

[Table of Contents](#)

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K

For the fiscal year ended December 31, 2011

of

ARRIS GROUP, INC.

A Delaware Corporation
IRS Employer Identification No. 58-2588724
SEC File Number 000-31254

3871 Lakefield Drive
Suwanee, GA 30024
(678) 473-2000

Securities registered pursuant to Section 12(b) of the Act:
Common Stock, \$0.01 par value — NASDAQ Global Market System
Preferred Stock Purchase Rights — NASDAQ Global Market System

ARRIS Group, Inc. is a well-known seasoned issuer.

ARRIS Group, Inc. (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 and (2) has been subject to such filing requirements for the past 90 days.

Except as set forth in Item 10, ARRIS Group, Inc. is unaware of any delinquent filers pursuant to Item 405 of Regulation S-K.

ARRIS Group, Inc. is a large accelerated filer and is not a shell company.

ARRIS is required to submit electronically and post on its corporate web site interactive data files required to be submitted and posted pursuant to Rule 405 of Regulation S-T.

The aggregate market value of ARRIS Group, Inc.'s Common Stock held by non-affiliates as of June 30, 2011 was approximately \$1.4 billion (computed on the basis of the last reported sales price per share of such stock of \$11.61 on the NASDAQ Global Market System). For these purposes, directors, officers and 10% shareholders have been assumed to be affiliates.

As of January 31, 2012, 115,089,175 shares of ARRIS Group, Inc.'s Common Stock were outstanding.

Portions of ARRIS Group, Inc.'s Proxy Statement for its 2012 Annual Meeting of Stockholders are incorporated by reference into Part III.

[Table of Contents](#)

TABLE OF CONTENTS

		<u>Page</u>
	PART I	
ITEM 1.	Business	1
ITEM 1A.	Risk Factors	18
ITEM 1B.	Unresolved Staff Comments	24
ITEM 2.	Properties	24
ITEM 3.	Legal Proceedings	25
ITEM 4.	Mine Safety Disclosures	28
ITEM 4A.	Executive Officers and Board Committees	28
	PART II	
ITEM 5.	Market for Registrant's Common Equity, Related Stockholder Matters, Issuer Purchases of Equity Securities, and Stock Performance Graph	30
ITEM 6.	Selected Consolidated Historical Financial Data	32
ITEM 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	33
ITEM 7A.	Quantitative and Qualitative Disclosures About Market Risk	67
ITEM 8.	Consolidated Financial Statements and Supplementary Data	68
ITEM 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	68
ITEM 9A.	Controls and Procedures	68
ITEM 9B.	Other Information	68
	PART III	
ITEM 10.	Directors, Executive Officers, and Corporate Governance	119
ITEM 11.	Executive Compensation	119
ITEM 12.	Security Ownership of Certain Beneficial Owners, Management and Related Stockholders Matters	119
ITEM 13.	Certain Relationships, Related Transactions, and Director Independence	119
ITEM 14.	Principal Accountant Fees and Services	119
	PART IV	
ITEM 15.	Exhibits and Financial Statement Schedules	120
	Signatures	125

PART I

Item 1. Business

As used in this Annual Report, unless the context requires otherwise, “we,” “our,” “us,” “the Company,” and “ARRIS” refer to ARRIS Group, Inc. and our consolidated subsidiaries.

General

Our principal executive offices are located at 3871 Lakefield Drive, Suwanee, Georgia 30024, and our telephone number is (678) 473-2000. We maintain a website at www.arrisi.com. The information contained on our website is not part of, and is not incorporated by reference into this Form 10-K. On our website we provide links to copies of the annual, quarterly and current reports that we file with the Securities and Exchange Commission (“SEC”), Forms 3, 4, and 5 that our officers and directors file with the SEC, any amendments to those reports, and all Company press releases. Investor presentations also frequently are posted on our website. Copies of our code of ethics and the charters of our standing board committees also are available on our website. We will provide investors copies of these documents in electronic or paper form upon request, free of charge.

Glossary of Terms

Below are commonly used acronyms in our industry and their meanings:

Acronym	Terminology
AdVOD	Linear and Demand Oriented Advertising
ARPU	Average Revenue Per User
BEQ	Broadband Edge QAM
Cable VoIP	Cable Voice over Internet Protocol
CAM	Cable Access Module
CBR	Constant Bit Rate
CCAP	Converged Cable Access Platform
CLEC	Competitive Local Exchange Carrier
CMM	ConvergeMedia Management
CMTS	Cable Modem Termination System
CPE	Customer Premises Equipment
CVeX	Converged Video Exchange
CWDM	Coarse Wave Division Multiplexing
DBS	Digital Broadcast Satellite
DOCSIS®	Data Over Cable Service Interface Specification
DPI	Digital Program Insertion
DSG	DOCSIS Set-Top Gateway
DSL	Digital Subscriber Line
DVR	Digital Video Recorder
DWDM	Dense Wave Division Multiplexing
EBIF	Enhanced Binary Interface Format
EMTA	Embedded Multimedia Terminal Adapter
eQAM	Edge Quadrature Amplitude Modulator
FMC	Fixed Mobile Convergence
FPGA	Field Programmable Gate Arrays
FTTH	Fiber to the Home
FTTP	Fiber to the Premises
GAAP	Generally Accepted Accounting Principles
GHZ	Gigahertz
GPA	General Purchase Agreements
HDTV	High Definition Television
HFC	Hybrid Fiber-Coaxial

[Table of Contents](#)

<u>Acronym</u>	<u>Terminology</u>
IFRS	International Financial Reporting Standards
ILEC	Incumbent Local Exchange Carrier
IP	Internet Protocol
IPTV	Internet Protocol Television
Mbps	Megabits per Second
MOD	Movies on Demand
MPEG-2	Moving Picture Experts Group, Standard No. 2
MPEG-4	Moving Picture Experts Group, Standard No. 4
M-CMTS	Modular CMTS
MSO	Multiple Systems Operator
MSP	Media Services Platform
MTA	Multimedia Terminal Adapter
NGNA	Next Generation Network Architecture
NDVR	Network Digital Video Recorder
NPVR	Network Personal Video Recorder
NSM	Network Service Manager
NIU	Network Interface Unit
OLT	Optical Line Termination
ONU	Optical Network Unit
PC	Personal Computer
PCS	Post Contract Support
PCT	Patent Convention Treaty
PDA	Personal Digital Assistant
PON	Passive Optical Network
PSTN	Public-Switched Telephone Network
PVR	Personal Video Recorder
QAM	Quadrature Amplitude Modulation
QoS	Quality of Service
RF	Radio Frequency
RGU	Revenue Generating Unit
SCTE	Society of Cable Telecommunication Engineers
SDV	Switched Digital Video
SLA	Service Level Agreement
STB	Set Top Box
VAR	Value-Added Reseller
VOD	Video on Demand
VoIP	Voice over Internet Protocol
VPN	Virtual Private Network
VSOE	Vendor-Specific Objective Evidence

Overview

We are a global communications technology company, headquartered in Suwanee, Georgia. We operate in three business segments, Broadband Communications Systems, Access, Transport & Supplies, and Media & Communications Systems, specializing in integrated broadband network solutions that include infrastructure and CPE products as well as systems and software for content and operations management (including video on demand, or VOD) and professional services. We are a leading developer, manufacturer and supplier of telephony, data, video, construction, rebuild and maintenance equipment for the broadband communications industry. In addition, we are a leading supplier of infrastructure products used by cable system operators to buildout and maintain hybrid fiber-coaxial ("HFC") networks. We provide our customers with products and services that enable reliable, high speed, two-way broadband transmission of video, telephony, and data.

Industry Overview

MSOs have aggressively upgraded their networks, spending over \$100 billion during the past fifteen years in order to deliver and support enhanced voice and video services and enhanced data services, such as high speed data, telephony, high definition digital video and VOD.

By offering bundled packages of broadband services, these MSOs are seeking to gain a competitive edge over telephone companies and digital broadcast satellite (“DBS”) providers, and to create additional revenue streams. Delivery of enhanced services also has helped MSOs offset reduced subscribers and reduce their subscriber churn. To compete effectively against the DBS providers and telephone companies, MSOs have been upgrading and rebuilding their networks to offer digital video, which enables them to provide more channels and better picture quality than analog video. These upgrades to digital video also allow MSOs to deploy high definition television (“HDTV”) and interactive services such as VOD. VOD services require video storage equipment and servers, systems to manage increasing amounts of various types of content and complementary devices capable of transporting, multiplexing and modulating signals to individual subscribers over a network. Additionally, the delivery of HDTV channels requires significantly more bandwidth than the equivalent number of standard definition digital channels. This demand for additional bandwidth is a key driver behind many of the changes being made to the cable operators’ network, and the MSO investment in the products provided by ARRIS.

Demand for high speed data bandwidth on cable systems is increasing as content providers (such as Google, Yahoo, YouTube, Hulu, Facebook, Blockbuster, Netflix, movie and music studios, and gaming vendors) increasingly offer personalized content including video and “over the top”, i.e., via the Internet to multiple devices, in addition to offering their content via the secure video network of the MSOs. For example, broadcast network shows and user-generated content, such as video downloads, personalized web pages, and video and photo sharing, have become commonplace on the Internet. Likewise, cable operators are starting to offer their subscribers the option of accessing their subscription content “over the top” using a high speed data network, which has been dubbed “TV Everywhere” by some operators. MSOs are also experimenting with offering more content through the use of network-based personal video recorders (“nPVRs”), which move video storage from set tops into the network. This is expected to add more traffic and pressure on network capacity. Another bandwidth intensive service being offered by a major cable operator allows cable video subscribers to re-start programs on demand if they miss the beginning (“time-shifted television”). Television today has thus become more interactive and personalized, thereby increasing the demand on a service provider’s network. Further, the Internet has raised the bar on personalization with viewers increasingly looking for a “similar” experience across multiple screens – television, PC, tablet and phone, further increasing the complexity of providing these enhanced services. The integration and interaction of various social media capabilities with video viewing experience is another emerging trend that is likely to further increase complexity and require greater network bandwidth.

Cable operators are offering enhanced broadband services, including HDTV, digital video, interactive and on demand video services, IP Video, high speed data and voice over internet protocol (“VoIP”). We expect these enhanced broadband services will continue to attract new subscribers, and that cable operators will continue to invest in their networks to re-purpose network capacity to support increased customer demand for personalized services. In the access portion, or “last-mile,” of the network, operators will need to upgrade headends, hubs, nodes, and radio frequency distribution equipment to support increased bandwidth allocated to narrowcast or personalized content distribution. The increasingly personalized (i.e., narrowcast rather than broadcast) nature of much of the content on the network requires the operators to evolve their architecture; this often means driving fiber networks closer to the subscribers and reducing the number of subscribers sharing the same bandwidth “pipe.” We expect operators will take a scalable approach by performing these network upgrades as the new services are developed and deployed. In addition, many international cable operators have not yet completed the initial upgrades necessary to offer such enhanced broadband services and are expected to continue purchasing equipment to complete these upgrades.

Data and VoIP services provided by the MSOs are governed by a set of technical specifications promulgated by CableLabs® in North America and Cable Europe Labs® in Europe. While the specifications developed by these two bodies necessarily differ in a few details in order to accommodate the differences in HFC network

[Table of Contents](#)

architectures between North America and Europe, a significant feature set is common. The primary data standard specification for cable operators in North America is entitled Data over Cable System Interface Specification ("DOCSIS®"). Release 3.0 of DOCSIS® is the current governing standard for data services in North America. The parallel release for European operators is Euro-DOCSIS® Release 3.0. DOCSIS® 3.0 builds upon the capabilities of DOCSIS® 2.0 and dramatically increases the bandwidth that can be provided to the subscriber in both the downstream and upstream directions. DOCSIS® is also a key enabler of Video over IP where multiple channels can now be used to deliver video over a common network infrastructure.

MSOs are beginning to deploy early versions of Video over IP to connected consumer devices, and are evaluating options for augmenting their current Pay TV service with IP Video. These trends provide ARRIS with the opportunity to introduce new products and services in addition to our DOCSIS® Cable Modem Termination Systems (CMTS), cable modems and Embedded Multimedia Terminal Adapters (EMTAs) product lines. ARRIS is collaborating with MSOs to develop headend and home gateway devices to cost effectively enable this new service. It is anticipated that as MSOs migrate to IP video they will de-emphasize MPEG network capital expenditures, in particular set tops, in favor of IP gateways. This is expected to favor ARRIS as the Company currently does not participate in the set top box market, but did launch IP gateways in 2011.

In addition to the DOCSIS® standards that govern data transmission, CableLabs® has defined the PacketCable™ specifications for VoIP and multimedia over cable. These specifications define the interfaces between network elements such as CMTSs, EMTAs, gateways and call management servers to provide high quality Internet protocol ("IP") telephony over an HFC network.

MSOs have benefited from the use of standard technologies like DOCSIS® and PacketCable™. A key service offered by the MSOs, based on DOCSIS® and PacketCable™ standards, is cable telephony. Cable telephony allows MSOs to offer their customers local and long distance residential telephone service. PacketCable™ certified VoIP, or Cable VoIP, permits cable operators to utilize the ubiquitous IP protocol to deliver toll-quality cable telephony services. The broad adoption of Cable VoIP by the MSOs has usurped the deployment of data-only cable modems, as the customer premises devices that support VoIP also offer high speed data access on the same equipment. We are a leading supplier of both headend and customer premises equipment for VoIP services over cable. The demand for single family residential VoIP subscriber devices ("EMTA") has been robust since the technology was first introduced in 2003, and reached a steady state in 2009. Cable operators worldwide have adopted VoIP as the primary method to offer voice services. Price pressures are strong in this market and therefore revenue growth is not linear with unit growth. However, because of our current leadership position in this market, we expect to be able to maintain cost leadership and to lead in innovations that could expand the size of the market by creating demand in commercial, enterprise and multiple-dwelling unit applications. As penetration of high bandwidth services increases, the demand for higher speed DOCSIS 3.0 devices will continue to increase and a technology replacement cycle will gather momentum.

