ADTRAN INC
Form 10-K
February 25, 2011

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K
FOR ANNUAL AND TRANSITION REPORTS
PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934

þ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the Fiscal Year Ended December 31, 2010

o **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the Transition Period from _____ to _____
Commission file number 0-24612
ADTRAN, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**63-0918200**
(*State of Incorporation*)	(*I.R.S. Employer Identification Number)*
901 Explorer Boulevard **Huntsville, Alabama 35806-2807**	**(256) 963-8000**
(Address of principal executive offices, including zip code)	(Registrant s telephone number, including area code)

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

Title of Each Class:	**Name of Each Exchange on which Registered**
Common Stock, par value $0.01 per share	NASDAQ Global Select Market

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

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

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

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 þ No o

Indicate by check mark whether the Registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulations S-T (232.405 of this chapter) during the preceding 12 months (or for shorter period that the Registrant was required to submit and post such files). Yes þ No o

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. o

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

Large Accelerated Filer þ Accelerated Filer o Non-accelerated Filer o Smaller Reporting Company o

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

The aggregate market value of the registrant s outstanding common stock held by non-affiliates of the registrant on June 30, 2010 was $1,693,956,687 based on a closing market price of $27.27 as quoted on the NASDAQ Global Select Market. There were 64,540,754 shares of common stock outstanding as of February 17, 2011.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement for the Annual Meeting of Stockholders to be held on May 4, 2011 are incorporated herein by reference in Part III.

ADTRAN, Inc.
Annual Report on Form 10-K
For the Fiscal Year Ended December 31, 2010
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PART I

ITEM 1. BUSINESS

Overview

ADTRAN, Inc. designs, manufactures, markets and services network access solutions for communications networks. Our solutions are widely deployed by providers of communications services (serviced by our Carrier Networks Division), and small and mid-sized enterprises (SMEs) (serviced by our Enterprise Networks Division), and enable voice, data, video and Internet communications across wireline and wireless networks. Many of these solutions are currently in use by every major United States and many global service providers, as well as by many public, private and governmental organizations worldwide.

We were incorporated under the laws of Delaware in November 1985, and commenced operations in January 1986. We are headquartered in Cummings Research Park in Huntsville, Alabama. The mailing address at our headquarters is 901 Explorer Boulevard, Huntsville, Alabama, 35806. The telephone number at that location is (256) 963-8000.

Products and Services

We maintain two operating divisions based on our product and service offerings: the Carrier Networks Division and the Enterprise Networks Division. These divisions serve two distinct markets and support sales globally, operating as two reportable segments. In 2010, sales of Carrier Networks products accounted for 78.6% of total revenue, while sales of Enterprise Networks products accounted for 21.4%. Sales to countries outside of the United States are included in these aggregate divisional figures, but when accounted for separately, comprise 5.3% of total revenue. For more financial information about these divisions and geographic areas, see Note 9 to the Consolidated Financial Statements included in this report.

Our Carrier Networks Division provides products and services used by service providers to deliver voice, data and video services to their customers premises and to mobile network cell sites. These products are located in central exchange offices or remote terminals, serving area interconnect locations and cell site locations for mobile networks.

Our Enterprise Networks Division provides products and services used by enterprise customers to construct voice, data and video networks within the customer s site or among distributed sites. Our combined product portfolio for both divisions consists of approximately 1,800 high-speed network access and communication devices. Our products typically connect two ends of a circuit and serve to transmit, route, and/or switch the data, voice, and/or video traffic traveling across that circuit. The bandwidth requirements of the circuit, along with the type of technology being used, determine the type of equipment needed.

Both of our divisions are positioned with product and service offerings that compete in many segments of the global telecommunications industry and, specifically, in the areas of Ethernet and Internet Protocol (IP) based networks. As networks migrate to IP-based architectures to deliver and utilize higher bandwidth services, ADTRAN® has strengthened its technologies in its primary growth areas: Broadband Access, Optical Access and Internetworking.

For a discussion of risks associated with our products see Risk Factors We must continue to update and improve our products and develop new products in order to compete and to keep pace with improvements in telecommunications technology , and Risk Factors If our products do not interoperate with our customers networks, installations may be delayed or cancelled, which could harm our business , in Item 1A of this report.

Network Access Infrastructure for Advanced Services

Networks are continuing to undergo a fundamental shift from circuit-based technologies to packet-based technologies, and converged networks are being implemented to address voice, video and data requirements in an effort to become more efficient. When voice was the dominant type of traffic in the network, networks were engineered to carry voice, integrating data into the architecture as necessary. Today, data is the dominant traffic type, and networks are evolving to increase bandwidth and transport data, voice and video in an integrated architecture. As networks migrate toward integrated communications and entertainment services, service providers and businesses alike are transitioning their networks to packet-based technologies, such as Ethernet and IP. We are well positioned to support both existing services and newer advanced services in the all integrated world of Ethernet and IP.

We develop, market, and support high-speed network access solutions for use across IP, Asynchronous Transfer Mode (ATM), and Time Division Multiplexed (TDM) architectures in both wireline and wireless network applications. Our solutions, including services and support, are used to deploy new broadband networks and to upgrade slower,

established networks using copper, fiber, and wireless technologies both in the United States and abroad.

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Our three major product categories are Carrier Systems, Business Networking and Loop Access.

Carrier Systems products are used by communications service providers to provide last mile access in support of data, voice and video services to consumers and enterprises. The Carrier Systems category includes our broadband access products comprised of Total Access® 5000 multi-service access and aggregation platform products, Total Access 1100/1200 Series Fiber-To-The-Node (FTTN) products, and Digital Subscriber Line Access Multiplexer (DSLAM) products. Our broadband access products are used by service providers to deliver high-speed Internet access, Voice over Internet Protocol (VoIP), IP Television (IPTV), and/or Ethernet services from the central office or remote terminal locations to customer premises. The Carrier Systems category also includes our optical access products. These products consist of optical access multiplexers including our family of OPTI products and our Optical Networking Edge (ONE) products. Optical access products are used to deliver higher bandwidth services, or to aggregate large numbers of low bandwidth services for transportation across fiber optic infrastructure. Total Access 1500 products, 303 concentrator products, M13 multiplexer products, and a number of mobile backhaul products are also included in the Carrier Systems product category.

