in indirect revenues of \$18.3 million, or 41%, was primarily due to the transition of certain customers serviced through Nortel Networks to direct relationships, as discussed above.

Revenues increased \$51.4 million, or 55%, in the year ended December 31, 2007 compared to 2006, due to an increase in product revenues of \$44.2 million and an increase in service revenues of \$7.3 million. Product revenues increased due to sales to existing customers and to increased sales in Japan and Korea discussed below. Direct revenues increased primarily due to increased sales to existing customers and to the transition of certain customers formerly serviced through Nortel Networks to a direct relationship with us. The increase in revenues from Japan was due primarily to the recognition of revenue deferred in prior periods since we delivered previously committed

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software functionality during the quarter ended June 30, 2007. The increase in revenues from Korea was due to increased sales to existing customers and the recognition of \$5.5 million that was deferred at December 31, 2006 due to the delivery of committed specific software functionality during the first quarter of 2007. The \$7.3 million increase in service revenues for 2007 compared to 2006 was due to an increase in the amount of our products installed at mobile operators.

Cost of Revenues and Gross Profit

The following table sets forth our cost of revenues and gross profit.

	Years Ended December 31,		Period-to-Period Change		Years Ended December 31,		Period-to-Period Change	
	2008	2007	\$	%	2007	2006	\$	%
(dollars in thousands)								
Cost of revenues:								
Product	\$ 39,974	\$ 29,064	\$ 10,910	38%	\$ 29,064	\$ 25,640	\$ 3,424	13%
<i>Percentage of related revenues</i>	18%	23%			23%	32%		
Service	16,015	9,299	6,716	72	9,299	2,086	7,213	346
<i>Percentage of related revenues</i>	42%	45%			45%	16%		
Total cost of revenues	\$ 55,989	\$ 38,363	\$ 17,626	46%	\$ 38,363	\$ 27,726	\$ 10,637	38%
<i>Percentage of revenues</i>	22%	26%			26%	29%		
Gross profit:								
Product	\$ 176,307	\$ 96,187	\$ 80,120	83%	\$ 96,187	\$ 55,421	\$ 40,766	74%
<i>Product gross margin</i>	82%	77%			77%	68%		
Service	21,780	11,247	10,533	94	11,247	11,203	44	
<i>Service gross margin</i>	58%	55%			55%	84%		
Total gross profit	\$ 198,087	\$ 107,434	\$ 90,653	84%	\$ 107,434	\$ 66,624	\$ 40,810	61%
<i>Gross margin</i>	78%	74%			74%	71%		

Product gross margin increased five percentage points to 82% in 2008 as compared to 2007 due primarily to a higher proportion of software revenue and, to a lesser extent, the higher sales mix and average sales price of our ST40 platform as compared to our ST16 platform. We expect product gross margin to decrease somewhat due to the expansion of our customer base in certain geographic areas.

During 2008, the \$6.7 million increase in cost of services as compared to 2007 was primarily due to higher personnel costs, depreciation expense and overhead costs primarily related to the addition of 30 customer support and training personnel and eight operations personnel. Service gross margin increased three percentage points to 58% in 2008 as compared to the same period in 2007. The increase was due to an 84% increase in service revenues compared to a 72% increase in expenses. We anticipate cost of services will increase in future periods as we continue to expand our customer support organization geographically in future periods, which may result in somewhat lower service gross margins in future periods.

Product gross margin increased nine percentage points in 2007 as compared to 2006. The 2006 period included revenues that we recognized upon establishing VSOE for maintenance and support for a type of customer; however, the cost of products associated with this revenue was higher because the arrangement obligated us to provide certain products free of charge. This cost in conjunction with the lower average selling price for this OEM arrangement resulted in lower gross margin in 2006. In addition, in 2007, we transitioned certain mobile operators that were formerly serviced by a reseller to direct relationships, which resulted in higher average selling prices to us.

During 2007, the \$7.2 million increase in cost of services as compared to 2006 was primarily due to higher personnel costs, depreciation expense and overhead costs associated with additional customer support and training personnel that were added during late 2006 and in 2007.

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The following table sets forth our operating expenses.

	Years Ended December 31,		Period-to-Period Change		Years Ended December 31,		Period-to-Period Change	
	2008	2007	\$	%	2007	2006	\$	%
	(dollars in thousands)							
Research and development	\$ 51,557	\$ 38,868	\$ 12,689	33%	\$ 38,868	\$ 25,980	\$ 12,888	50%
<i>Percentage of revenues</i>	20%	27%			27%	28%		
Sales and marketing	71,526	46,434	25,092	54	46,434	30,311	16,123	53
<i>Percentage of revenues</i>	28%	32%			32%	32%		
General and administrative	22,824	15,340	7,484	49	15,340	8,515	6,825	80
<i>Percentage of revenues</i>	9%	11%			11%	9%		
Total operating expenses	\$ 145,907	\$ 100,642	\$ 45,265	45%	\$ 100,642	\$ 64,806	\$ 35,836	55%
<i>Percentage of revenues</i>	57%	69%			69%	69%		

Our operating expenses consist primarily of personnel costs, including salaries, commissions, bonuses, share-based compensation and related benefits and taxes; prototype costs related to the design and development of new products and enhancement of existing products; and consulting, travel and depreciation expenses. Personnel costs are our largest expense, representing \$92.0 million, or 63% of our total operating expenses for the year ended December 31, 2008; \$68.5 million, or 68% of our total operating expenses for the year ended December 31, 2007; and \$39.5 million, or 61% of our total operating expenses for the year ended December 31, 2006.

Research and development

The following table sets forth our research and development expenses.