Our international business represented 31% of our sales in 2011 as operators in Europe, Latin America and Asia continued to evolve their networks to all-digital, expand their deployments of high definition channels and VoIP and add DOCSIS 3.0 ultra-high speed data services. These operators are confronted with competition from both direct broadcast satellite and telephone companies offering IPTV service. In addition, Netflix has launched OTT services in Europe, Southeast Asia and Latin America and others are expected to follow suit. Demand for our products has remained strong as these operators seek to compete against this onslaught of competition.

International markets have undergone considerable consolidation over the past several years. UPC in Europe has acquired operators in Poland, Germany and Belgium to augment its holdings in the Netherlands, the Czech Republic, Hungary, Austria and Romania. In Japan, a majority share of J-Com, the country's largest operator was acquired by the telephone service provider, KDDI, and efforts are underway to merge them with KDDI's other cable operation including JCN. The Chinese operators have begun a process of rationalization with multiple disparate operators being merged into provincial operations. In Latin America, TelMex has been on an acquisition track, purchasing cable operators in Colombia, Peru, Brazil, and Chile. As these consolidations have occurred so has the consolidation of operations, creating demand for newer, more modern equipment.

Our Strategy

Our long-term business strategy, "Convergence Enabled," includes the following key elements:

- Maintain a strong capital structure, mindful of our debt (which is likely to be required to be repaid in 2013), share repurchase opportunities and other capital needs including mergers and acquisitions.
- Grow our current business into a more complete portfolio including a strong video product suite.
- Continue to invest in the evolution toward enabling true network convergence onto an all IP platform.
- Continue to expand our product/service portfolio through internal developments, partnerships and acquisitions.
- Expand our international business and begin to consider opportunities in markets other than cable.
- Continue to invest in and evolve the ARRIS talent pool to implement these strategies.

To fulfill our strategy, we develop technology, facilitate its implementation, and enable operators to put their subscribers in control of their entertainment, information, and communication needs. Through a set of business solutions that respond to specific market needs, we are integrating our products, software, and services solutions to work with our customers as they address Internet Protocol telephony deployment, high speed data deployment, high definition television content expansion, on demand video rollout, operations management, network integration, and business services opportunities.

Specific aspects of our strategy include:

Providing a Comprehensive Line of Broadband Products. We offer a full range of high speed data, voice and video solutions including IP based headend and subscriber premises product, and fiber optic transmission and radio frequency products. These solutions transmit both radio frequency and optical signals in both directions over HFC networks between "the headend and the home."

Offering a Unified Video Platform for Linear and On Demand Services. We offer a unified video delivery platform that allows network operators to offer a full line of on demand and linear video services such as switched digital video, video on demand, dynamic digital advertising, video encoding and transcoding, and network based-personal video recorders. Using open industry standards, we help network operators build new systems and transition existing facilities.

Providing Integrated Software Solutions to Enhance Content and Operations Management. Our applications-oriented IP software allows cable operators to automate and proactively manage their networks to maximize quality of service and return on investment. Cable operators need enhanced network visibility, flexibility, and scalability to provide the latest services to their customers. Our modular, interoperable applications provide network operators with the subscriber management, content management, and network optimization and service assurance tools needed to efficiently manage and operate their networks.

Integrating Products, Content and Operations Management Systems, and Services for End-to-End Solutions. We integrate our expertise in products, content and operations management systems, and professional services to offer customer-focused applications for expanding network capacity, combining video on demand programming with dynamic advertisements, coordinating management of network devices and services with technicians in the field, controlling network traffic and verifying subscriber usage levels, and managing the full lifecycle for deploying voice over Internet services.

Expansion via Strategic Acquisitions. To further our strategy, in 2011 we acquired BigBand Networks, a provider of broadcast video processing systems and dense edge video modulation systems (QAMs). BigBand Networks is an innovator in video processing; pioneering switched digital video (SDV) services enabling operators to reclaim the bandwidth assigned to lightly used video channels and redeploy that bandwidth for more lucrative high speed data and video services. In 2009 we acquired EG Technologies, a manufacturer of video processing systems for the encoding, transcoding and transrating of IP-based digital video content. We also acquired Digeo, which had a portfolio of video-related technology. These acquisitions strengthened our portfolio of digital video technology and furthered our goal of providing a completely converged solution to our customers. In December 2007 we acquired C-COR Incorporated

[Table of Contents](#)

("C-COR"). As a result of these acquisitions, we have substantially increased our scale and critical mass, as well as achieved greater product breadth, enhanced customer diversity and a stronger patent portfolio. As the cable industry has continued to consolidate, supplier scale and product breadth have become increasingly important. We expect our increased product breadth and greater scale to be strategically relevant to our customers, thereby giving us an opportunity to capture a larger share of their spending. The ability to offer end-to-end solutions should enable us to optimize customer relationships and derive greater product pull through. We expect to regularly consider acquisition opportunities that could cost-effectively expand our technology portfolio or strengthen our market presence or opportunities.

Our Principal Products

A broadband cable system consists of three principal components:

- *Headend.* The headend is a central point in the cable system where signals are received via satellite and other sources. High capacity routers connect the Internet and public switched telephone networks to the local cable access network in the headend. The headend organizes, processes and retransmits signals through the distribution network to subscribers. Larger networks include both primary headends and a series of secondary headends or hubs.
- *Distribution Network.* The distribution network consists of fiber optic and coaxial cables and associated optical and electronic equipment that take the combined signals from the headend and transmits them throughout the cable system to optical nodes and ultimately the subscriber premises. The distribution network also collects requests and transmissions from subscribers and transports them back to the headend for processing and transmission.
- *Subscriber Premises.* Cable drops extend from multi taps to subscribers' homes and connect to a subscriber's television set, set-top box, gateways, telephony network interface device or high speed cable modem.

We provide cable system operators with a broad product offering for the headend, distribution network and subscriber premises. We divide our product offerings into three segments:

Broadband Communications Systems ("BCS"):

- VoIP and High-Speed Data products
 - CMTS Edge Router
 - 2-Line Residential EMTA
 - Multi-line EMTA for Residential and Commercial Services
 - Wireless Gateway
 - High speed data Cable Modems
- Video / IP products
 - CMTS Edge Routers
 - Broadband and Universal EdgeQAM
 - Whole Home Gateways and Media Players
- Video Processing products
 - Switched Digital Video Systems
 - IPTV Systems
Digital Video Encoders ,Transcoders, Transraters, and Statistical Multiplexers
 - MPEG and IP Video Stream slicing

[Table of Contents](#)

Access, Transport & Supplies (“ATS”):

- HFC plant equipment products
 - Headend and Hub products
 - Optical Transmitters
 - Optical Amplifiers
 - Optical Repeaters
 - Optical Nodes
 - Wi-Fi Access Points
 - ePON Optical Network Units
 - ePON Optical Line Terminals
 - RF over Glass (RFOG) Optical Network Units
 - Radio Frequency amplifiers
- Infrastructure products for fiber optic or coaxial networks built under or above ground
 - Cable and strand
 - Vaults
 - Conduit
 - Drop materials
 - Tools
 - Connectors
 - Test equipment

Media & Communications Systems (“MCS”):

- Media, Delivery and Monetization Platform
 - Video on Demand Management and Distribution
 - Linear and Advanced Advertising
- Operations Management Systems
 - Network and Service Assurance
 - Mobile Workforce Management
- Fixed Mobile Convergence Platform
 - Mobility Application Server (“MAS”) for continuity of services across wireless and PacketCable™ Networks
 - Voice Call Continuity (“VCC”) Application Server for continuity of services in IP Multimedia Subsystem (“IMS”) Networks
 - Convergence clients for smartphones

Broadband Communications Systems

Voice and Video over IP and High-Speed Data Products

Headend — The heart of a VoIP or data headend is a CMTS edge router. A CMTS, along with a call agent, a gateway, and provisioning systems, provides the ability to integrate the Public-Switched Telephone Network

[Table of Contents](#)

("PSTN"), high speed data services and IPTV over an HFC network. The CMTS provides many of the same capabilities found in a metro router, with the addition of the cable-specific interface functions to provide IP capability over the HFC network. The CMTS also is responsible for initializing and monitoring all cable modems, DOCSIS set tops, IP gateways and EMTAs connected to the HFC network. We provide two cable edge router products, the C4[®]CMTS and the C4c[™] CMTS, used in the cable operator's headend that provide VoIP, Video over IP, DOCSIS set top gateway signaling, and high speed data services to residential and business subscribers. The CMTS is a highly complex, reliable, real-time sensitive element of a carrier-grade broadband network, responsible for ensuring the quality of the services provided. Through the acquisition of BigBand Networks we have expanded our platform of headend products to include highly sophisticated switched video and IP video processing equipment that enable highly personalized video applications as well as various addressable advertising solutions.

During 2009, we introduced the C4c CMTS, a compact version of the C4 CMTS chassis that utilizes the same line cards as the large C4 CMTS. The C4c CMTS is an economical choice for smaller operators who want to upgrade to DOCSIS 3.0 wideband edge router services but do not need the density and capacity of the full C4 CMTS.

In 2010, we continued to add additional features to the CMTS product line along with significant development of second generation DOCSIS 3.0 line cards. In 2011, we introduced the 24U and 32D line cards for the C4 CMTS and C4c CMTS that doubled the capacity that can be provided by a single chassis. We have been deeply involved in the definition of a next generation edge access architecture, which now is called CCAP – Converged Cable Access Platform – by the industry. We commenced laboratory trials with a major customer using our CCAP platform, the E6000 cable edge router. The E6000 will provide a platform for scalable IPTV services over the HFC network.

Subscriber Premises — Subscriber premises equipment includes DOCSIS[®] certified cable modems for high speed data applications as well as Euro-DOCSIS[®] certified versions and PacketCable[™] Certified EMTAs for VoIP applications in both DOCSIS[®] and Euro-DOCSIS[®] networks. The PacketCable[™] solution builds on DOCSIS[®] and its quality of service enhancements to support lifeline telephony deployed over HFC networks. Our Touchstone[®] product line provides carrier-grade performance to enable operators to provide all data, telephony and video services on the same network using common equipment.

During 2009, we introduced the first generation of DOCSIS 3.0 customer premise voice and data modems. We dramatically expanded the portfolio in 2010, further increasing maximum speeds in excess of 300 Mbps, and advanced home networking capabilities to simplify installation and distribution of content throughout the premise. This allows cable operators to compete very favorably against telephone company fiber to the home. In 2011 we introduced a number of new devices which incorporate advanced Wi-Fi capabilities along with embedded routing functionality.

Video/IP Products

Headend — Digital video streams are bridged onto the HFC network using an edge multiplexer/modulator such as the D5[™] Universal Edge QAM. The D5[™] multiplexes digital video and IP data and modulates the signals for transmission on a cable service provider's HFC plant. The D5[™] Universal Edge QAM is compatible with DOCSIS[®] cable modems as well as MPEG-2 and MPEG-4 set-top boxes. The D5[™] Universal Edge QAM is ideal for service providers deploying video on demand and switched digital video ("SDV") services where many unicast channels are required.

With the BigBand acquisition, we have expanded our portfolio of QAM products to now include the BEQ platform and the next generation chassis-based MSP (Media Services Platform) QAM platform. The MSP is capable of providing multiple applications including edgeqam modulation and multiplexing, video grooming, and stream splicing, with industry-leading density and reliability.

Subscriber Premises — In 2011 we began shipping our advanced Moxi[®] Whole Home Solutions media gateways and media players supporting hybrid and full IP architectures. These gateways and players combine simultaneous use of feature-rich video and telephony services, multi-room DVR, Wi-Fi, DOCSIS(R) 3.0 data

[Table of Contents](#)

rates, and other services. The solution answers the demand for a single service provider offering that accommodates multi-room subscriber access to unicast and multicast content, whether via cable, over-the-top (“OTT”), or the subscriber’s personal media on their home network.

Video Processing Products

Headend — We market a line of MPEG digital video encoders and processors under the Encore[®], Quartet[®], HEMi[®] and VIPr[®] brands. Encore is designed to provide very high quality MPEG-2 digital video encoding and multiplexing. Quartet is designed to provide good quality, economical MPEG-2 encoding for regional channel digitization. HEMi provides a means to digitally encode several local analog channels, multiplex them into an existing MPEG stream and modulate the stream for inclusion in a digital service to multiple dwelling units and small headends. The VIPr platform is a multipurpose video processor providing HD-to-SD transcoding, transrating, rate shaping, and up to 4:1 HD channel statistical multiplexing. All of our video processing products are IP-based and address advanced digital video services.

Through our acquisition of BigBand Networks, we now market a line of Broadcast Media Routers and next generation Multiservice Platforms which provide operators with an economical way to process and transmit multiple channels of video thereby reclaiming substantial bandwidth on their networks. This reclaimed bandwidth can be repurposed by the operator to generate incremental revenue.

The BigBand portfolio also includes the CVeX (Converged Video Exchange) Switched Digital Video (SDV) platform that provides the control plane function for optimizing the use of HFC network bandwidth across multiple video program streams. This control plane can be extended into the IP domain and used for managing IP Video streams across a CMTS and EdgeQAM infrastructure.

Access, Transport & Supplies

The traditional HFC network connects a headend to individual residential and or business users through a progression of fiber optic and coaxial cables and a variety of electrical and optical devices that modulate, transmit, receive, and amplify the radio frequency and optical signals as they move over the network. The local HFC network consists of three major components: the headend and hubs, optical nodes, and the radio frequency plant. We offer product lines for all three components. The optics platforms support both coarse wave division multiplexing (“CWDM”), dense wave division multiplexing (“DWDM”) and Ethernet over Passive Optical Network (ePON) which provide more capacity per subscriber over existing infrastructures and provide state-of-the-art capacity for new networks.

Headend and Hubs

We offer a broad range of managed and scalable headend and hub equipment for domestic and international applications. The benchmark design of CHP[™] 5000 converged headend platform with advanced CWDM, DWDM and ePON technologies that lower the capital costs of delivering more bandwidth per subscriber while enabling network operators to increase their network capacity for advanced services, such as video on demand, high definition television, high speed Internet, and voice over Internet Protocol.