Business Networking products provide access to telecommunication services, facilitating the delivery of converged services and Unified Communications to the SME market. The Business Networking category includes Internetworking products and Integrated Access Device (IAD) products. Internetworking products consist of our Total Access IP Business Gateways, Optical Network Terminals (ONTs), and NetVanta product lines. NetVanta products include multi-service routers, managed Ethernet switches, IP Private Branch Exchange (PBX) products, IP phone products, Unified Communications solutions, Unified Threat Management (UTM) solutions and Carrier Ethernet Network Terminating Equipment (NTE).

Loop Access products are used by carrier and enterprise customers for access to copper-based telecommunications networks. The Loop Access category includes products such as: Digital Data Service (DDS) and Integrated Services Digital Network (Total Reach) products, High bit-rate Digital Subscriber Line (HDSL) products including Total Access 3000 HDSL and Time Division Multiplexed-Symmetrical HDSL (TDM-SHDSL) products, T1/E1/T3, Channel Service Units/Data Service Units, and TRACER fixed wireless products.

In addition, we identify sub-categories of product revenues, which we divide into growth products, representing our primary growth areas, and traditional products. Our growth products consist of Broadband Access and Optical Access products (included in Carrier Systems) and Internetworking products (included in Business Networking) and our traditional products include HDSL products (included in Loop Access) and other products not included in the aforementioned growth products.

Carrier Networks

Carrier services continue to evolve to next generation networks, and carrier service providers are generating additional revenue by connecting greater numbers of customers to their infrastructure by offering broadband digital services. Our Carrier Networks Division supplies the network access products, services and support that these service providers require to connect their customers to core transmission and switching networks. Specifically, we deliver fiber and copper-based solutions that enable these types of services. Our customer base includes all of the Major Service Providers (which includes United States Incumbent Local Exchange Carriers (ILECs), Competitive Local Exchange Carriers (CLECs), and Cable MSOs), many independent operating companies, Utilities, Municipalities, major international carriers and wireless service providers. We have focused on opportunities in North America, with increasing emphasis on expanding into the Asia-Pacific region, Caribbean, Latin America, Europe, the Middle East and Africa.

Services enabled using our systems include traditional voice services, VoIP, IPTV, RF Video, high-speed Internet access and data services based upon Ethernet, frame relay, TDM, and ATM networks, connecting the network with user components such as switches, routers, gateways, IADs, PBXs, and telephone key systems. ADTRAN devices, deployed at the business site, are enabling carriers to provide Ethernet services to SMEs and distributed enterprises. Our solutions provide a complete end-to-end solution for carriers by supporting both new fiber-based infrastructure and also allowing them to reuse their existing copper infrastructure, lowering their overall costs to deploy advanced Ethernet services to SMEs and distributed enterprises.

Service Provider Networks

Telecommunications networks are transitioning from traditional TDM and circuit-switched technology to IP and Ethernet-based packet networks that offer services such as high-speed Internet access, VoIP, and IPTV. We design solutions that allow service providers to leverage existing network assets, by providing a migration path to new broadband technologies and services.

Continued competition from cable and wireless providers is forcing traditional wireline service providers to react with price incentives, service bundling, and network investments and modifications. ADTRAN products, services and support enable wireline providers to offer higher Internet access speeds as well as VoIP and IPTV. Our multi-service access and aggregation platforms are used to provide multi-Gigabit Ethernet capability, increasing rates within the access network. Our optical technologies enable subscriber access solutions for Fiber-To-The-Premises and FTTN architectures. To offer higher speed DSL services in support of delivering Internet access and IPTV, carriers are shortening copper loop lengths in order to increase bandwidth and gain a competitive advantage. Our multi-service access and aggregation platform and the FTTN series of outside plant DSLAM products are used to shorten copper loop lengths so that wireline providers can deliver higher-speed network services.

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Our products marketed under the Total Access® brand fit the decentralized networking model that most carriers are using today both in the United States and abroad. Currently, these products comprise the flagship product line for the Carrier Networks Division and offer service providers a single platform that can accommodate demand for a variety of high-speed Internet, voice, data and video services from businesses and residential customers. These modular, scalable, and geographically distributed products offer advantages such as lower start-up costs, more flexible service deployment, greater network interface options, increased bandwidth, grow-as-you-go modularity, and centralized network management. We provide Total Access products that connect to fiber optic and copper network backbones, making them suitable for installation in many parts of the network and enabling deployment of a wide range of voice, video and data services around the world. The Total Access® products and other ADTRAN products are accepted by the USDA Rural Utilities Service (RUS) as suitable for use in RUS-financed telecommunications systems. Deployed in central offices, remote terminals, or multi-tenant units, the system encompasses carrier-class solutions for fiber and copper broadband multi-service access, DSL access, Carrier Ethernet access, and narrowband multi-service access.

Advanced IP Services

For wireline service providers, our broadband access products provide the ability to increase bandwidth and improve the quality of services to customers. These products are used in high-density central office applications, along with lower density applications that include remote terminals and outside plant deployments. Also, these products are available in models that are temperature hardened for use in harsh, outside-plant environments and provide support for Ethernet delivery of advanced IP services over fiber or copper as well as legacy TDM and ATM networks.

High-speed Residential Services

Designed with fiber deployment in mind, the ADTRAN Total Access 5000 provides high-capacity switching and bandwidth for ultra-broadband services. Optical Line Terminals (OLTs) provide either a full 2.5 Gbps of dedicated bandwidth per Passive Optical Network (PON) or up to 1 Gbps per end user, enabling the delivery of advanced solutions like IPTV across an all-Ethernet architecture. ADTRAN s Total Access 300 series family of Optical Network Terminals (ONTs) provides carriers with different delivery options for residential, business and mobile backhaul opportunities. The Total Access 5000 offers the industry s most comprehensive set of broadband solutions from an all-Ethernet platform.

Our leading Total Access® DSLAMS allow service providers to realize ultra-broadband speeds over their existing copper infrastructure, economically securing the broadband connection to the home and enabling the delivery of advanced communications and entertainment services. Capabilities like Very-high-data-rate Digital Subscriber Line (VDSL2) and other technology enhancements that are actively being developed will help Service Providers overcome the challenge of using their existing copper facilities to compete with service offerings of 100Mb and higher without the need to invest in or overcome the obstacles associated with Fiber-to-the Premises (FTTP) architectures.