	Years Ended December 31,		Period-to-Period Change		Years Ended December 31,		Period-to-Period Change	
	2008	2007	\$	%	2007	2006	\$	%
	(dollars in thousands)							
Research and development	\$ 51,557	\$ 38,868	\$ 12,689	33%	\$ 38,868	\$ 25,980	\$ 12,888	50%
<i>Percentage of revenues</i>	20%	27%			27%	28%		

Research and development expenses increased \$12.7 million, or 33%, in 2008 compared to 2007. The increase was due to increases in cash compensation of \$4.3 million, primarily due to the addition of 70 employees; higher depreciation expense of \$5.5 million related to our research and development capital expenditures primarily utilized in our quality assurance and customer lab testing facilities and higher consulting expense of \$2.3 million primarily related to the interoperability testing of our products with other vendors' network elements. In addition to the increases in expenses noted above, reimbursements for non-recurring engineering projects, which are recorded as a reduction of research and development expense, decreased by \$1.8 million in 2008 as compared to 2007. These increases in expenses were partially offset by lower prototype and related equipment expenses of \$2.5 million.

Research and development expenses increased \$12.9 million, or 50%, in 2007 compared to 2006. The increase was due to the increases in cash compensation of \$6.8 million, primarily related to the addition of 133 employees; share-based compensation of \$5.2 million, primarily related to the increase in the fair value of our common stock at the time the share-based awards were granted and our higher number of employees; and higher depreciation expense of \$1.1 million related to significant additions of quality assurance testing equipment, partially offset by lower amounts of various other expenses.

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We intend to continue to invest significantly in our research and development efforts, which we believe are essential to maintaining our competitive position. Accordingly, we anticipate personnel costs and depreciation expense to increase during 2009 as we continue to add quality assurance personnel and increase our test lab facilities. We expect research and development expenses will increase in absolute amount in 2009.

Sales and marketing

The following table sets forth our sales and marketing expenses.

	Years Ended December 31,		Period-to-Period Change		Years Ended December 31,		Period-to-Period Change	
	2008	2007	\$	%	2007	2006	\$	%
	(dollars in thousands)							
Sales and marketing	71,526	46,434	25,092	54%	46,434	30,311	16,123	53%
Percentage of revenues	28%	32%				32%	32%	

Sales and marketing expenses increased \$25.1 million, or 54%, in 2008 compared to 2007, but decreased as a percentage of revenues to 28%. This increase was due to higher cash compensation of \$13.2 million, primarily related to the addition of 44 employees and an increase in our sales commission expense of \$4.5 million; higher share-based compensation of \$1.9 million primarily due to the increase in the fair value of our common stock at the time the share-based awards were granted and our higher number of employees; higher consulting expense of \$2.3 million due to arrangements we have with third party consultants whose fees are earned as we receive orders from specific customers; higher demonstration expenses of \$2.1 million as a result of the expansion of our sales activities geographically and travel expenses of \$1.0 million due primarily to our employee additions.

Sales and marketing expenses increased \$16.1 million, or 53%, in 2007 compared to 2006, but remained at 32% of revenues. This spending increase was primarily due to the higher cash compensation of \$10.1 million, primarily related to the increase in sales commission expense and the addition of 19 employees; share-based compensation of \$2.5 million related to the increase in the fair value of our common stock at the time the share-based awards were granted and our higher number of employees; \$0.9 million higher consulting expenses and increased travel expenses of \$1.7 million. Consulting expenses increased primarily due to arrangements we have with third party consultants whose fees are earned as we receive orders from specific customers. The increase in travel expenses was due to our employee additions. All of these expense increases were due to the expansion of our direct sales force into additional geographic areas and at significant customer accounts to address market opportunities.

We anticipate continuing to increase the number of sales and marketing personnel we employ in future periods to expand our geographic presence, to address specific customer opportunities and to increase our revenues. The sales commission portion of sales and marketing personnel costs may vary significantly if our customer orders differ materially from the quotas established for our sales personnel.

General and administrative

The following table sets forth our general and administrative expenses.

	Years Ended December 31,		Period-to-Period Change		Years Ended December 31,		Period-to-Period Change	
	2008	2007	\$	%	2007	2006	\$	%
	(dollars in thousands)							
General and administrative	22,824	15,340	7,484	49%	15,340	8,515	6,825	80%
Percentage of revenues	9%	11%				11%	9%	

General and administrative expenses increased \$7.5 million, or 49%, in 2008 as compared to 2007. The increase was primarily due to higher cash compensation of \$2.9 million related to the addition of 12 employees; higher share-based compensation of \$0.7 million related to the increase in the fair value of our common stock at the time the share-based awards were granted and our higher number of employees; and an increase in professional fees of \$3.3 million due primarily to costs associated with pending litigation.

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General and administrative expenses increased \$6.8 million, or 80%, in 2007 as compared to 2006, primarily due to higher cash compensation of \$1.7 million, primarily related to the addition of 19 employees; share-based compensation costs of \$2.7 million related to the increase in the fair value of our common stock at the time the share-based awards were granted and our higher number of employees; and higher professional fees of \$1.3 million, consulting fees of \$0.9 million and insurance of \$0.5 million. The increase in professional fees was primarily due to costs associated with our defense in the UTStarcom litigation. Consulting fees increased primarily due to enhancements of our enterprise financial and support systems. The increase in insurance expense was due primarily to coverage changes associated with us becoming a publicly-traded company in June 2007.

We expect general and administrative expense to increase in future periods as we invest in infrastructure to support continued growth and incur additional costs related to operating as a publicly-traded company, including increased audit and legal fees, costs of compliance with securities and other regulations and investor relations. In addition, we expect to continue to incur costs associated with patent litigation discussed in Part I Item 3 Legal Proceedings .

Interest income