Optical Transmission

Optical transport continues to migrate deeper into the networks, closer to the customer driven both by competition and improving economics around optical technologies. We have put specific focus into supporting this migration with the development of advanced, multi-wavelength optical transmitters, optical amplifiers and optical repeaters. These platforms allow the operators to rapidly and significantly multiply the capacity of their existing fiber infrastructures and leverage them closer to the end user. These components are also essential elements of the rapidly evolving passive optical networks (“PON”) such as radio frequency over glass (“RFoG”) which leverages existing back office and customer premise equipment and ethernet passive optical networks (“ePON”) which provides gigabit data rates to commercial customers again utilizing existing optical infrastructures and DOCSIS[®] provisioning systems.

[Table of Contents](#)

Optical Nodes

The general function of the optical node in the local hybrid fiber coax network is to convert information from optical signals to electronic signals for distribution to the home or business. Our node series offers the performance service, segmentability, and cost efficiency required to meet the demands of the most advanced network architectures. Our nodes utilize scalable space and cost-saving technology that allows network operators to economically grow their infrastructure, minimizing capital expenditures while maximizing network service availability and performance.

During 2010, we introduced second generation CORWave I O-Band and CORWave II C-Band downstream optics platforms. These optical multiplexing platforms provide significantly higher physical densities and reduce powering requirements. CORWave platforms support the essential delivery of HD SDV, On Demand and business services on existing MSO fiber networks. These platforms also allow the MSOs to add significant capacity for new services while minimizing infrastructure investments and deployment timeframes. CORWave is an extension of the broadly deployed, field proven CHP CWDM optics that deliver more capacity over longer-link distances on existing fiber.

ePON Solutions

Commercial customers have gained increasing MSO focus in recent years. Commercial customers by their nature place greater demands on data networks than traditional residential customers, and ePON solutions address those demands. We have crafted headend optical line terminations ("OLT") to be compatible with the widely deployed CHP platform. The optical wavelengths are designed to co-exist in existing residential networks. The customer premise, optical network units ("ONU") have been created with a flexible feature set to meet the variety of commercial requirements and enable commercial customers access to gigabit speed data rates. Finally, these solutions are managed with DOCSIS control interfaces thus enabling the MSO to use existing residential customer management and provisioning systems.

RFoG Solutions

Radio frequency over glass ("RFoG") solutions utilize a subset of our headend and hub products, optical transmission products and newly available RFoG ONUs. These solutions allow the MSO to take fiber directly to the side of the customer premises while maintaining existing back office, headend and customer premise solutions. The ARRIS solution is also crafted to be compatible with an optical wave plan that allows it to co-exist in the same fiber infrastructure with traditional HFC and the newer ePON solutions.

Radio Frequency Products

The radio frequency amplifiers transmit information between the optical nodes and subscribers. These products come in various configurations such as trunks, bridgers, and line extenders to support both domestic and international markets. Our amplifiers use drop-in replacement modules to allow cost and time saving upgrades for the operators. Many of these amplifiers are complemented by optical nodes upgrade kits to provide a wide array of options for the operators to enhance the capacity of their networks.

Supplies

We offer a variety of products that are used by MSOs to build and maintain their cable plants. Our products are complemented by our extensive distribution infrastructure, which is focused on providing efficient delivery of products from stocking or drop-ship locations.

We believe the strength of our product portfolio is our broad offering of trusted name-brand products, strategic proprietary product lines and our experience in distribution. Our name-brand products are manufactured to our specifications by manufacturing partners. These products include taps, line passives, house passives and premises installation equipment marketed under our Regal® brand name; MONARCH® aerial and underground plant construction products and enclosures; Digicon® premium F-connectors; and FiberTel fiber optic con-

[Table of Contents](#)

nectivity devices and accessories. Through our product selection, we are able to address substantially all broadband infrastructure applications, including fiber optics, outside plant construction, drop and premises installation, and signal acquisition and distribution.

We also resell products from vendors, which include widely recognized brands to small specialty manufacturers. Through our strategic suppliers, we also supply ancillary products like tools, safety equipment, testing devices and specialty electronics.

Our customers benefit from our inventory management, fulfillment and logistics capabilities and services. These services range from just-in-time delivery, product “kitting,” specialized electronic interfaces, and customized reporting, to more complex and comprehensive supply chain management solutions. These services complement our product offerings with advanced channel-to-market and logistics capabilities, extensive product bundling opportunities, and an ability to deliver carrier-grade infrastructure solutions in the passive transmission portions of the network. The depth and breadth of our inventory and service capabilities enable us to provide our customers with single supplier flexibility.

Media & Communications Systems

We provide integrated, application-oriented software solutions for video delivery, operations management systems and fixed mobile convergence.

Video Delivery

Our comprehensive video service delivery platform consists of three key components (ConvergeMedia™ Manager, ConvergeMedia™ Distribution and AdManager™ Advertising) to enable delivery and monetization of media for operators, programmers and broadcasters. ConvergeMedia™ is designed to provide seamless media access across a wide variety of personal media devices and diverse networks.

ConvergeMedia™ Manager

Our on demand management system lets network operators manage all aspects of video on demand—the system, the content, and the business—from a single, integrated platform that gives real-time control and visibility to achieve maximum revenue. ConvergeMedia Management Suite (“CMM”), which is at the heart of our managed media platform, supports a complete range of interactive television services and provides an open architecture for rapid development and delivery of future media delivery services. In addition, CMM eliminates unnecessary manual intervention, simplifies operations, and reduces costs through a single platform and an accompanying set of processes to manage on demand service delivery at corporate, regional, and local levels, all in real time and across different video on demand delivery systems. Additionally this platform manages the robust delivery of content by ensuring operators can deliver a high level of quality of experience for managed and OTT content delivery models.

ConvergeMedia™ Distribution

Our media distribution portfolio comprises the ConvergeMedia™ XMS™ product line. This next generation server optimizes cost performance for robust video delivery over a wide range of customer applications, including movies on demand (“MOD”), subscription video on demand (“SVOD”), linear ad insertion, advertising-supported video on demand (“AdVOD”), network-based digital video recording (“NDVR”), network-based personal video recording (“NPVR”) and other time-shifted TV services. Moreover, XMS™ is able to deliver multimedia to a wide range of consumer electronics devices using standard video codecs, audio codecs, container formats and transport protocols.

AdManager™ Advertising

Using our digital program insertion (“DPI”), network operators can reach both digital and analog customers from one, cost-effective platform. This allows for a smooth, scalable transition from analog-only systems and helps raise revenues from a variety of advertising models, including high definition ad insertion with standard and high definition content, local and long form ads, and targeted advertising by geographic and demographic

[Table of Contents](#)

segment. Telescoping, a form of viewer selected advertising that integrates our linear ad insertion and VOD products, puts the consumer in control by allowing users to seek successive levels of detail about a given product or service being advertised.

Operations Management Systems

We provide a unified operations support system ("OSS") suite of products that allows customers to ensure high levels of service availability through offering visibility, analysis, and control to address their bandwidth management, network optimization and assurance, and automated workforce needs. This OSS suite provides a set of applications that support network operators' business and engineering needs by reducing the cost and complexity of managing standards-based (DOCSIS®) and hybrid fiber coax networks while speeding deployment of new Internet Protocol services in cable networks.

Network and Service Assurance

ARRIS ServAssure™ Network and Service Management Software helps MSOs monitor, collect and analyze the health and performance of their networks and services in real-time; allowing them to react proactively to immediate and on-going needs. Our integrated and modular solutions adapt easily to an MSO's existing infrastructure to help reduce the time to repair outages, minimize unnecessary truck rolls, and automate the management of revenue-generating services. We provide solutions that give MSOs a 360° real-time view of their networks. Our network and service assurance applications help MSOs monitor and manage device and service status across the entire network, proactively pinpoint outage locations and impact on subscribers, and forecast and plan for maximum network capacity.

Mobile Workforce Management

ARRIS WorkAssure™ Workforce Automation is a comprehensive field service management solution that combines the simplicity and sophistication of browser-based business applications with real-time connectivity to the mobile workforce through wireless data connections and mobile computing devices. By proactively managing service delivery and network integrity, MSOs recognize significant savings through improved productivity, fewer repeat calls and extensive reductions in the overall cost of non-revenue generating truck rolls. WorkAssure helps MSOs maximize service quality and customer retention.

Fixed Mobile Convergence ("FMC")

Our mobility and voice call continuity application servers provide a migration strategy for cable operators' digital voice services, allowing them to evolve their existing landline voice service into a fully-converged landline and wireless offering. Our convergence client software enables smart phones to seamlessly connect between wireless and wire line networks.

Sales and Marketing

We are positioned to serve customers worldwide with a sales and sales engineering organization complemented by a skilled technical services team. We maintain offices in California, Colorado, Connecticut, Georgia, Massachusetts, Oregon, Pennsylvania and Washington in the United States, and in Argentina, Brazil, Chile, China, Israel, Japan, Korea, Mexico, The Netherlands, and Spain. Our sales engineering team assists customers in system design and specification and can promptly be onsite to resolve any problems that may arise during the course of a project. Our technical services team provides professional services through experienced and highly skilled personnel who work with network operators to design and keep their networks operating at peak performance. Core competencies include network engineering and design, project management for launching advanced applications over complex broadband networks, and solutions to move today's sophisticated networks forward to Internet Protocol and digital services. Additionally, we provide 24x7 technical support, directly and through channel partners, as well as provide training for customers and channel partners, as required, both in our facilities and at our customers' sites.

[Table of Contents](#)

We have agreements in various countries and regions with value added resellers (“VARs”), sales representatives and channel partners that extend our sales presence into markets without established sales offices. We also maintain an inside sales group that is responsible for regular phone contact with the customer, prompt order entry, timely and accurate delivery, and effective sales administration.

Our marketing and product management teams focus on each of the various product categories and work with our engineers and various technology suppliers on new products and product enhancements. These teams are responsible for inventory levels, pricing, delivery requirements, market demand analysis, product positioning and advertising.

We are committed to providing superior levels of customer service by incorporating innovative customer-centric strategies and processes supported by business systems designed to deliver differentiating product support and value-added services. We have implemented advanced customer relationship management programs to bring additional value to our customers and provide significant value to our operations management. Through these information systems, we can provide our customers with product information ranging from operational manuals to the latest product updates. Through on-going development and refinement, these programs will help to improve our productivity and enable us to further improve our customer-focused services.

Customers

The vast majority of our sales are to cable system operators worldwide. As the US cable industry continues a trend toward consolidation, the six largest MSOs control approximately 77% of the triple play RGUs within the US cable market (according to Dataxis third quarter 2011), thereby making our sales to those MSOs critical to our success. Our sales are substantially dependent upon a system operator’s selection of ARRIS’ network equipment, demand for increased broadband services by subscribers, and general capital expenditure levels by system operators. Our two largest customers (including their affiliates, as applicable) are Comcast and Time Warner Cable. From time-to-time, the affiliates included in our revenues from these customers have changed as a result of mergers and acquisitions. Therefore, the revenue for our customers for prior periods has been adjusted to include, on a comparable basis for all periods presented, the affiliates currently understood to be under common control. Our sales to these customers for the last three years were:

	Years ended December 31,		
	2011	2010	2009
	(in thousands)		
Comcast and affiliates	\$286,987	\$268,149	\$348,169
% of sales	26.4%	24.7%	31.4%
Time Warner Cable and affiliates	\$162,060	\$174,471	\$230,211
% of sales	14.9%	16.0%	20.8%

ARRIS utilizes standard terms of sale. These standard terms of sale apply to all purchases except those to a few of our large customers with whom we have executed general purchase agreements (“GPAs”). These GPAs do not obligate the customer to a specific volume of business. The vast majority of our sales, whether to customers with GPAs or otherwise, result from periodic purchase orders. We have multiple agreements with our largest customers, such as Comcast and Time Warner Cable, based upon their needs or as a result of prior acquisitions. We maintain these agreements in the normal course of our business.

International Operations

Our international revenue is generated primarily from Asia-Pacific, Europe, Latin America and Canada. The Asia-Pacific market includes China, Hong Kong, Japan, Korea, Singapore, and Taiwan. The European market includes Austria, Belgium, France, Germany, the Netherlands, Norway, Poland, Portugal, Spain, Sweden, Switzerland, Great Britain, Ireland, Turkey, Russia, Romania, Hungary and Israel. The Latin America market includes Argentina, Brazil, Chile, Colombia, Mexico, Peru, Puerto Rico, Ecuador, Honduras, Costa Rica, Panama, Jamaica and Bahamas. Revenues from international customers were approximately 31.3%, 35.2%, and 26.5% of total revenues for 2011, 2010 and 2009, respectively.

[Table of Contents](#)

We continue to strategically invest in worldwide marketing and sales efforts, which have yielded some promising results in several regions. We currently maintain international sales offices in Argentina, Brazil, Chile, China, Israel, Japan, Korea, Mexico, The Netherlands, and Spain.

Research and Development

We operate in an industry that is subject to rapid changes in technology. Our ability to compete successfully depends in large part upon anticipating such changes. Accordingly, we engage in ongoing research and development activities in response to our customers' needs with the intention to advance existing product lines and/or develop new offerings. Our primary research and development focuses include:

- In our Broadband Communication System business segment, we believe that our future success depends on our rapid adoption and implementation of broadband local access industry specifications, as well as rapid innovation and introduction of technologies that provide service and performance differentiation.
- In our Access, Transport & Supplies business segment, our research and development has focused on fiber-deep, multi-wavelength optical access and PON products.
- In our Media and Communications business segment, we have completed the introduction of a full-functioned ConvergeMedia VOD back office and COTS service platform allowing our customers to deliver superior VOD services that are well-matched to their needs for hierarchical storage in nationally inter-connected head-ins. We continue to focus on evolving our advertising solutions to handle increased targeting and applicability to multi-screen in points.

We began the process of integrating the BigBand product development roadmap with our product vision during December 2011 and expect to have that integration substantially completed during 2012.