The Total Access® 1100 Series broadband access products provide an innovative approach to the successful deployment of FTTN architectures. Recognizing the technological and economic barriers of traditional cabinet-based DSL deployments, ADTRAN designed this product series to eliminate the need for expensive cabinet enclosures, heat exchangers and site construction, which account for a large portion of the total cost of deployment. In many cases, Total Access® 1100 Series DSLAMs can deliver FTTN-based services for significantly less than traditional cabinet-based systems. This allows carriers to more economically utilize the capacity of the existing copper network over the last mile.

Metro Ethernet Services

Metro Ethernet is growing with the proliferation of packet-based infrastructure in both enterprise and carrier networks. The implementation of Ethernet throughout the communications network provides benefits in equipment and operational savings. Gigabit speeds are increasingly becoming available throughout the access network, but they are far from being widespread. Ethernet s increasing presence throughout the network is driving costs down, further increasing availability to business customers. We provide Metro Ethernet Forum (MEF) compliant products that enable the delivery of these services.

ADTRAN has a complete portfolio of solutions for Carrier Ethernet services utilizing Fiber (EoF), Copper (EoCu) and TDM (EoTDM). These solutions enable cost-effective business Ethernet service delivery across all kinds of network infrastructure. The ADTRAN Total Access 5000 supports standards-based copper pair bonding of xDSL loops for

direct Ethernet service delivery. Leveraging a complete end-to-end solution with the NetVanta 800 and NetVanta 8000 Series of network termination equipment, the Total Access 5000 also offers an innovative approach to delivering Ethernet services by aggregating bonded copper, bonded circuits, and fiber while supporting multi-megabit rates for MEF certified carrier Ethernet circuits. This combination allows carriers to ubiquitously offer Ethernet services across the entire network, enabling new revenue-generating services for businesses.

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Optical Access

Optical Networking Edge (ONE) has been added to our product portfolio to enable high performance optical services at the edge of the network. The ADTRAN ONE solutions combine right sized core optical services like Wave Division Multiplexing (WDM), Scalable Carrier Ethernet, Optical Transport Node (OTN), and SONET/SDH with high-speed access services under the Total Access® 5000 multi-service access and aggregation platform.

Our OPTI® product family includes a multi-service provisioning platform, the OPTI-6100®, delivering high-speed Ethernet (addressing DS1/E1, DS3/E3, OC-3/STM-1, OC-12/STM-4, OC-48, and 10/100/1000Mb) connectivity and transport to cellular sites using a variety of fiber optic ring architectures. Our OPTI-3® fiber multiplexer provides OC-3 capacity in terminal mode and DS3 range extension applications. The OPTI-6100® MX (medium) chassis consolidates discrete optical and multiplexer network elements into one, small chassis that addresses DS1/E1, DS3/E3, STS-1, OC-3/STM-1 bandwidths, and Ethernet services delivery to the subscriber. Our OPTI-6100® LMX (large) chassis provides high-density termination options and utilizes many common modules from the other OPTI® chassis. The OPTI-6100® SMX (small) chassis provides a very compact chassis for low-density applications, with a variety of mounting options to meet unique customer requirements. Our solutions provide for optical transport in very compact enclosures for cell site traffic backhaul and feature single fiber operation for maximum facility utilization and integration with the ADTRAN Total Access® family of products and associated multiplexers.

All of these products enable wireless and wireline service providers to more efficiently handle network traffic by consolidating multiple circuits into a single facility, to upgrade their networks to support next-generation services, and to improve backhaul efficiency. These devices provide a migration path from TDM systems to Ethernet/IP networks and also support techniques for bonding multiple physical circuits into a single virtual circuit.

Business-class Services

HDSL is a common technique for delivering bandwidth at rates of 1.544 Mbps (known as the DS1 or T1 rate) for infrastructure support, business customer services, and wireless network mobile backhaul services. The T1 interface is universally accepted throughout the United States, and HDSL is the most common method of delivering the T1 interface in nearly every application. ADTRAN HDSL products are manufactured in a variety of configurations for use in every major DS1 deployment platform for voice and data services.

SHDSL products were developed to provide symmetrical solutions for the transport of high-speed business-class services. The International Telecommunications Union (ITU), Alliance for Telecommunications Industry Solutions (ATIS), and the European Telecommunications Standards Institute (ETSI) have established standards for 2-wire and 4-wire SHDSL solutions.

We contributed significantly to ITU, ATIS, and ETSI SHDSL standards. Because of this involvement, we delivered the industry s first SHDSL customer device. Our SHDSL products, like many of our products, are standards-based, which ensures interoperability with other standards-based products.

Service and Support

In addition to our product portfolio and standard pre- and post-sales technical support, the CN division offers a variety of professional services to provide customers with deployment, maintenance and management services. Deployment service offerings include engineering, installation, configuration, turn-up and test, training, and project management services, as well as pre-assembled and wired rack and cabinet assemblies. Maintenance services are designed to protect customers networks from unnecessary downtime such as managed spares, extended warranty, and remote or on-site technical support beyond standard warranty coverage. Management services facilitate remote management and monitoring of the service providers networks.

Network Management

As communications solutions and networks become more complex, the need for carrier-class management systems becomes vital to ensure operational efficiencies. A system level view is necessary and service awareness is increasingly important. We develop and support systems to centralize the configuration, provisioning, and management of our network access products. These systems are used to configure, monitor, and control ADTRAN equipment installed in the network. The systems ensure communication with the service provider s central management system to reduce technician dispatches and operating costs.

We have added the Advanced Operational Environment (AOE) set of products to provide integrated end-to-end service aware network management tools that enhance network planning, service activation, service assurance, and decision support tools for our customers operations. Our Total Access® Element Management System is an all-Java application that provides configuration, performance, network assurance, and provisioning functions for ADTRAN Total Access® products.