We have a significant number of engineers and other employees dedicated to research and development. New products are developed in our Research and Development laboratories in Beaverton, Oregon; Kirkland, Washington; Lisle, Illinois; State College, Pennsylvania; Suwanee, Georgia; Wallingford, Connecticut; and Westborough, Massachusetts, as well as in Cork, Ireland; Shenzhen, China; and Tel Aviv, Israel.

Research and development expenses in 2011, 2010 and 2009 were approximately \$146.5 million, \$140.5 million and \$124.6 million, respectively. Research and development expenses as a percent of sales in 2011, 2010 and 2009 were approximately 13.5%, 12.9% and 11.3%, respectively. These costs include allocated common costs associated with information technology and facilities.

Intellectual Property

We have an active patenting program for protecting our innovations. During 2011, we were awarded 36 patents and filed 71 utility patent applications and 21 provisional patent applications. As of January 31, 2012, the patenting program consisted of maintaining our portfolio of approximately 582 issued patents (both U.S. and foreign) and pursuing patent protection on new inventions (currently approximately 383 U.S. and foreign patent applications). In our effort to pursue new patents, we have created a process whereby employees may submit ideas of inventions for review by management. The review process evaluates each submission based on criteria that includes: novelty, potential commercial value of the invention, and detectability of infringement. Patent applications are filed on the inventions that meet the criteria. In addition, we hold an exclusive license, for use in our field, of numerous patents relating to fiber optic and radio frequency transmission equipment and technology, and network management techniques and services.

Our patents and patent applications generally are in the areas of telecommunications hardware, software and related technologies. Our recent research and development has led to a number of patent applications in technology related to DOCSIS®. Through various acquisitions over the past several years, we have acquired patents related to a wide range of technologies, including CMTS, wide area networks, fiber and cable systems, video processing, set-top boxes and ad insertion.

[Table of Contents](#)

For technology that is not owned by us, we have a program for obtaining appropriate licenses with the industry leaders to ensure that the strongest possible patents support the licensed technology. In addition, we have formed strategic relationships with leading technology companies that will provide us with early access to technology and will help keep us at the forefront of our industry.

We also have a trademark program for protecting and developing trademarks. As of January 31, 2012, ARRIS has 156 registered or pending trademark registrations. Our trademark program includes procedures for the use of current trademarks and for the development of new trademarks. This program is designed to ensure that our employees properly use our registered trademarks and any new trademarks that are expected to develop strong brand loyalty and name recognition. The design of our trademark program is intended to protect our trademarks from dilution or cancellation.

From time-to-time there are significant disputes with respect to the ownership of the technology used in our industry and patent infringements. See Part I, Item 3, "Legal Proceedings."

Product Sourcing and Distribution

Our product sourcing strategy for products other than Access and Transport products centers on the use of contract manufacturers to produce our products. Our largest contract manufacturers are Unihan, Plexus Services Corporation, Flextronics and Benchmark Electronics. The facilities operated by these contract manufacturers for the production of our products are located in China, Ireland, Mexico, Israel and the United States.

We have contracts with each of these manufacturers. We provide these manufacturers with 6-month or 12-month rolling, non-binding forecasts, and we typically have a minimum of 60 days of purchase orders placed with them for products. Purchase orders for delivery within 60 days generally are not cancelable. Purchase orders with delivery past 60 days generally may be cancelled with penalties in accordance with each vendor's terms. Each contract manufacturer provides a minimum 15-month warranty.

We manufacture our Access and Transport products in our own manufacturing facility in Tijuana, Mexico. The factory is 83,124 square feet, and, as of December 31, 2011, we employed approximately 320 employees. Typical items purchased for the ARRIS manufactured products are fiber optic lasers, photo receivers, radio frequency hybrids, printed circuit boards, die cast aluminum housings, and other electronic components. Although some of the components we use are single sourced, generally there are alternate sources, if needed. We outsource the manufacture and repair of certain assemblies and modules where it is cost effective to do so or where there are advantages with respect to delivery times. Current outsourcing arrangements include European versions of amplifiers, certain power supplies, accessories, optical modules, digital return modules, circuit boards, repair services, and small-lot manufacturing.

We distribute a substantial number of products that are not produced by us in order to provide our customers with a comprehensive product offering. For instance, we distribute hardware and installation products that are distributed through regional warehouses in California, North Carolina, Canada, Japan, The Netherlands, and through drop shipments from our contract manufacturers located throughout the world.

We obtain key components from numerous third party suppliers. For example, Broadcom provides several DOCSIS[®] components in our CMTS product line. We also make extensive use of FPGA from Altera and Xilinx in our C4[®] CMTS, C3 CMTS, and D5 Universal Edge QAM. Intel (formerly Texas Instruments) and Broadcom provide components used in some of our customer premises equipment (CPE) (i.e., EMTAs and cable modems). Our agreements include technology licensing and component purchases. Several of our competitors have similar agreements for these components. In addition, we license software for operating network and security systems or sub-systems, and a variety of routing protocols from different suppliers.

Backlog

Our backlog consists of unfilled customer orders (believed to be firm and long-term contracts) that have not been completed. With respect to long-term contracts, we include in our backlog only amounts representing orders currently released for production or, in specific instances, the amount we expect to be released in the succeeding

[Table of Contents](#)

12 months. The amount contained in backlog for any contract or order may not be the total amount of the contract or order. The amount of our backlog at any given time does not reflect expected revenues for any fiscal period.

Our backlog at December 31, 2011 was approximately \$148.5 million, at December 31, 2010 was approximately \$140.4 million, and at December 31, 2009 was approximately \$144.4 million. We believe that all of the backlog existing at December 31, 2011 will be shipped in 2012.

Anticipated orders from customers may fail to materialize and delivery schedules may be deferred or cancelled for a number of reasons, including reductions in capital spending by network operators, customer financial difficulties, annual capital spending budget cycles, and construction delays.

Competition

The broadband communication systems markets are dynamic and highly competitive and require companies to react quickly and capitalize on change. We must retain skilled and experienced personnel, as well as deploy substantial resources to meet the changing demands of the industry and must be nimble to be able to capitalize on change. We compete with national, regional and local manufacturers, distributors and wholesalers including some companies that are larger than we are. Our major competitors include:

- Aurora Networks;
- Casa Systems, Inc.;
- Cisco Systems, Inc.;
- Commscope, Inc.;
- Concurrent Computer Corporation;
- Ericsson (TandbergTV);
- Harmonic, Inc.;
- Motorola Mobility, Inc.;
- Pace;
- SeaChange, Inc.;
- SMC Networks;
- Technicolor, Inc.;
- Tivo;
- TVC Communications, Inc.; and
- Ubee Interactive, Inc.

Our products are marketed with emphasis on quality, advanced technology, differentiating features, flexibility, service, and business solutions, and are generally priced competitively with other manufacturers' product lines. Product reliability and performance, technological innovation, responsive customer service, breadth of product offering, and pricing are several of the key criteria for success over our competition.

The consumer demand for more broadband bandwidth is a fundamental driver behind the continued growth in CMTS Edge Routing capacity deployed by cable operators worldwide. The CMTS supplier space is highly concentrated with strong competition from Cisco and Motorola. Both companies approach the market strategically and aggressively compete for market share. In the third quarter of 2011, according to Infonetics Research, *CMTS and Edge QAM Hardware and Subscribers Quarterly Worldwide and Regional Market Share, Size, and Forecasts, Third Quarter 2011*, ARRIS maintained a number two worldwide market share with 30% of shipments.

[Table of Contents](#)

The ARRIS customer premises business consists of High Speed Data Modems and Voice over IP enabled modems, EMTAs. ARRIS has been the market leader in the EMTA product category since its inception. According to Infonetics, ARRIS also became the leading provider of all DOCSIS CPE products in the second and third quarters of 2010, and has maintained a number two position in 2011. We compete on price, product performance, our telephony experience, and integration capabilities. Again, both Cisco and Motorola compete in the DOCSIS CPE category, along with several other vendors. ARRIS has maintained number one EMTA market share since 2005, and had approximately 40% of the world market in the third quarter of 2011 according to Infonetics Research, *Broadband CPE Quarterly Worldwide Market Share and Forecasts for Third Quarter 2011*. The video gateway business is new and emerging, but we expect to see competition from Motorola Mobility, Cisco, Pace, Tivo and others.

Our content and operations management systems compete with several vendors offering on demand video and digital advertising insertion hardware and software, including Cisco, Concurrent Computer Corporation, Ericsson's TandbergTV Division, Motorola Mobility, SeaChange International Inc., as well as vendors offering network management, mobile workforce management, network configuration management, and network capacity management systems in the United States, some of which may currently have greater sales in these areas than we do. In some instances, our customers internally develop their own software for operations support systems. However, we believe that we offer a more integrated solution that gives us a competitive advantage in supporting the requirements of both today's HFC networks and the emerging all-digital, packet-based networks.

We also compete with Aurora Networks, Cisco, Harmonic, and Motorola Mobility for products within the Access, Transport & Supplies group. In recent periods, competition has also increased from aftermarket suppliers, whose primary focus is on the refurbishment of OEM equipment, resulting in additional competition for new sales opportunities. In addition, because of the convergence of the cable, telecommunications and computer industries and rapid technological development, new competitors may enter the cable market.

In the supplies distribution business we compete with national distributors, such as Commscope and TVC Communications, Inc., and with several local and regional distributors. Various manufacturers, who are suppliers to us, also sell directly to our customers, as well as through other distributors, into the cable marketplace. Product breadth, price, availability and service are the principal competitive advantages in the supply business. Our products in the supplies distribution business are competitively priced and are marketed with emphasis on quality. Product reliability and performance, superior and responsive technical and administrative support, and breadth of product offerings are key criteria for competition. Technological innovations and speed to market are additional competitive factors.

Lastly, some of our competitors, notably Cisco and Motorola Mobility, are larger companies with greater financial resources and product breadth than us. This may enable them to bundle products or be able to market and price products more aggressively than we can.

Employees

As of January 31, 2012, we had 2,211 employees. ARRIS has no employees represented by unions within the United States. We believe that we have maintained a strong relationship with our employees. Our future success depends, in part, on our ability to attract and retain key personnel. Competition for qualified personnel in the cable industry is intense, and the loss of certain key personnel could have a material adverse effect on us. We have entered into employment contracts with our key executive officers and have confidentiality agreements with substantially all of our employees. We also have long-term incentive programs that are intended to provide substantial incentives for our key employees to remain with us.

[Table of Contents](#)

Item 1A. Risk Factors

Our business is dependent on customers' capital spending on broadband communication systems, and reductions by customers in capital spending adversely affect our business.

Our performance is dependent on customers' capital spending for constructing, rebuilding, maintaining or upgrading broadband communications systems. Capital spending in the telecommunications industry is cyclical and can be curtailed or deferred on short notice. A variety of factors affect the amount of capital spending, and, therefore, our sales and profits, including:

- general economic conditions;
- customer specific financial or stock market conditions;
- availability and cost of capital;
- governmental regulation;
- demands for network services;
- competition from other providers of broadband and high speed services;
- acceptance of new services offered by our customers; and
- real or perceived trends or uncertainties in these factors.

Several of our customers have accumulated significant levels of debt. These high debt levels, coupled with the current turbulence and uncertainty in the capital markets, may impact their access to capital in the future. Even if the financial health of our customers remains intact, these customers may not purchase new equipment at levels we have seen in the past or expect in the future. During the later part of 2008 and most of 2009, the economy and financial markets were heavily impacted by housing market disruptions and foreclosures as well as the material disruptions in the credit markets. We cannot predict the impact if any of the recent financial market turmoil or of specific customer financial challenges on our customer's expansion and maintenance expenditures.

The markets in which we operate are intensely competitive, and competitive pressures may adversely affect our results of operations.

The markets for broadband communication systems are extremely competitive and dynamic, requiring the companies that compete in these markets to react quickly and capitalize on change. This requires us to retain skilled and experienced personnel as well as to deploy substantial resources toward meeting the ever-changing demands of the industry. We compete with national and international manufacturers, distributors and wholesalers including many companies that are larger than we are. Our major competitors include:

- Aurora Networks;
- Casa Systems, Inc.;
- Cisco Systems, Inc.;
- Commscope, Inc.;
- Concurrent Computer Corporation;
- Ericsson (TandbergTV);
- Harmonic, Inc.;
- Motorola Mobility, Inc.;
- Pace;
- SeaChange, Inc.;
- SMC Networks;
- Technicolor, Inc.;

[Table of Contents](#)

- Tivo;
- TVC Communications, Inc.; and
- Ubee Interactive, Inc.

In some instances, notably our software products, our customers themselves may be our competition as they may develop their own software. The rapid technological changes occurring in the broadband markets may lead to the entry of new competitors, including those with substantially greater resources than our own. Because the markets in which we compete are characterized by rapid growth and, in some cases, low barriers to entry, smaller niche market companies and start-up ventures also may become principal competitors in the future. Actions by existing competitors and the entry of new competitors may have an adverse effect on our sales and profitability. The broadband communications industry is further characterized by rapid technological change. In the future, technological advances could lead to the obsolescence of some of our current products, which could have a material adverse effect on our business.

Further, many of our larger competitors are in a better position to withstand any significant, sustained reduction in capital spending by customers. They often have broader product lines and market focus and therefore are not as susceptible to downturns in a particular market. In addition, several of our competitors have been in operation longer than we have been, and therefore they have more established relationships with domestic and foreign broadband service users. We may not be able to compete successfully in the future, and competition may negatively impact our business.

Consolidations in the telecommunications industry could result in delays or reductions in purchases of products, which would have a material adverse effect on our business.

The telecommunications industry has experienced the consolidation of many industry participants. When consolidations occur, it is possible that the acquirer will not continue using the same suppliers, thereby possibly resulting in an immediate or future elimination of sales opportunities for us or our competitors, depending upon who had the business initially. Consolidations also could result in delays in purchasing decisions by the merged businesses. The purchasing decisions of the merged companies could have a material adverse effect on our business.