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Enterprise Networks

Our Enterprise Networks Division encompasses a comprehensive internetworking solutions portfolio that delivers converged services, Unified Communications (UC) and Unified Threat Management (UTM) to the SME market. Small and medium businesses and geographically dispersed enterprises use these products for their voice and data service requirements. Our carrier customers bundle our solutions into their service offerings for their SME customers. These products are typically installed in equipment rooms and wiring closets, to connect headquarters, branch offices, and telecommuters to the corporate voice and data infrastructure. A small to medium business generally refers to an organization with fewer than 500 employees. These organizations can be a single location or geographically dispersed with many locations, including home offices. These businesses and service providers use our internetworking products to implement a high performance, reliable network for converged services, Unified Communications and Unified Threat Management.

Marketed under the brand names Total Access® and NetVanta®, our solutions are known for their high performance, reliability and high availability making them the preferred solutions for the delivery of converged IP services. The Enterprise Network solutions portfolio provides the infrastructure required for a SME to utilize converged IP services, Unified Communications and Unified Threat Management. The solutions portfolio includes multi-service routers, managed Layer 2/3 switches, IP Business Gateways (IPBGs), FTTx ONTs, Wireless Access Points (WAPs), IP PBXs, IP phones, UC and security solutions. Our solutions enable the SME end user to migrate their existing infrastructure thus preserving their investment; or to replace their legacy system with an IP-based solution.

We view the development and continued evolution of our operating system as critical to our success in bringing to market feature-rich, highly reliable, high-performance solutions. As such, the ADTRAN Operating System (AOS) is common across our internetworking products, optimizing our product development resources and minimizing time to market for new products and features. It also ensures common configuration practices, policies, protection schemes, and management interfaces for our carrier customers providing a Total Cost of Ownership (TCO) advantage.

Our solutions and roadmaps are closely aligned with our customers strategic service offerings. Our solutions enable our customers to offer high-performance, feature-rich managed and unmanaged converged IP services (data, voice, unified communications and security features) to the SME. Our solutions offer a wide variety of LAN and WAN connectivity options, ranging from analog to fiber, supporting different geographic locations in their enterprise and wide area networks, as well as local area networks requiring switching, routing and voice capabilities. Many of the products available from the Enterprise Networks Division reach the SME end user through their service provider as these products are typically installed by the service provider at the customer premises as part of a bundled service package.

Data Solutions

ADTRAN multi-service routers move data between networked computers over public or private IP, Frame Relay, MultiProtocol Label Switching leased-line infrastructures or carrier-supplied Ethernet services. These devices include features to route traffic between multiple destinations, secure the network against cyber attacks, ensure the privacy of data as it is transported across the Internet, and restore communications in the event of equipment or network failure. ADTRAN multi-service routers provide Internet access and interconnect corporate locations and when deployed in the workgroup environment with our managed Layer 2 and Layer 3 (L2/L3) Ethernet switches provide connectivity from the WAN to the end user s desktop computer and IP Phone. ADTRAN s managed L2/L3 switches range in speeds up to multi-Gigabit and include Power over Ethernet (PoE) options.

Our NetVanta multi-service router products include both modular and fixed-configuration solutions. The NetVanta router portfolio offers a wide assortment of business-class features including: Quality of Service (QoS), Firewall, VPN, Network Performance Monitoring, Cable Diagnostics and Voice Quality Monitoring (VQM). These features enable carriers to offer the highest quality of service with a TCO advantage.

The ADTRAN NetVanta portfolio also includes wireless solutions for the SME market. With 802.11WiFi capabilities, the NetVanta 1335 multi-service access router with integrated WiFi and NetVanta 150 wireless access device address the increasing demands for wireless solutions, allowing businesses to streamline and improve operational efficiencies, expand customer service offerings, and increase flexibility for employees.

The NetVanta router portfolio supports 3G data services. The NetVanta 3G Network Interface Module (NIM) provides a wireless WAN capability for our NetVanta line of multi-service routers and provides a rapid, secure and cost-effective connectivity option when used in conjunction with one of our modular routers. A 3G data service allows customers to take advantage of flexible deployment options at broadband speeds from a single platform. The solution is ideal for a number of applications including use as a primary data service and/or a network failover option for SMEs.

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Voice Solutions

The network infrastructure for voice services, in recent years, has undergone a rapid evolution to an IP-based infrastructure, including the accelerated adoption of SIP trunking. SIP trunking is a packet-based service that dynamically consolidates all voice and data traffic over a single IP circuit and enables the SIP Service Provider to carry local, domestic and international long distance, and toll free calls, in addition to video, email, Internet, and other data. As a result, VoIP as a part of a converged services offering, represents an important revenue opportunity for service providers seeking to add new features, such as cloud applications and unified communications in order to retain and expand their subscriber base. ADTRAN Total Access and NetVanta IP Business Gateways (IPBGs) support this strategic direction, and are deployed by the service provider at the demarcation point on the customer premises. An ADTRAN IPBG combines the functionality of a voice gateway with a multi-service router and security features. Our products offer a highly integrated, cost-effective platform for delivering converged services to the SME customer.

Our Enterprise Networks Division solutions are widely regarded for their innovation, most notably our ability to integrate the functionality of multiple network elements into a single platform. This all-in-one strategy for the delivery of converged voice and data services enables a service provider to offer a SME customer converged services without the expense of replacing their current infrastructure, enabling the customer to migrate to a Hosted PBX service based on their timeline for investment. Supporting a SME s migration with a single platform provides the service provider with operational efficiencies, such as network management, and a TCO advantage.

The Enterprise Networks Division portfolio of voice products provides an industry-leading TCO advantage. Our voice products combine the highest level of feature integration with performance and reliability. This level of product innovation combined with our industry-leading warranty and product support enables the service provider an extended life cycle for our platforms in their customer s network.

Unified Communications and IP Telephony

Unified Communications (UC) solutions were added to the portfolio of ADTRAN Enterprise solutions in 2009, with the acquisition of Objectworld Communications Corporation, a Canadian-based company. Marketed under the name NetVanta Unified Communications, these solutions enable businesses with 75 to 2,000 employees to realize the benefits of UC. ADTRAN s NetVanta UC products deliver end-to-end unified communications that bridge the gap between telephony, desktop communications productivity and business processes. Referred to as Communications-Enabled Business Processes (CEBP), ADTRAN NetVanta UC solutions enable businesses with Microsoft Windows platforms to drive workforce productivity and improve customer service. ADTRAN s award-winning NetVanta UC Server enables CEBP while providing simplicity and value to businesses that want to make a smooth transition from simple telephony to a unified communications solution without sacrificing their PBX and Microsoft business systems investments. There are four platforms in the NetVanta UC solutions portfolio: NetVanta UC Server, NetVanta Business Application Server, NetVanta Enterprise Communications Server, and NetVanta Business Communications System.