Mergers among the supplier base also have increased. Larger combined companies with pooled capital resources may be able to provide solution alternatives with which we would be put at a disadvantage to compete. The larger breadth of product offerings by these consolidated suppliers could result in customers electing to trim their supplier base for the advantages of one-stop shopping solutions for all of their product needs. Consolidation of the supplier base could have a material adverse effect on our business.

Our business is highly concentrated in the cable television portion of the telecommunications industry, which is significantly impacted by technological change.

The cable television industry has gone through dramatic technological change resulting in MSOs rapidly migrating their business from a one-way television service to a two-way communications network enabling multiple services, such as high speed Internet access, residential telephony services, business telephony services and Internet access, video on demand and advertising services. New services that are, or may be offered by MSOs and other service providers, such as home security, power monitoring and control, high definition television, 3-D television, and a host of other new home services also are based on and will be characterized by rapidly evolving technology. The development of increasing transmission speed, density and bandwidth for Internet traffic has also enabled the provision of high quality, feature length video over the Internet. This so called over-the-top IP video service enables content providers such as Netflix, Hulu, CBS and portals like Google to provide video services on-demand, by-passing traditional video service providers. As these service providers enhance their quality and scalability, MSOs are moving to match them and provide even more competitive services over their existing networks, as well as over-the-top for delivery not only to televisions but to the computers, tablets, and telephones in order to remain competitive. Our business is dependent on our ability to develop the products that enable current and new customers to exploit these rapid technological changes. We believe the growth of over-the-top video represents a shift in the traditional video delivery paradigm, and we cannot predict the effect it will have on our business.

[Table of Contents](#)

In addition, the cable industry has and will continue to demand a move toward open standards. The move toward open standards is expected to increase the number of MSOs that will offer new services. This trend is expected to increase the number of competitors and drive down the capital costs per subscriber deployed. These factors may adversely impact both our future revenues and margins.

Our business comes primarily from a few key customers. The loss of one of these customers or a significant reduction in sales to one of these customers would have a material adverse effect on our business.

Our two largest customers (including their affiliates, as applicable) are Comcast and Time Warner Cable. For the year ended December 31, 2011, sales to Comcast accounted for approximately 26.4% and sales to Time Warner Cable accounted for approximately 14.9% of our total revenue. The loss of either of these customers, or one of our other large customers, or a significant reduction in the products or services provided to any of them would have a material adverse impact on our business. For each of these customers, we also are one of their largest suppliers. As a result, if from time-to-time customers elect to purchase products from our competitors in order to diversify their supplier base and to dual-source key products or to curtail purchasing due to budgetary or market conditions, such decisions could have material consequences to our business. In addition, because of the magnitude of our sales to these customers the terms and timing of our sales are heavily negotiated, and even minor changes can have a significant impact upon our business.

We may pursue acquisitions and investments that could adversely affect our business.

In the past, we have made acquisitions of and investments in businesses, products, and technologies to complement or expand our business. While we have no announced plans for additional acquisitions, future acquisitions are part of our strategic objectives and may occur. If we identify an acquisition candidate, we may not be able to successfully negotiate or finance the acquisition or integrate the acquired businesses, products, or technologies with our existing business and products. Future acquisitions could result in potentially dilutive issuances of equity securities, the incurrence of debt and contingent liabilities, amortization expenses, and substantial goodwill. We will test the goodwill that is created by acquisitions, at least annually and will record an impairment charge if its value has declined. For instance, in the fourth quarter of 2008 and again in the fourth quarter of 2011, we recorded substantial impairment charges with respect to the goodwill that was created as part of a prior acquisition.

We may face higher costs associated with protecting our intellectual property or obtaining access necessary to intellectual property of others.

Our future success depends in part upon our proprietary technology, product development, technological expertise and distribution channels. We cannot predict whether we can protect our technology or whether competitors can develop similar technology independently. We have received, directly or indirectly, and expect to continue to receive, from third parties, including some of our competitors, notices claiming that we, or our customers using our products, have infringed upon third-party patents or other proprietary rights. We are a defendant in several proceedings (and other proceedings have been threatened) in which our customers were sued for patent infringement and sued, or made claims against, us and other suppliers for indemnification, and we may become involved in similar litigation involving these and other customers in the future. These claims, regardless of their merit, result in costly litigation, divert the time, attention and resources of our management, delay our product shipments, and, in some cases, require us to enter into royalty or licensing agreements. If a claim of product infringement against us is successful and we fail to obtain a license or develop non-infringing technology, our business and operating results could be materially and adversely affected. In addition, the payment of any damages or any necessary licensing fees or indemnification costs associated with a patent infringement claim could be material and could also materially adversely affect our operating results. See Part I, Item 3, "Legal Proceedings."

We have substantial goodwill and amortizable intangible assets.

Our financial statements reflect substantial goodwill and intangible assets, approximately \$194.5 million and \$124.8 million, respectively, as of December 31, 2011, that were recognized in connection with the acquis-

[Table of Contents](#)

itions that we have made. We annually (and more frequently if changes in circumstances indicate that the asset may be impaired) review the carrying amount of our goodwill in order to determine whether it has been impaired for accounting purposes. In general, if the fair value of the corresponding reporting unit's goodwill is less than the carrying value of the goodwill, we record an impairment. The determination of fair value is dependent upon a number of factors, including assumptions about future cash flows and growth rates that are based on our current and long-term business plans. With respect to the amortizable intangible assets, ARRIS tests recoverability when events or changes in circumstances indicate that their carrying amounts may not be recoverable. Examples of such circumstances include, but are not limited to, operating or cash flow losses from the use of such assets or changes in our intended uses of such assets. If the Company determines that an asset or asset group is not recoverable, then the Company would record an impairment charge if the carrying value of the asset or asset group exceeds its fair value. Fair value is based on estimated discounted future cash flows expected to be generated by the asset or asset group. The assumptions underlying cash flow projections would represent management's best estimates at the time of the impairment review.

We recorded a non-cash goodwill impairment charge of \$41.2 million and a non-cash intangible asset impairment charge of \$47.4 million relating to our MCS reporting unit during the fourth quarter of 2011. No goodwill or intangible asset impairments were recorded in 2009 or 2010. We recorded a non-cash goodwill impairment charge of \$128.9 million and \$80.4 million related to the ATS and MCS reporting units, respectively, during the fourth quarter of 2008. As the ongoing expected cash flows and carrying amounts of our remaining goodwill and intangible assets are assessed, changes in the economic conditions, changes to our business strategy, changes in operating performance or other indicators of impairment could cause us to realize additional impairment charges in the future. For additional information, see the discussion under Critical Accounting Policies in Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations.

We may have difficulty in forecasting our sales.

Because a significant portion of the purchases by our customers are discretionary, accurately forecasting sales is difficult. In addition, in recent years our customers have submitted their purchase orders less evenly over the course of each quarter and year and with shorter lead times than they have historically. This has made it even more difficult for us to forecast sales and other financial measures, which can result in us maintaining inventory levels that are too high or too low for our ultimate needs.

Our business has and is expected to have higher levels of software sales, which may result in greater volatility in our operating results.

The level of our Media & Communications Systems sales fluctuates significantly quarter to quarter, which results in greater volatility of our operating results than has been typical in the past, when the main source of volatility was the high proportion of quick-turn product sales. The timing of revenue recognition on software and system sales is based on specific contract terms and, in certain cases, is dependent upon completion of certain activities and customer acceptance which are difficult to forecast accurately. In addition, the level of software sales in our BCS segment is expected to increase.

Because the gross margins associated with software and systems sales are substantially higher than our average gross margins, fluctuations in quarterly software sales have a disproportionate effect on operating results and earnings per share and could result in our operating results falling short of the expectations of the investment community.

Products currently under development may fail to realize anticipated benefits.

Rapidly changing technologies, evolving industry standards, frequent new product introductions and relatively short product life cycles characterize the markets for our products. The technology applications that we currently are developing may not ultimately be successful. Even if the products in development are successfully brought to market, they may not be widely used or we may not be able to successfully capitalize on their technology. To compete successfully, we must quickly design, develop, manufacture and sell new or enhanced

[Table of Contents](#)

products that provide increasingly higher levels of performance and reliability. However, we may not be able to successfully develop or introduce these products if they:

- are not cost-effective;
- are not brought to market in a timely manner;
- fail to achieve market acceptance; or
- fail to meet industry certification standards.

Furthermore, our competitors may develop similar or alternative technologies that, if successful, could have a material adverse effect on us. Our strategic alliances are based on business relationships that have not been the subject of written agreements expressly providing for the alliance to continue for a significant period of time. The loss of a strategic relationship could have a material adverse effect on the progress of new products under development with that third party.

Our success depends in large part on our ability to attract and retain qualified personnel in all facets of our operations.

Competition for qualified personnel is intense, and we may not be successful in attracting and retaining key personnel, which could impact our ability to maintain and grow our operations. Our future success will depend, to a significant extent, on the ability of our management to operate effectively. In the past, competitors and others have attempted to recruit our employees and in the future, their attempts may continue. The loss of services of any key personnel, the inability to attract and retain qualified personnel in the future or delays in hiring required personnel, particularly engineers and other technical professionals, could negatively affect our business.

We are substantially dependent on contract manufacturers, and an inability to obtain adequate and timely delivery of supplies could adversely affect our business.

Many components, subassemblies and modules necessary for the manufacture or integration of our products are obtained from a sole supplier or a limited group of suppliers. Our reliance on sole or limited suppliers, particularly foreign suppliers, and our reliance on subcontractors involves several risks including a potential inability to obtain an adequate supply of required components, subassemblies or modules and reduced control over pricing, quality and timely delivery of components, subassemblies or modules. Historically, we have not maintained long-term agreements with any of our suppliers or subcontractors. An inability to obtain adequate deliveries or any other circumstance that would require us to seek alternative sources of supply could affect our ability to ship products on a timely basis. Any inability to reliably ship our products on time could damage relationships with current and prospective customers and harm our business.

Our international operations may be adversely affected by any decline in the demand for broadband systems designs and equipment in international markets.

Sales of broadband communications equipment into international markets are an important part of our business. Our products are marketed and made available to existing and new potential international customers. In addition, United States broadband system designs and equipment are increasingly being employed in international markets, where market penetration is relatively lower than in the United States. While international operations are expected to comprise an integral part of our future business, international markets may no longer continue to develop at the current rate, or at all. We may fail to receive additional contracts to supply equipment in these markets.

Our international operations may be adversely affected by changes in the foreign laws in the countries in which we and our manufacturers and assemblers have plants.

A significant portion of our products are manufactured or assembled in China, Ireland, Mexico, and other countries outside of the United States. The governments of the foreign countries in which our products are manufactured may pass laws that impair our operations, such as laws that impose exorbitant tax obligations or nationalize these manufacturing facilities.

In addition, we own a manufacturing facility located in Tijuana, Mexico. This operation is exposed to certain risks as a result of its location, including:

[Table of Contents](#)

- changes in international trade laws, such as the North American Free Trade Agreement and Prosec, affecting our import and export activities;
- changes in, or expiration of, the Mexican government's IMMEX (Manufacturing Industry Maquiladora and Export Services) program, which provides economic benefits to us;
- changes in labor laws and regulations affecting our ability to hire and retain employees;
- fluctuations of foreign currency and exchange controls;
- potential political instability and changes in the Mexican government;
- potential regulatory changes; and
- general economic conditions in Mexico.

Any of these risks could interfere with the operation of this facility and result in reduced production, increased costs, or both. In the event that production capacity of this facility is reduced, we could fail to ship products on schedule and could face a reduction in future orders from dissatisfied customers. If our costs to operate this facility increase, our margins would decrease. Reduced shipments and margins would have an adverse effect on our financial results.

Regional instability in Israel may adversely affect business conditions, including the operations of our contract manufacturers, and may disrupt our operations and negatively affect our operating results.

A portion of our research and development operations and a portion of our contract manufacturing occurs in Israel. As of January 31, 2012, we had approximately 125 full-time employees located in Israel. We also have customer service, marketing and general and administrative employees at our facility. Accordingly, we are directly influenced by the political, economic and military conditions affecting Israel, and any major hostilities there involving Israel or the interruption or curtailment of trade between Israel and its trading partners could significantly harm our business. In addition, in the past, Israel and companies doing business with Israel have been the subject of an economic boycott. Israel has also been and is subject to civil unrest and terrorist activity, with varying levels of severity, for the last decade. Security and political conditions may have an adverse impact on our business in the future. Hostilities involving Israel or the interruption or curtailment of trade between Israel and its trading partners could adversely affect our operations and make it more difficult for us to retain or recruit qualified personnel in Israel.

In addition, most of our employees in Israel are obligated to perform annual reserve duty in the Israeli Defense Forces and several have been called for active military duty in connection with intermittent hostilities over the years. Should hostilities in the region escalate again, some of our employees would likely be called to active military duty, possibly resulting in interruptions in our sales and development efforts and other impacts on our business and operations, which we cannot currently assess.

We face risks relating to currency fluctuations and currency exchange.

On an ongoing basis we are exposed to various changes in foreign currency rates because significant sales are denominated in foreign currencies. These risk factors can impact our results of operations, cash flows and financial position. We manage these risks through regular operating and financing activities and periodically use derivative financial instruments such as foreign exchange forward and option contracts. There can be no assurance that our risk management strategies will be effective.

We also may encounter difficulties in converting our earnings from international operations to U.S. dollars for use in the United States. These obstacles may include problems moving funds out of the countries in which the funds were earned and difficulties in collecting accounts receivable in foreign countries where the usual accounts receivable payment cycle is longer.

[Table of Contents](#)

We depend on channel partners to sell our products in certain regions and are subject to risks associated with these arrangements.

We utilize distributors, value-added resellers, system integrators, and manufacturers' representatives to sell our products to certain customers and in certain geographic regions to improve our access to these customers and regions and to lower our overall cost of sales and post-sales support. Our sales through channel partners are subject to a number of risks, including:

- ability of our selected channel partners to effectively sell our products to end customers;
- our ability to continue channel partner arrangements into the future since most are for a limited term and subject to mutual agreement to extend;
- a reduction in gross margins realized on sale of our products; and
- a diminution of contact with end customers which, over time, could adversely impact our ability to develop new products that meet customers' evolving requirements.