The addition of UC solutions is a logical extension of our Enterprise portfolio enabling our customers to continue to look to ADTRAN as a total solution provider. Additionally, NetVanta UC solutions provide the flexibility to be customized and optimized to address the unique CEBP and customer service needs of a range of vertical markets such as banking, hospitality, education, healthcare, retail, and real estate.

ADTRAN s NetVanta 7000 Series is an innovative IP PBX solution with integration that results in a single box solution for small business communications needs. Scaling up to 100 users the NetVanta 7000 Series combines the features of an IP PBX with the functionality of an Ethernet switch, a multi-service router, security features and WAN connectivity.

At the end of 2010, ADTRAN expanded its solution portfolio further by entering the security market with the NetVanta 2000 Series of Unified Threat Management (UTM) security appliances. This UTM solution is a multi-tiered, security solution combining intrusion prevention, anti-virus and anti-spyware capabilities with application intelligence and control. ADTRAN s UTM product family enables end-user customers to combine high-performance, internetworking solutions with UTM to create a solution from, and supported by, a single vendor.

Configuration and Network Management

We develop and support network productivity tools and systems to centralize the configuration and management of our internetworking products. These tools aid in the management of networks powered by ADTRAN internetworking products and includes the nCommand MSP (Managed Service Provider) management platform. nCommand MSP streamlines a service provider s product life cycle management efforts including remote monitoring and management of ADTRAN NetVanta or Total Access solutions. A web-based platform, nCommand MSP simplifies new device deployment and enables Managed Service Providers, service providers and enterprise IT organizations to deliver on Service Level Agreements, improve customer service response times, reduce network downtimes and proactively monitor and report network performance, all while reducing operational costs.

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Service and Support

In addition to our product portfolio, we offer technical support services to help ensure that we are responsive to our customers who have deployed networking and infrastructure solutions. We provide pre- and post-sales technical support and a variety of training options. We offer installation and maintenance services designed to protect customers networks from unnecessary downtime. ADTRAN professional services, ADTRAN Custom Extended Services , branded as ACES, guarantees priority access to technical support engineers and on-site product replacement on a four-hour or next business day basis, depending on the service plan selected. Our service and support offerings are available to customers in both our Carrier Networks Division and Enterprise Networks Division.

Customers

We have a diverse customer base, which we segment based on the markets served, and typically within each of our two distinct divisions.

Customers of our **Carrier Networks Division** in the United States include Major Service Providers, independent telephone companies, competitive service providers, Internet service providers, Utilities, Municipalities, and wireless service providers.

The Carrier Networks Division also serves incumbent carriers and competitive service providers internationally in various regions.

Major Service Providers and many smaller providers require product approval prior to adopting a vendor s products for use in their networks. We are involved in a constant process of submitting new and succeeding generations of products for approval and ADTRAN products are widely deployed in these service provider networks.

Customers of our **Enterprise Networks Division** in the United States include Major Service Providers, independent telephone companies and competitive service providers. Additionally SME organizations purchase our solutions through a two-tier distribution channel. The two-tier distribution channel is comprised of several large distributor partners and an extensive network of value-added resellers (VARs) as described in Distribution, Sales and Marketing below. Furthermore, ADTRAN Enterprise solutions are deployed internationally in various regions. Vertical markets where our solutions are used include retail, food service, healthcare, finance, government, education, manufacturing, military, transportation, hospitality, and energy/utility.

Single customers comprising more than 10% of our revenue in 2010 include Qwest Communications International, Inc. at 20%, AT&T Inc. at 18%, and Verizon Communications, Inc. at 11%. The revenues from all of these customers are reported in both the Carrier Networks and Enterprise Networks segments. No other customer accounted for 10% or more of our sales in 2010.

For a discussion of risks associated with customers, service providers and approval processes, see Risk Factors The lengthy approval process required by major and other service providers for new products could result in fluctuations in our revenue , Risk Factors We depend heavily on sales to certain customers; the loss of any of these customers would significantly reduce our revenues and net income , and Risk Factors Consolidation and deterioration in the competitive service provider market could result in a significant decrease in our revenue , in Item 1A of this report.

Distribution, Sales and Marketing

We sell our **Carrier Networks** products in the United States through a combination of a direct sales organization and a distribution network. Our direct sales organization supports major accounts and has offices located throughout the United States. Sales to most competitive service providers and independent telephone companies are fulfilled through a combination of direct sales and major technology distribution companies such as KGP Logistics, Inc., Walker and Associates, Inc., and Power & Telephone Supply Company.

Prior to placing any orders, service providers require lengthy product qualification and standardization processes that can extend for several months or years. Orders, if any, are typically placed under single or multi-year supply agreements that are generally not subject to minimum volume commitments. Service providers generally prefer having two or more suppliers for most products, so individual orders are usually subject to competition based on some combination of total value, service, price, delivery, and other terms.

The majority of **Enterprise Networks** products are sold in the United States through a non-exclusive distribution network that consists, at the top level, of several major technology distributors, such as Walker and Associates, Inc., Ingram Micro, Inc., Jenne Distributors, Inc., Synnex Corporation and ScanSource, Inc. d/b/a Catalyst Telecom. These

organizations then distribute products to an extensive network of Value-Added Resellers (VARs), system integrators, and service providers.

VARs and system integrators may be affiliated with ADTRAN as channel partners, or they may purchase from a distributor in an unaffiliated fashion. Affiliated partners participate with us at various program levels based on sales volume and other factors to receive benefits such as product discounts, co-op advertising funds, technical support and training. We maintain field offices nationwide to support distributors, VARs and system integrators. The Enterprise Networks Division maintains a channel-based sales organization to manage our partners.

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A growing portion of our Enterprise Networks products are being sold to service providers for provisioning of hosted VoIP service offerings for SME branch office end users.

Outside of the United States, both Carrier and Enterprise products are sold through distribution arrangements customized for each region. Each region is supported by an ADTRAN field office that offers sales and support functions, and in some cases, warehousing and manufacturing support. In some regions, Carrier products are sold to carriers through our direct sales organization.