Our stock price has been and may continue to be volatile.

Our common stock is currently traded on The NASDAQ Global Select Market. The trading price of our common stock has been and may continue to be subject to large fluctuations. Our stock price may increase or decrease in response to a number of events and factors including:

- future announcements concerning us, key customers or competitors;
- quarterly variations in operating results;
- changes in financial estimates and recommendations by securities analysts;
- developments with respect to technology or litigation;
- the operating and stock price performance of our competitors; and
- acquisitions and financings.

Fluctuations in the stock market, generally, also impact the volatility of our stock price. General stock market movements may adversely affect the price of our common stock, regardless of our operating performance.

We do not intend to pay cash dividends in the foreseeable future.

Although from time to time we may consider repurchasing shares of our common stock, we do not anticipate paying cash dividends on our common stock in the foreseeable future. In addition, the payment of dividends in certain circumstances may be prohibited by the terms of our current and future indebtedness.

We have anti-takeover defenses that could delay or prevent an acquisition of our company.

We have a shareholder rights plan (commonly known as a "poison pill"). This plan is not intended to prevent a takeover, but is intended to protect and maximize the value of stockholders' interests. However, the plan could make it more difficult for a third party to acquire us or may delay that process.

We have the ability to issue preferred shares without stockholder approval.

Our common shares may be subordinate to classes of preferred shares issued in the future in the payment of dividends and other distributions made with respect to common shares, including distributions upon liquidation or dissolution. Our Certificate of Incorporation permits our board of directors to issue preferred shares without first obtaining stockholder approval. If we issued preferred shares, these additional securities may have dividend or liquidation preferences senior to the common shares. If we issue convertible preferred shares, a subsequent conversion may dilute the current common stockholders' interest.

Item 1B. Unresolved Staff Comments

As of December 31, 2011, there were no unresolved comments.

Item 2. Properties

We currently conduct our operations from 29 different locations; three of which we own, while the remaining 26 are leased. These facilities consist of sales and administrative offices, manufacturing and warehouses totaling over 1.2 million square feet. Our long-term leases expire at various dates through 2023. We believe that our current properties are adequate for our operations.

Table of Contents

A summary of our principal leased properties (those exceeding 10,000 sq. ft.) that are currently in use is as follows:

Location	Description	Area (sq. ft.)	Lease Expiration	Segment
Suwanee, Georgia	Office space	129,403	April 14, 2020	All
Tijuana, Mexico	Manufacturing	83,124	July 31, 2016	(1) & (2)
Wallingford, Connecticut	Office space	82,155	December 31, 2014	(2)
Westborough, Massachusetts	Office	76,493	March 30, 2012	(1) & (3)
Lisle, Illinois	Office space	63,922	October 31, 2013	(1)
Beaverton, Oregon	Office space/Manufacturing	60,389	September 16, 2016	(1) & (3)
Ontario, California	Warehouse	59,269	March 31, 2014	All
Tel Aviv, Israel	Office/Warehouse space	55,391	July 31, 2015	(1)
Kirkland, Washington	Office space	37,413	August 31, 2018	(1)
Englewood, Colorado	Office space	32,240	March 31, 2016	All
Redwood City, California	Office	27,646	December 31, 2012	(1)
Shenzhen, China	Office space	22,097	August 15, 2013	(1)
Shenzhen, China	Office space	20,095	December 5, 2012	All
Ontario, California	Warehouse	17,400	June 30, 2013	All
Waltham, Massachusetts	Office space	12,185	May 16, 2016	(3)
Cork, Ireland	Office space	11,135	October 28, 2020	(1)

We own the following properties:

Location	Description	Area (sq. ft.)	Segment
Cary, North Carolina	Warehouse	151,500	All
State College, Pennsylvania	Office space	133,000	(2)
Chicago, Illinois	Warehouse/Office space	18,000	(2)

Segment:

- (1) Broadband Communications Systems
- (2) Access, Transport & Supplies
- (3) Media & Communications Systems

All All segments

Item 3. Legal Proceedings

From time to time, ARRIS is involved in claims, disputes, litigation or legal proceedings incidental to the ordinary course of its business, such as intellectual property disputes, contractual disputes, employment matters and environmental proceedings. Also, suits may be brought against ARRIS' customers that, in turn, may ask ARRIS for indemnification. Except as described below, ARRIS is not party to any proceedings that are, or reasonably could be expected to be, material to its business, results of operations or financial condition.

Ceres Comm. v. MSOs, Telcos, and others. C.A. 10-1062; 11-279, District of Delaware. In August and December 2010, Ceres filed suit against 23 and 13 companies, respectively, which included the major MSOs, Telcos and others, alleging infringement of two US patents, nos. 5,774,526 and 7,149,252, related to modulation techniques. Certain of our customers that are defendants have requested that we provide indemnification. The complaint requests unspecified damages, although to-date no evidence of damages has been introduced. The cases are moving relatively slowly – claim construction briefing will occur in August 2012, discovery will be complete December 2012, expert reports by April 2013 and the trial presently scheduled for September 2013. It is premature to assess the likelihood of a favorable outcome. In the event of an unfavorable outcome, ARRIS may be required to indemnify the MSOs, pay royalties and/or cease utilizing certain technology.

[Table of Contents](#)

ARRIS v. British Telecom & British Telecom v. Cox and Cable One. C.A. No. 10-658 (SLR), U.S. District Court, District of Delaware. On August 5, 2010 BT sued Cox and Cable One alleging infringement of four BT patents, nos. 5,142,532, 5,526,350, 6,538,989 and 6,665,264. Cox and Cable One have asked ARRIS (and other suppliers) to indemnify them. It is premature to assess the likelihood of a favorable outcome. In the event of an unfavorable outcome, ARRIS may be required to indemnify Cable One and Cox, pay royalties and/or cease utilizing certain technology.

ARRIS v. SeaChange Int'l. (previously nCube v. SeaChange). C.A. No. 01-011 (JJF). U.S. District Court, District of Delaware. In May 2002, a jury found that video-on-demand products and software sold by SeaChange International ("SeaChange") willfully infringed various claims of ARRIS's U.S. Patent No. 5,805,804. The jury also determined that a 7% royalty rate was applicable to SeaChange's infringing sales. In April 2004, the District Court awarded enhanced damages and attorneys' fees based on the jury's finding of willful infringement. In January 2006, the Federal Circuit affirmed the jury's findings of willful infringement and the District Court's award of enhanced damages and attorneys' fees. In April 2006, the District Court entered a permanent injunction that, among other things, enjoined SeaChange from selling video-on-demand products and software that infringe U.S. Patent No. 5,805,804. Following the District Court's entry of the permanent injunction, SeaChange initiated re-examination proceedings of the infringed claims before the United States Patent and Trademark Office ("USPTO"). The USPTO determined that most of the patent claims were patentable without any modification, including the infringed claim at issue in the contempt action.

In July 2009, ARRIS filed a motion for contempt, seeking to enforce the permanent injunction and an award of sanctions for SeaChange's continued sales of the video-on-demand products and software. In August 2009, in response to ARRIS's motion for contempt, SeaChange filed a declaratory-judgment suit seeking an order that its video-on-demand products and software do not infringe U.S. Patent No. 5,805,804. In June 2010, the District Court stayed SeaChange's declaratory-judgment suit in favor of proceeding with ARRIS's motion for contempt. To date, ARRIS has introduced evidence of infringement and support for sanctions based on SeaChange's sales of its video-on-demand products and software since 2002. ARRIS has requested that enhanced sanctions be awarded. In March 2011, the District Court conducted a hearing with respect to ARRIS's motion for contempt. In September 2011, the District Court issued an opinion, confirming that the contempt proceedings were appropriate and further noting its "present inclination to find no colorable difference" between SeaChange's infringing product and SeaChange's current product. The District Court also stated that "further proceedings may be necessary before the Court will be able to make a final finding." A hearing to determine contempt is set for March 1, 2012.

Multiservice Solutions v. MSOs C.A. No. 6:11-cv-00114, Eastern District of Texas. In March 2011, Multiservice Solutions filed suit against 4 MSOs alleging infringement of one US patent by all parties to the suit, no. 5,774,527, and another US patent by one party to the suit, no. 5,715,315, relating to integrated voice, data, and video devices. Certain of our customers have requested that we provide indemnification. The complaint requests unspecified damages for past and future infringement. It is premature to assess the likelihood of a favorable outcome. In the event of an unfavorable outcome, ARRIS may be required to indemnify the MSOs, pay royalties and/or cease utilizing certain technology.

Olympic Developments AG v. MSOs C.A. No. 2:11-cv-00612, Central District of California. In January 2011, Olympic Developments AG filed suit against 9 cable and satellite service operators alleging infringement of two US patents, nos. 5,475,585 and 6,246,400, relating to VOD products and services. Certain of our customers have requested that we provide indemnification. The Court is currently awaiting an answer to be filed by Comcast, and will thereafter set a scheduling conference. The complaint requests unspecified damages for past infringement and an injunction against future infringement. To date, no evidence of damages has been introduced. It is premature to assess the likelihood of a favorable outcome. In the event of an unfavorable outcome, ARRIS may be required to indemnify the MSOs, pay royalties and/or cease utilizing certain technology.

Bear Creek Technologies v. MSOs C.A.No. 2:11-cv-00103, District of Delaware. In February 2011, Bear Creek sued MSOs, Telcos and other VoIP service providers for infringement of US Patent No. 7,889,722, relating to EMTAs. Certain of our customers have requested that we provide indemnification. The complaint requests unspecified damages for past infringement and injunction against future infringement. To date, no evidence of

[Table of Contents](#)

damages has been introduced. It is premature to assess the likelihood of a favorable outcome. In the event of an unfavorable outcome, ARRIS may be required to indemnify the MSOs, pay royalties and/or cease utilizing certain technology.

GTZM Technology Ventures Ltd. v. MSOs C.A. No. 1:11-cv-00790, District of Delaware. In September 2011, GTZM Technology Ventures filed suit against 14 cable and telephone service providers alleging infringement of US Patent No. 5,455,859, relating to EMTAs. Certain of our customers have requested that we provide indemnification. The complaint requests unspecified damages for past infringement and injunction against future infringement. It is premature to assess the likelihood of a favorable outcome. In the event of an unfavorable outcome, ARRIS may be required to indemnify the MSOs, pay royalties and/or cease utilizing certain technology.

CyberFone (LVL Patent Group, LLC) v. MSOs C.A. No. 1:11-cv-00828, District of Delaware. On September 15, 2011, LVL Patent Group filed suit against 14 cable service providers alleging infringement of 6,044,382, relating to VOD products and services. Certain of our customers have requested that we provide indemnification. The complaint requests unspecified damages for past infringement and injunction against future infringement. To date, no evidence of damages has been introduced. It is premature to assess the likelihood of a favorable outcome. In the event of an unfavorable outcome, ARRIS may be required to indemnify the MSOs, pay royalties and/or cease utilizing certain technology.

Bernstein, et al v. BigBand Networks, Inc., et al. During October 2011, five lawsuits were filed against BigBand Networks, BigBand Networks directors and ARRIS for breach of fiduciary duty claiming, among other things, the price that ARRIS has agreed to pay to acquire BigBand Networks is too low and seeking injunctive relief and monetary damages. Four suits were filed in California and one in Delaware. The suits are Bernstein v. BigBand Networks, Inc., et al. Civil Action No. CIV509018, Naveh v. BigBand Networks, Inc., et al. Civil Action No. CIV509114, and Bushaskey v. BigBand Networks, Inc., et al. Civil Action No. CIV 509188 and Schnaider v. BigBand Networks, Inc., et al. Civil Action No. CIV509158. The Delaware case is Amir v. BigBand Networks, Inc., et al. Civil Action No. CA 6992-VCG. A tentative settlement of the case subject to certain additional discovery and court approval has been reached in the amount of \$0.5 million which is included in ARRIS consolidated balance sheet as of December 31, 2011.

Patchin Value Master v. ARRIS Solutions, Inc. Filed Jan. 19, 2012. The holder of 670,000 shares of BigBand stock (\$1.507M at our offer) declined our tender offer and is now seeking for the Court of Chancery of State of Delaware to value the stock. The plaintiff is seeking a broad range of discovery documents to seek a higher value for the shares. It is premature to assess the likelihood of a favorable outcome.

KTech Telecommunications Inc. v. Time Warner Cable Inc. C.A. 2:11-cv-09373, Central District of California. On November 9, 2011, KTech Telecommunications filed suit against Time Warner Cable (TWC) alleging infringement of U.S. Patent Nos. 6,785,903, 7,487,533, 7,761,893, and 7,984,469. The complaint requests unspecified damages for past infringement and injunction against future infringement. To date, no evidence of damages has been introduced. It is premature to assess the likelihood of a favorable outcome. In the event of an unfavorable outcome, ARRIS may be required to indemnify the TWC, pay royalties and/or cease utilizing certain technology.

Sprint v. Time Warner Cable and Comcast C.A. 11-cv-2684, District of Kansas. On December 19, 2011, Sprint filed suit against Time Warner Cable (TWC) and Comcast alleging infringement of 12 patents alleged to cover various voice over internet protocol technologies. The complaint requests unspecified damages for past infringement and injunction against future infringement. . It is premature to assess the likelihood of a favorable outcome. In the event of an unfavorable outcome, ARRIS may be required to indemnify TWC and/or Comcast, pay royalties and/or cease utilizing certain technology.

From time to time third parties demand that we or our customers enter into a license agreement with respect to patents owned, or allegedly owned, by the third parties. Such demands cause us to dedicate time to study the patents and enter into discussions with the third parties regarding the merits and value, if any, of the patents. These discussions, may materialize into license agreements or patent claims asserted against us or our customers. If asserted against our customers, our customers may request indemnification from us. It is not possible to determine the impact of any such demands and the related discussions on ARRIS' business, results of operations or financial condition.

[Table of Contents](#)

Item 4. Mine Safety Disclosures

Not Applicable

Item 4A. Executive Officers and Board Committees

Executive Officers of the Company

The following table sets forth the name, age as of February 29, 2012, and position of our executive officers.