Our field sales organizations, distributors, and service provider customers receive support from headquarters-based marketing, sales, and customer support groups. Under certain circumstances, other headquarters personnel may become involved in sales and other activities.

Research and Development

Rapidly changing technologies, evolving industry standards, changing customer requirements, and continuing developments in communications service offerings characterize the markets for our products. Our continuing ability to adapt to these changes and to develop new and enhanced products that meet or anticipate market demand is a significant factor influencing our competitive position and our prospects for growth.

During 2010, 2009, and 2008, product development expenditures totaled $90.3 million, $83.3 million, and $81.8 million, respectively. Our product development activities are an important part of our strategy. Because of rapidly changing technology and evolving industry standards, we expect to sustain, and possibly increase, product development levels each year.

We strive to deliver innovative network access solutions that lower the total cost of deploying services, increase the level of performance achievable with established infrastructures, reduce operating and capital expense for our customers, increase network bandwidth and functionality, and extend network reach. Our development process is conducted in accordance with ISO 9001, TL 9000, and ISO 14001, which are international standards for quality and environmental management systems.

We develop most of our products internally, although we sometimes license intellectual property rights for use in certain products. Internal development gives us more control over design and manufacturing issues related to our products and closer control over product costs. Our ability to continually reduce product costs is an important part of our overall business strategy. Our product development efforts are often centered on entering a market with improved technology, allowing us to offer products at a price point lower than established market prices. We then compete for market share. We continually re-engineer successive generations of the product to improve our gross margin.

Product development activities focus on products to support both existing and emerging technologies in the telecommunications industry in segments of our markets that we consider viable revenue opportunities. We are actively engaged in developing and refining technologies to support data, voice, and video transport primarily over IP/Ethernet network architectures. Our work involves Ethernet transport, fiber optic transport, DSL transport (VDSL2, ADSL2+, ADSL, SHDSL, and HDSLx), access routing, Ethernet switching, integrated access, converged services, VoIP, network management, and professional services.

A centralized research function supports product development efforts company-wide. This group provides guidance to our various product design and engineering teams in digital signal processing technologies, computer simulation and modeling, CAD/CAM tool sets, custom semiconductor design, industry standards, and technological forecasting.

Many telecommunications issues, processes and technologies are governed by Standards Development Organizations (SDOs). These SDOs consist of representatives from various manufacturers, service providers, and testing laboratories working to establish specifications and compliance guidelines for emerging telecommunications technologies. We are an active participant in several SDOs, and have assisted with the development of worldwide standards in many technologies.

We continue to be involved in the evolution of Ethernet technology by participating in the Institute of Electrical and Electronics Engineers 802 LAN/MAN standards committee, the ITU-T and the MEF, which are standardizing technologies such as Carrier Ethernet traffic management, Ethernet Ring Protection Switching (ERPS), provider networking, Ethernet Operations, Administration and Management (OAM), and Connectivity Fault Management. In the past year, we have worked in the SDOs to bring more interoperability between GPON equipment. These efforts have included helping ATIS establish a new subcommittee focusing on optical access networks (NIPP-OAN) and

increasing our participation in GPON work in the Broadband Forum.

We are also involved in other standards development efforts related to maximizing the bandwidth potential of the copper pair to enable new applications. We contributed to the development of the VDSL2 ITU-Telecommunications (ITU-T) standard. Upon completion of the various wireline telecommunications standards, the industry-wide interoperability and performance testing requirements become the responsibility of the Broadband Forum (formerly DSL Forum). We have continued our contributions toward VDSL2 and ADSL2+ development through our work in the Broadband Forum.

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For a discussion of risks associated with our research and development activities, see Risk Factors We must continue to update and improve our products and develop new products in order to compete and to keep pace with improvements in telecommunications technology and Risk Factors We engage in research and development activities to improve the application of developed technologies, and as a consequence may miss certain market opportunities enjoyed by larger companies with substantially greater research and development efforts who may focus on more leading edge development , in Item 1A of this report.

Manufacturing and Operations

The principal steps in our manufacturing process include the purchase and management of materials, assembly, testing, final inspection, packing, and shipping. We purchase parts and components for the assembly of some products from a large number of suppliers through a worldwide sourcing program. In addition, we manage a process that identifies the components that are best purchased directly by contract manufacturers for use in the assembly of our products to achieve manufacturing efficiency, quality, and cost objectives. Certain key components used in our products are currently available from a single source, and other key components are available from only a limited number of sources. In the past, we have experienced delays in the receipt of certain key components, which has resulted in delays in related product deliveries. We attempt to manage these risks through developing alternative sources, by staging inventories at strategic locations, through engineering efforts designed to obviate the necessity of certain components, and by maintaining close contact and building long-term relationships with our suppliers.

We rely on subcontractors in Asia for assembly and testing of certain printed circuit board assemblies, sub-assemblies, chassis, enclosures and equipment shelves, and to purchase some of the raw materials used in such assemblies. We typically manufacture our low-volume, high-mix, or complex product assemblies at our manufacturing site in Huntsville, Alabama. We continue to build and test all new product prototypes and initial production units for our products in Huntsville, and later transfer the production of high-volume, low-mix assemblies to our subcontractors. Subcontract assembly operations can lengthen fulfillment cycle times, but we believe we can respond more rapidly to uncertainties in incoming order rates by selecting assembly subcontractors having significant reserve capacity and flexibility. We have consolidated our production to two subcontractors who have proven to be flexible and able to meet our quality requirements. We conduct the majority of all transactions with our foreign suppliers in United States currency.

Most shipments of products to customers occur from our facilities in Huntsville, Alabama. Our facilities are certified pursuant to the most current releases of ISO 9001, TL 9000, ISO 14001, and are Customs-Trade Partnership Against Terrorism certified. Our products are also certified to certain other telephone company standards, including those relating to emission of electromagnetic energy and safety specifications.

For a discussion of risks associated with manufacturing activities, see Risk Factors Our strategy of outsourcing a portion of our manufacturing requirements to subcontractors located in Asia may result in us not meeting our cost, quality or performance standards and Risk Factors Our dependence on a limited number of suppliers may prevent us from delivering our products on a timely basis, which could have a material adverse effect on customer relations and operating results , in Item 1A of this report.