Name	Age	Position
Robert J. Stanzione	64	Chief Executive Officer, Chairman of the Board
Lawrence A. Margolis	64	Executive Vice President, Administration, Legal, HR, and Strategy, Chief Counsel, and Secretary
David B. Potts	54	Executive Vice President, Chief Financial Officer and Chief Information Officer
John O. Caezza	54	President, Access, Transport & Supplies
Ronald M. Coppock	57	President, Worldwide Sales & Marketing
Bryant K. Isaacs	52	President, Media & Communications Systems
James D. Lakin	68	President, Advanced Technology & Services
Bruce W. McClelland	45	Group President
Marc S. Geraci	58	Senior Vice President, Treasurer

Robert J. Stanzione has been Chief Executive Officer since 2000. From 1998 through 1999, Mr. Stanzione was President and Chief Operating Officer of ARRIS. Mr. Stanzione has been a director of ARRIS since 1998 and has been the Chairman of the Board of Directors since 2003. From 1995 to 1997, he was President and Chief Executive Officer of Arris Interactive L.L.C. From 1969 to 1995, he held various positions with AT&T Corporation. Mr. Stanzione has served as a director of Symmetricon, Inc. since 2005. Mr. Stanzione also serves on the board of the National Cable Telecommunications Association.

Lawrence A. Margolis has been Executive Vice President, Strategic Planning, Administration, and Chief Counsel since 2004 and has served as the Secretary of ARRIS since 1992. Mr. Margolis was the Chief Financial Officer from 1992 to 2004. Prior to joining ARRIS, Mr. Margolis was Vice President, General Counsel and Secretary of Anixter, Inc., a global communications products distribution company, from 1986 to 1992 and General Counsel and Secretary of Anixter from 1984 to 1986. Prior to 1984, he was a partner at the law firm of Schiff Hardin & Waite.

David B. Potts has been the Chief Financial Officer since 2004, and has been Chief Information Officer since the acquisition of Arris Interactive L.L.C. in August 2001. Prior to being named Chief Financial Officer in 2004, Mr. Potts was the Senior Vice President of Finance. Before joining ARRIS, he was Chief Financial Officer of Arris Interactive L.L.C. from 1995 to 2001. From 1984 to 1995, Mr. Potts held various executive management positions with Nortel Networks including Vice President and Chief Financial Officer of Bell Northern Research in Ottawa and Vice President of Mergers and Acquisitions in Toronto. Prior to Nortel Networks, Mr. Potts was with Touche Ross in Toronto. Mr. Potts is a member of the Institute of Chartered Accountants in Canada.

John O. Caezza was appointed President of ARRIS Access, Transport & Supplies in December 2007. He previously had held the position of President of C-COR's Access and Transport business unit. He is responsible for the Company's product development, production, and technical support across its Access, Transport & Supplies group. Prior to joining C-COR in 2001, Mr. Caezza was Vice President and General Manager of the Broadband Communications Division of ADC Telecommunications, Inc., with primary responsibilities for strategic product creation and promotion. Mr. Caezza also has had extensive management experience with Philips Broadband Networks, Inc., including the position of Vice President of Engineering and Associate Director of International Sales.

[Table of Contents](#)

Ronald M. Coppock has been President of ARRIS Worldwide Sales since 2003. Prior to his current role, Mr. Coppock was President of International Sales since 1997 and was formerly Vice President International Sales and Marketing for TSX Corporation. Mr. Coppock has been in the cable television and satellite communications industry for over 20 years, having held senior management positions with Scientific-Atlanta, Pioneer Communications and Oak Communications. Mr. Coppock is an active member of the American Marketing Association, Kappa Alpha Order, Cystic Fibrosis Foundation Board, and the Auburn University Alumni Action Committee.

Bryant K. Isaacs was appointed President, Media & Communications Systems in December 2007 and was President of ARRIS New Business Ventures since 2002. Prior to his role as President, ARRIS New Business Ventures, he was President of ARRIS Network Technologies since 2000. Prior to joining ARRIS, he was Founder and General Manager of Lucent Technologies' Wireless Communications Networking Division in Atlanta from 1997 to 2000. From 1995 through 1997, Mr. Isaacs held the position of Vice President of Digital Network Systems for General Instrument Corporation where he was responsible for developing international business strategies and products for digital video broadcasting systems.

James D. Lakin was appointed President, Advanced Technology and Services in 2007. Prior to his current role he was President of ARRIS Broadband since the acquisition of Arris Interactive L.L.C. in 2001. From 2000 to August 2001, he was President and Chief Operating Officer of Arris Interactive L.L.C. From 1996 to 2000, Mr. Lakin was Chief Marketing Officer of Arris Interactive L.L.C. Prior to 1996, he held various executive positions with Compression Labs, Inc. and its successor General Instrument Corporation.

Bruce W. McClelland was appointed Group President in October 2011 and is responsible for all product development and operations for the company, and is responsible for the financial performance of the three operating segments: BCS, MCS, and ATS. Previously, McClelland served as president of the Broadband Communications System Business Unit, and before that, as Vice President of Engineering for ARRIS Broadband. Prior to joining ARRIS in 1999 as Vice President of Engineering, he had eleven years of experience with Nortel Networks where he was responsible for development efforts on Nortel Networks' Signaling System 7 and the Class 4/5 DMS switching product line.

Marc S. Geraci, Senior Vice President of Finance and Treasurer, has been with the company since 1994. He joined ARRIS as Controller for the International Sales Group and in 1997 was named Chief Financial Officer of that group. Prior to joining ARRIS he was a broker/dealer on the Pacific Stock Exchange in San Francisco for eleven years and prior to that in public accounting in Chicago for four years. Mr. Geraci received his CPA license in Illinois in 1977, and is on the Board of the Chi Delta Tau Foundation at Trinity University.

Board Committees

Our Board of Directors has four permanent committees: Audit, Compensation, Nominating & Corporate Governance, and Technology. The charters for all four committees are located on our website at www.arrisi.com. The Board believes that each of its members, with the exception of Mr. Stanzone, is independent, as defined by the SEC and NASDAQ rules. The Board has identified John Petty as the lead independent director and audit committee financial expert, as defined by the SEC. Additionally, the Board has identified Matthew Kearney as an audit committee financial expert.

PART II

Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

ARRIS’ common stock is traded on the NASDAQ Global Select Market under the symbol “ARRS.” The following table reports the high and low trading prices per share of our common stock as listed on the NASDAQ Global Market System:

	High	Low
2010		
First Quarter	\$12.90	\$ 9.39
Second Quarter	13.03	10.11
Third Quarter	12.15	8.16
Fourth Quarter	11.32	8.90
2011		
First Quarter	\$14.49	\$11.31
Second Quarter	13.06	10.37
Third Quarter	12.59	9.60
Fourth Quarter	12.75	9.81

We have not paid cash dividends on our common stock since our inception. In 2002, to implement our shareholder rights plan, our board of directors declared a dividend consisting of one right for each share of our common stock outstanding. Each right represents the right to purchase one one-thousandth of a share of our Series A Participating Preferred Stock and becomes exercisable only if a person or group acquires beneficial ownership of 15% or more of our common stock or announces a tender or exchange offer for 15% or more of our common stock or under other similar circumstances.

As of January 31, 2012, there were approximately 516 record holders of our common stock. This number excludes shareholders holding stock under nominee or street name accounts with brokers or banks.

Issuer Purchases of Equity Securities

The table below sets forth the purchases of ARRIS common stock for the quarter ended December 31, 2011 (in thousands, except per share data):

Period	Total Number of Shares Purchased (1)	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs
October 2011	6	\$ 11.07	—	105,926
November 2011	1,372	\$ 10.60	1,372	91,382
December 2011	1,899	\$ 10.44	1,899	71,551

(1) Includes approximately 5,847 shares repurchased to satisfy tax withholding obligations that arose on the vesting of shares of restricted stock and restricted stock units.

In March 2009, the Company announced that its Board of Directors had authorized a plan for ARRIS to repurchase up to \$100 million of our common stock. The Company did not repurchase any shares under the plan during 2009. During the fiscal year 2010, ARRIS repurchased and retired approximately 6.8 million shares of its common stock at an average price of \$10.24 per share for an aggregate purchase price of \$69.3 million. In May 2011, the share repurchase authorization amount under the 2009 plan was exhausted.

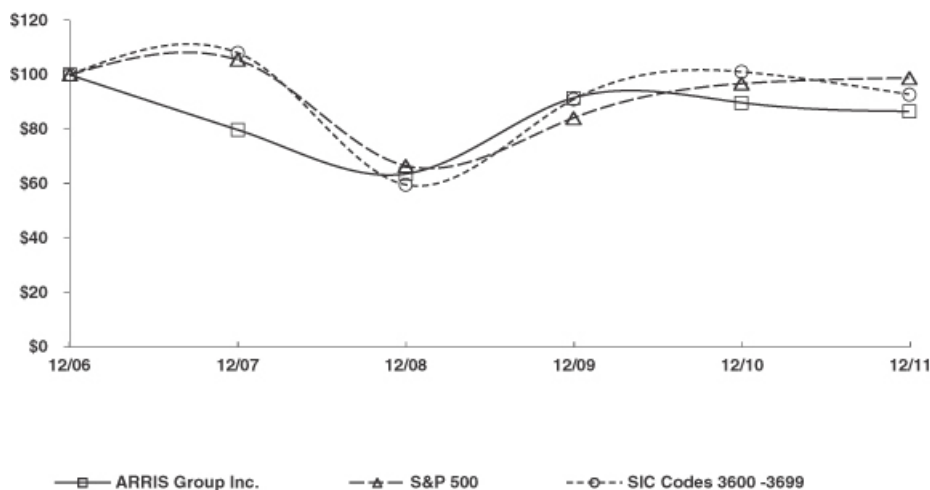
[Table of Contents](#)

In May 2011, the Company's Board of Directors authorized a new plan for the Company to purchase up to \$150 million of the Company's common stock. During the fiscal year 2011, ARRIS repurchased and retired approximately 10.0 million shares of its common stock at an average price of \$10.95 per share for an aggregate consideration of approximately \$109.1 million. Unless terminated earlier by a Board resolution, the Program will expire when we have used all authorized funds for repurchase. The remaining authorized amount for stock repurchases under this program was \$71.6 million as of December 31, 2011.

Stock Performance Graph

Below is a graph comparing total stockholder return on the Company's stock from December 31, 2006 through December 31, 2011, with the Standard & Poor's 500 and the Index of NASDAQ U.S. Stocks of entities in the industry of electronics and electrical equipment and components, exclusive of computer equipment (SIC 3600-3699), prepared by the Research Data Group, Inc.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*
Among ARRIS Group Inc., the S&P 500 Index, and SIC Codes 3600 - 3699



* \$100 invested on 12/31/06 in stock or index, including reinvestment of dividends.
Fiscal year ending December 31.

Copyright© 2012 S&P, a division of The McGraw-Hill Companies Inc. All rights reserved.

	12/06	12/07	12/08	12/09	12/10	12/11
ARRIS Group Inc.	100.00	79.78	63.55	91.37	89.69	86.49
S&P 500	100.00	105.49	66.46	84.05	96.71	98.75
SIC Codes 3600 - 3699	100.00	108.04	59.61	90.94	101.06	92.71
Copyright© 2012 Standard & Poor's, a division of The McGraw-Hill Companies Inc. All rights reserved. (www.researchdatagroup.com/S&P.htm)						

Notwithstanding anything to the contrary set forth in any of our filings under the Securities Act of 1933, or the Securities Exchange Act of 1934 that might incorporate future filings, including this Annual Report on Form 10-K, in whole or in part, the Performance Graph presented above shall not be incorporated by reference into any such filings.

[Table of Contents](#)**Item 6. Selected Consolidated Historical Financial Data**

The selected consolidated financial data as of December 31, 2011 and 2010 and for each of the three years in the period ended December 31, 2011 set forth below are derived from the accompanying audited consolidated financial statements of ARRIS, and should be read in conjunction with such statements and related notes thereto. The selected consolidated financial data as of December 31, 2009, 2008, and 2007 and for the years ended December 31, 2008 and 2007 is derived from audited consolidated financial statements that have not been included in this filing. The historical consolidated financial information is not necessarily indicative of the results of future operations and should be read in conjunction with ARRIS' historical consolidated financial statements and the related notes thereto and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this document. See Note 21 of the Notes to the Consolidated Financial Statements for a summary of our quarterly consolidated financial information for 2011 and 2010 (in thousands, except per share data).