Competition

We compete in markets for networking and communications equipment for service providers, businesses, government agencies, and other organizations worldwide. Our products and services support the transfer of data, voice and video across service providers fiber, copper, and wireless infrastructures, and across wide area networks, local area networks, and the Internet.

The markets for our products are intensely competitive. Numerous competitors exist in each of our product segments. Intense competitive conditions and recent declines in economic activity have resulted in competitor consolidations, bankruptcies and liquidations. Consumer acceptance of alternative communications technologies such as coaxial cable and cellular-based services that compete with our products has grown in recent years. Competition might further increase if new technologies emerge, new companies enter the market, or existing competitors expand their product lines.

For our **Carrier Networks Division**, factors influencing the markets in which we currently compete or may compete in the future include the ability to:

Help the customer solve networking problems within the confines of restrained capital budgets;
Offer globally competitive solutions against a different set of competitors than in the United States;
Deliver solutions that fit the distributed networking model being deployed by most service providers;
Deliver solutions for service provider networks as they increasingly focus on network transformation, convergence, and integration of services;
Deliver solutions at attractive price points;
Deliver reliability and redundancy, especially for higher bandwidth products;

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Adapt to new network technologies as they evolve;
Compete effectively against large firms with greater resources;
Deliver products when needed by the customer;
Deliver responsive customer service, technical support, and training; and
Assist customers requiring pre-assembled, turnkey systems and professional services.

Competitors of our Carrier Networks Division include large, established firms such as Alcatel-Lucent, Cisco Systems, Fujitsu Limited, Huawei, ZTE, Ericsson, Tellabs, and Nokia-Siemens. There are also a number of smaller, specialized firms with which we compete, such as Actelis, Hatteras, Zhone Technologies, Occam Networks, Calix Networks, and other privately held firms.

For our **Enterprise Networks Division**, factors influencing the markets in which we currently compete or may compete in the future include the ability to:

Satisfy the customer s need for a cost-efficient alternative to established internetworking suppliers;
Satisfy the customer s need to utilize the most cost-effective combination of transmission technologies to connect geographically dispersed locations;
Increase network performance and lower the customer s cost for communications services and equipment;
Add capacity and migrate to new or different technologies without a major system upgrade;
Continue to develop and support established platforms;
Offer products to address new networking technologies in a timely manner;
Deliver reliability and system backup, especially for higher bandwidth products;
Adapt to new network technologies as they evolve;
Deliver products when needed by the customer;
Deliver responsive customer service, technical support and training; and
Assist customers requiring hands-on installation and maintenance.

Competitors of our Enterprise Networks Division include Cisco Systems, Juniper Networks, Avaya, Hewlett Packard, Enterasys Networks, Extreme Networks, Allied Telesyn, and other smaller companies. Some of these companies compete in a single product segment, while others compete across multiple product lines.

For further discussion of risks associated with our competition, see Risk Factors We must continue to update and improve our products and develop new products in order to compete and to keep pace with improvements in telecommunications technology and Risk Factors We compete in markets that have become increasingly competitive, which may result in reduced gross profit margins and market share , in Item 1A of this report.

Backlog and Inventory

A substantial portion of our shipments in any fiscal period relate to orders received and shipped in that fiscal period for customers under agreements containing non-binding purchase commitments. Further, a significant percentage of orders require delivery within a few days. These factors normally result in very little order backlog or order flow visibility. We believe that because we fill a substantial portion of customer orders within the fiscal quarter of receipt, backlog is not a meaningful indicator of actual sales for any succeeding period.

To meet this type of demand, we have implemented advanced supply chain management systems to manage the production process. We maintain a substantial finished goods inventory. Our practice of maintaining sufficient inventory levels to assure prompt delivery of our products increases the amount of inventory that may become obsolete. The obsolescence of this inventory may require us to write down the value of the obsolete inventory, which may have an adverse effect on our operating results.

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Government Regulation

In the United States, our products must comply with various regulations and standards defined by the Federal Communications Commission and Underwriters Laboratories. Products sold internationally may be required to comply with regulations or standards established by telecommunications authorities in various countries, as well as those of certain international bodies. For instance, environmental legislation within the European Union (EU) may increase our cost of doing business internationally as we amend our products to comply with these requirements. The EU issued a Directive on the restriction of certain hazardous substances in electronic and electrical equipment (RoHS), enacted the Waste Electrical and Electronic Equipment (WEEE) Directive to mandate the funding, collection, treatment, recycling and recovery of WEEE by producers of electrical or electronic equipment into Europe, and enacted a regulation concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). We continue to implement measures to comply with the RoHS Directive, the WEEE Directive and the REACH Regulation as individual countries issue their implementation guidance.

For further discussion of risks associated with government regulation, see Risk Factors Our products may not continue to comply with the regulations governing their sale, which may harm our business and Risk Factors Regulatory and potential physical impacts of climate change may affect our customers and our production operations, resulting in adverse affects on our operating results , in Item 1A of this report.

Employees

As of December 31, 2010, we had 1,663 full-time employees in the United States and in our international subsidiaries located in Canada, Mexico, the Asia-Pacific region and Europe. None of our employees are represented by a collective bargaining agreement, nor have we ever experienced any work stoppage. We believe that our relationship with our employees is good.

We also utilize significant numbers of contractors and temporary employees in various manufacturing, engineering and sales capacities, domestically and internationally, as needed.

Intellectual Property

The ADTRAN corporate logo is a registered trademark of ADTRAN. The name ADTRAN is a registered trademark of ADTRAN. A number of our product identifiers and names also are registered. We also claim rights to a number of unregistered trademarks.

We have ownership of at least 264 patents related to our products and have approximately 126 additional patent applications pending, of which at least 5 have been approved and are in the process of being issued by the U.S. Patent and Trademark Office. The average remaining duration of our patents as of December 31, 2010 was approximately 12.7 years. We will continue to seek additional patents from time to time related to our research and development activities. We do not derive any material amount of revenue from the licensing of our patents.

We protect our intellectual property and proprietary rights in accordance with good legal and business practices. We believe, however, that our competitive success will not depend on the ownership of intellectual property, but instead will depend primarily on the innovative skills, technical competence, and marketing abilities of our personnel.

The communications industry is characterized by the existence of an ever-increasing volume of patent litigation and licensing activities. From time to time we receive and may continue to receive notices of claims alleging that we are infringing upon patents or other intellectual property. We cannot predict whether we will prevail in any claims or litigation over alleged infringements, or whether we will be able to license any valid and infringed patents, or other intellectual property, on commercially reasonable terms. It is possible that litigation may result in significant legal costs and judgments. Any intellectual property infringement claims, or related litigation against or by us, could have a material adverse effect on our business and operating results.

For a discussion of risks associated with our intellectual and proprietary rights, see Risk Factors Our failure to maintain rights to intellectual property used in our business could adversely affect the development, functionality, and commercial value of our products , in Item 1A of this report.

Available Information

A copy of this Annual Report on Form 10-K, as well as our Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and any amendments to these reports, are available free of charge on the Internet at our web site, www.adtran.com, as soon as reasonably practicable (generally, within one day) after we electronically file these

reports with, or furnish these reports to, the Securities and Exchange Commission (SEC). The reference to our web site address does not constitute incorporation by reference of the information contained on the web site, which information should not be considered part of this document. You may also read and copy any materials we file with the SEC at the SEC s Public Reference Room at 100 F Street, N.E., 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. The SEC maintains an Internet site (www.sec.gov) that contains our reports, proxy and information statements, and other information that we have filed electronically with the SEC.

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ITEM 1A. RISK FACTORS

The Private Securities Litigation Reform Act of 1995 provides a safe harbor for forward-looking statements made by or on behalf of ADTRAN. ADTRAN and its representatives may from time to time make written or oral forward-looking statements, including statements contained in this report and our other filings with the SEC and other communications with our stockholders. Generally, the words, believe, expect, intend, estimate, anticipate, w could and similar expressions identify forward-looking statements. We caution you that any forward-looking statements made by or on our behalf are subject to uncertainties and other factors that could cause these statements to be wrong. Some of these uncertainties and other factors are listed below. Though we have attempted to list comprehensively these important factors, we caution investors that other factors may prove to be important in the future in affecting our operating results. New factors emerge from time to time, and it is not possible for us to predict all of these factors, nor can we assess the impact each factor or combination of factors may have on our business.

You are further cautioned not to place undue reliance on those forward-looking statements because they speak only of our views as of the date the statements were made. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

The following are some of the risks that could affect our financial performance or could cause actual results to differ materially from those expressed or implied in our forward-looking statements:

Our operating results may fluctuate in future periods, which may adversely affect our stock price.

Our operating results have been and will continue to be subject to quarterly and annual fluctuations as a result of numerous factors. These factors include, but are not limited to:

- Fluctuations in demand for our products and services, especially with respect to significant network expansion projects undertaken by telecommunications service providers;
- Continued growth of communications network traffic and the adoption of communication services and applications by enterprise and consumer end users;
- Changes in sales and implementation cycles for our products and reduced visibility into our customers spending plans and associated revenue;
- Reductions in demand for our traditional products as new technologies gain acceptance;
- Our ability to maintain appropriate inventory levels and purchase commitments;
- Price and product competition in the communications and networking industries, which can change rapidly due to technological innovation;
- The overall movement toward industry consolidation among both our competitors and our customers;
- Our dependence on sales of our products by channel partners, the timing of their replenishment orders, the potential for conflicts and competition involving our channel partners and large end use customers and the potential for consolidation among our channel partners;
- Variations in sales channels, product cost or mix of products sold;
- Delays in receiving product acceptance from certain customers as defined under contract, for shipments near the end of a reporting period;
- Our ability to maintain high levels of product support;
- Manufacturing and customer order lead times;
- Fluctuations in our gross margin, and the factors that contribute to this as described below;
- Our ability to achieve cost reductions;
- The ability of our customers, channel partners, and suppliers to obtain financing or to fund capital expenditures;
- Our ability to execute on our strategy and operating plans;
- Benefits anticipated from our investments in engineering, sales and marketing activities;
- The effects of climate change; and

- The effects of political or economic conditions, terrorist attacks, acts of war, or other unrest in certain international markets.

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As a result, operating results for a particular future period are difficult to predict, and prior results are not necessarily indicative of results to be expected in future periods. Any of the above mentioned factors, or other factors discussed elsewhere in this document, could have a material adverse effect on our business, results of operations and financial condition that could adversely affect our stock price.

Our revenue for a particular period can be difficult to predict, and a shortfall in revenue may harm our operating results.

As a result of the many factors discussed in this report, our revenue for a particular quarter is difficult to predict and will fluctuate from quarter to quarter. Our typical pattern of customer orders requests product delivery within a short period following receipt of an order. Consequently, we do not typically carry a significant order backlog, and are dependent upon obtaining orders and completing delivery in accordance with shipping terms that are predominantly within each quarter to achieve our targeted revenues. Our net sales may grow at a slower rate than in previous quarters or may decline. Our ability to meet financial expectations could also be affected if the variable sales patterns seen in prior quarters recur in future quarters. We have experienced periods of time during which manufacturing issues have delayed shipments, leading to variable shipping patterns. In addition, to the extent that manufacturing issues and any related component shortages result in delayed shipments in the future, and particularly in quarters in which we and our subcontractors are operating at higher levels of capacity, it is possible that revenue for a quarter could be adversely affected, and we may not be able to remediate the conditions within the same quarter.

In the past, long manufacturing lead times have caused our customers to place the same order multiple times. This multiple ordering, along with other factors, may cause difficulty in predicting our sales and, as a result, could impair our ability to manage parts inventory effectively.

We plan our operating expense levels based primarily on forecasted revenue levels. These expenses and the impact of long-term commitments are relatively fixed in the short term. A shortfall in revenue could lead to operating results being below expectations because we may not be able to quickly reduce these fixed expenses in response to short-term business changes.

General economic conditions may reduce our revenues and harm our operating results.

Economic conditions in the latter part of 2008 and much of 2009 contributed to a slowdown in telecommunications industry spending, including specific market segments in which we operate. The potential reoccurrence of these trends and their duration and depth are difficult to predict. Capital spending for network infrastructure projects of our largest customers could be delayed or cancelled in response to reduced consumer spending, tight capital markets or declining liquidity trends. Sustained trends of this nature could have a material adverse affect