	2011	2010	2009	2008	2007
Consolidated Operating Data:					
Net sales	\$1,088,685	\$1,087,506	\$1,107,806	\$1,144,565	\$992,194
Cost of sales	678,172	663,417	645,043	751,436	718,312
Gross margin	410,513	424,089	462,763	393,129	273,882
Selling, general, and administrative expenses	151,960	137,694	148,403	143,997	99,879
Research and development expenses	146,519	140,468	124,550	112,542	71,233
Impairment of goodwill & intangibles	88,633	—	—	209,297	—
Acquired in-process research and development charge	—	—	—	—	6,120
Amortization of intangible assets	33,649	35,957	37,361	44,195	2,278
Restructuring charges	4,360	65	3,702	1,211	460
Operating income (loss)	(14,608)	109,905	148,747	(118,113)	93,912
Interest expense	16,939	17,965	17,670	17,123	16,188
Loss (gain) on debt retirement	19	(373)	(4,152)	—	—
Gain related to terminated acquisition, net of expenses	—	—	—	—	(22,835)
Interest income	(3,154)	(1,997)	(1,409)	(7,224)	(24,776)
Other expense (income), net	(1,471)	94	2,731	(1,465)	418
Loss (gain) on investments and notes receivable	1,570	(414)	(711)	717	(4,596)
Income (loss) from continuing operations before income taxes	(28,511)	94,630	134,618	(127,264)	129,513
Income tax expense (benefit)	(10,849)	30,502	43,849	2,375	37,370
Net income (loss) from continuing operations	(17,662)	64,128	90,769	(129,639)	92,143
Discontinued Operations:					
Income from discontinued operations, net of tax	—	—	—	—	204
Net income (loss)	<u>\$ (17,662)</u>	<u>\$ 64,128</u>	<u>\$ 90,769</u>	<u>\$ (129,639)</u>	<u>\$ 92,347</u>

[Table of Contents](#)

	2011	2010	2009	2008	2007
Net income (loss) per common share:					
Basic:					
Income (loss) from continuing operations	\$ (0.15)	\$ 0.51	\$ 0.73	\$ (1.04)	\$ 0.83
Income from discontinued operations	—	—	—	—	—
Net income (loss)	<u>\$ (0.15)</u>	<u>\$ 0.51</u>	<u>\$ 0.73</u>	<u>\$ (1.04)</u>	<u>\$ 0.83</u>
Diluted:					
Income (loss) from continuing operations	\$ (0.15)	\$ 0.50	\$ 0.71	\$ (1.04)	\$ 0.82
Income from discontinued operations	—	—	—	—	—
Net income (loss)	<u>\$ (0.15)</u>	<u>\$ 0.50</u>	<u>\$ 0.71</u>	<u>\$ (1.04)</u>	<u>\$ 0.82</u>
Selected Balance Sheet Data:					
Total assets	\$1,360,810	\$1,424,087	\$1,475,616	\$1,350,321	\$1,557,193
Long-term obligations	\$ 286,749	\$ 282,087	\$ 295,696	\$ 297,238	\$ 300,469

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

In recent years, the technology used in cable systems has evolved significantly. Historically, cable systems offered only one-way analog video service. Due to technological advancements, these systems have evolved to become two-way broadband systems delivering high-volume, high speed, interactive services. MSOs have over the years aggressively upgraded their networks to cost-effectively support and deliver enhanced voice, video and data services. As a result, MSOs have been able to use broadband systems to increase their revenues by offering enhanced interactive subscriber services, such as high speed data, telephony, digital video and video on demand, and to effectively compete against other broadband communications technologies, such as DSL, local multipoint distribution service, DBS, FTTH, and fixed wireless. Delivery of enhanced services also has helped MSOs offset slowing basic video subscriber growth, reduce their subscriber churn and compete against alternative video providers, in particular, DBS and the telephone companies.

A key factor driving the growth of broadband systems is the powerful growth of the Internet. Rapid growth in the number of Internet users, their desire for ever higher Internet access speeds, and more high-volume interactive services with growing customer control features have created demand for our products. Another key factor driving the growth of broadband systems is the evolution of video services being offered to consumers. Video on demand, high definition television and switched digital video are three key video services expanding the use of MSOs' broadband systems. The increase in volume and complexity of the signals transmitted through the network and emerging competitive pressures from telephone companies with digital subscriber line and fiber to the premises offerings are spurring cable operators to rapidly deploy new technologies. Further, cable operators are looking for products and technologies that are flexible, cost effective, easily deployable and scalable to meet future demand. Because the technologies are evolving and the services delivered are growing in complexity and volume, cable operators need equipment that provides the necessary technical capability at a reasonable cost at the time of initial deployment and the flexibility later to accommodate technological advances and network expansion.

Within the past several years, the rise of wideband data services and improvements in server technology has enabled a new competitive threat. So called Over-the-Top ("OTT") entertainment, sports, and news video services such as those offered by Netflix, Hulu, NBC, ABC, CBS, FOX, ESPN and other content providers, now provide delivery of video programming directly to consumers via the Internet bypassing the traditional service provider Pay TV service and the attendant subscription and advertising revenue it generates for the service providers. In addition, Google and other Internet portals have made acquisitions and developed methods to provide advertising-supported video content which is linked directly to advertising buyers, increasing advertising effec-

[Table of Contents](#)

tiveness and reducing cost per impression. With the advent of these new OTT services, simple stand alone devices which enable the viewing of OTT video on any television in the home have appeared on the retail shelves, thus moving the Internet viewing experience from the PC in the den to the big screen TV in the living room. Recently consumer electronics manufacturers have begun to incorporate the network interfaces directly into their television sets and other entertainment devices. Further, there is a growing demand to be able to view video on multiple screens, for example tablets and PDAs.

OTT presents a new challenge to the MSOs, as consumers embrace these new services in lieu of the traditional linear programming provided by the service providers. OTT services provide the consumer with a new paradigm in entertainment: availability of a wide range of high quality, feature length programming specific to their tastes when they want to view it. In today's fast paced society, immediacy is a major factor in consumer preference. To address the challenge presented by OTT, the MSOs are moving to provide their content in a more compelling on-demand format, utilizing many of the technologies used by the OTT providers, but with a better managed, higher quality, more secure service, which will enable consumers to receive any content on any screen, anytime, anywhere. With the emergence of OTT programming, advertising revenues are moving from the traditional linear programming to these new services. A key factor in the migration is the economics of advertising in an on-demand format. With the ability of advertisers to have immediate access to information regarding individual viewers' preferences, and to be able to correspond with that viewer in real time, the relevance of each ad impression is substantially improved and the cost per relevant impression is dramatically reduced. The MSOs are addressing this opportunity, incorporating advertising insertion servers into their networks and building a system behind these servers to enable advertisers to mount campaigns directly to consumers via the MSOs' networks.

Over the past decade, United States cable operators have spent substantial investment to upgrade their networks to deliver digital video and two-way services such as high speed data, video on demand, and telephony. As global cable operators maximize their investment in their networks, we believe that our business will be driven by the industry dynamics and trends outlined below.

Industry Conditions

Competition Between Cable Operators and Telephone Companies Continues. Telephone companies are aggressively offering high speed data services and are making progress in offering video services to the residential market. Counter balancing this, cable companies are providing IP-based telephone service and DOCSIS 3.0-based ultra high speed data service.

Competition Between Cable Operators and Direct Broadcast Satellite Services Continues. Direct broadcast satellite services are aggressively offering many HDTV channels. DIRECTV and The Dish Network and multiple satellite services around the world are deploying significantly more HDTV channels including many local channels. Cable operators are responding by reclaiming spectrum through advanced technologies such as switched digital video, statistical multiplexing and upgrades of their networks to 1 GHz to make more spectrum available for additional HDTV channels.

Personalized Programming is Becoming More Readily Available Across Multiple Platforms . Demand for bandwidth by cable subscribers continues to grow as content providers (such as Google, Yahoo, YouTube, Hulu, MySpace, Facebook, Blockbuster, Netflix, ABC, CBS, NBC, movie and music studios, and gaming vendors) are offering personalized content across multiple venues. For example, broadcast network shows and user-generated (UG) content, such as streaming video, personalized web pages, and video and photo sharing, have become commonplace on the Internet. Likewise, certain cable operators are experimenting with offering more content through the use of network personal video recorders (nPVRs) which, once copyright issues are resolved, will add more traffic to the networks. Another bandwidth intensive service being offered by major cable operators allows cable video subscribers to re-start programs on demand if they miss the beginning of a television show (time-shifted television). Television today has thus become more interactive and personal, further increasing the demands on the network. In addition, the Internet has set the bar on personalization with viewers increasingly looking for "similar" experiences across multiple screens – television, PC, tablet, smart phone and PDA further increasing the challenges in delivering broadband content.

[Table of Contents](#)

Emerging Competition Between Cable Operators and Internet-based Services is a Major Market Disruption . OTT video services enabled by wideband data services, is increasingly providing the same content provided by MSOs in an on-demand, location independent format. In our fast paced world such immediacy is finding favor with consumers. MSOs are responding with enhanced on-demand location independent services of their own, providing immediate access to a wide array of content anytime, anywhere, on any screen.

Advertisers are Exploring new Models To Better Leverage Advertising Investments Across All Media . Google, Yahoo, Facebook, Microsoft and others have introduced easy, interactive ways for advertisers to mount advertising campaigns, measure results in real time, target individual consumers with ads specific to their preferences, and provide consumers with a way to respond to ads in real time. Advertisers, Programmers, and Content Distributors including MSOs are evaluating ways to integrate this new advertising paradigm with existing linear television by incorporating next generation advertising insertion servers in their networks and jointly building an advanced advertising platform with consistent technologies, metrics and interfaces across a national footprint.

Macroeconomic Factors Have and May Continue to Affect our Industry. The current economic downturn, the severe decline in new household formations, the increase in unemployment and the resulting impact on consumer disposable income have and is expected to contract the amount of capital expenditures the MSOs will make in 2012 and may in the future.

Growth in Enhanced Broadband Services Requires Continued Upgrades and Maintenance by Domestic and International Cable Operators. Cable operators are offering enhanced broadband services, including high definition television, digital video, interactive and on demand video services, high speed Internet and voice over Internet Protocol. As these enhanced broadband services continue to attract new subscribers, we expect that cable operators will be required to invest in their networks to expand network capacity and support increased customer demand for personalized services. In the access portion, or "last-mile," of the network, operators will need to upgrade headends, hubs, nodes, and radio frequency distribution equipment. While many domestic cable operators have substantially completed initial network upgrades necessary to provide enhanced broadband services, they will need to take a scalable approach to continue upgrades as new services are deployed. In addition, many international cable operators have not yet completed the initial upgrades necessary to offer such enhanced broadband services. Finally, as more and more critical services are provided over the MSO network plant maintenance becomes a more important requirement. Operators must replace network components (such as amplifiers and lasers) as they approach the end of their useful lives.

Growing Demand for Bundled Services — Video, Voice, and Data. In response to increased competition from telecommunication service providers and direct broadcast satellite operators, cable operators have not only upgraded their networks to cost effectively support and deliver enhanced video, voice, and data, but continue to invest significantly to offer a "triple play" bundle of these services. The ability to cost-effectively provide personalized, bundled services helps cable operators reduce subscriber turnover and increase revenue per subscriber. As a result, the focus on such services is driving cable operators to continue to invest in network infrastructure, content management, digital advertising insertion, and back office automation tools.

Cable Operators are Demanding Advanced Network Technologies and Software Solutions. The increase in volume and complexity of the signals transmitted over broadband networks as a result of the migration to an all digital, on demand network is causing cable operators to deploy new technologies. For example, transport technologies based on Internet Protocol allow cable operators to more cost effectively deliver video, voice, and data across a common network infrastructure. Cable operators also are demanding sophisticated network and service management software applications that minimize operating expenditures needed to support the complexity of two-way broadband communications systems. As a result, cable operators are focusing on technologies and products that are flexible, cost effective, compliant with open industry standards, and scalable to meet subscriber growth and effectively deliver reliable, enhanced services.

Digital Video Recorders are Impacting the Advertising Business. As the use of digital video recorders and other recording devices becomes more prevalent, advertisers face the need to develop new business models. Since personal recorders allow the viewer to skip over ads, network operators are looking for new ways to attract

[Table of Contents](#)

advertising dollars and deliver a meaningful ad experience to viewers. As a result, many network operators are implementing digital ad insertion, allowing them to transition from all analog to a mix of analog and digital and ultimately to all digital. One benefit is the ability to reallocate bandwidth. More importantly, digital advertising allows network operators to create a more dynamic and interactive experience between advertiser and viewer. Telephone companies are also planning for this transition.

Cable Operators have Developed Strategies to Offer Business Services. Cable operators are leveraging their investment in existing fiber and coax networks by expanding beyond traditional residential customers to offer voice, video, and data services to commercial (small and medium size businesses), education, healthcare, and government clients. Using their experience in delivering data, cable operators can bundle both voice and data for commercial subscribers and effectively compete with the telephone companies who have typically focused on large enterprises. Business services are just one of several market segments where cable and telephone companies are trying to penetrate each others' markets.

Consolidation of Vendors Has Occurred and May Continue. In February 2006, Cisco Systems, Inc. acquired Scientific-Atlanta, Inc. Both Cisco and Scientific-Atlanta are key competitors of ARRIS. In February 2007, Ericsson purchased Tandberg Television. In July 2007, Motorola acquired Terayon Communication Systems. In December 2007, ARRIS acquired C-COR. In 2009, ARRIS acquired Digeo and EGT. In August 2011, Google announced that it would acquire Motorola Mobility. In November 2011, ARRIS acquired BigBand Networks. It is also possible that other competitor consolidations may occur which could have an impact on future sales and profitability.

The impact of the above trends is difficult to predict and quantify, but generally:

- The pace of new service introduction will continue to increase as will the variety of connected consumer devices. This change will increase the consumption of bandwidth and the demand for ARRIS' products.
- The need for MSOs to expand their networks to meet the increased bandwidth and speed requirements their customers are demanding, driven by both the competition MSOs face and the proliferation of new services, in turn leads the MSOs to ask ARRIS and ARRIS' competitors, for product innovations that decrease the cost per megabit of capacity required. This trend may have an impact on both revenues and margins, depending upon (amongst other things), the life cycle of the technology being deployed and the price points associated with that technology at a point in time. Further, the requirement to continuously innovate is expected to require continued development investment.
- The anticipated shift by MSOs to an all IP network is expected to increase ARRIS' revenue over time, as ARRIS is presently not a participant in the set top box market which is expected to be displaced by gateways. Gateways are expected to have lower than the current ARRIS average gross margin, as a result, it is possible that the Company's overall average gross margin may decline in the near term as gateway revenues ramp.
- Increased competition for the services of MSOs could result in pressure on the pricing of their services, which in turn could negatively impact the level of their capital expenditures and negatively impact their purchases from ARRIS.

Our Strategy and Key Highlights

Our long-term business strategy "Convergence Enabled" includes the following key elements:

- Maintain a strong capital structure, mindful of our 2013 debt maturity, share repurchase opportunities and other capital needs including mergers and acquisitions.
- Grow our current business into a more complete portfolio including a strong video product suite.
- Continue to invest in the evolution toward enabling true network convergence onto an all IP platform.
- Continue to expand our product/service portfolio through internal developments, partnerships and acquisitions.
- Expand our international business and begin to consider opportunities in markets other than cable.
- Continue to invest in and evolve the ARRIS talent pool to implement the above strategies.

[Table of Contents](#)

To fulfill our strategy, we develop technology, facilitate its implementation, and enable operators to put their subscribers in control of their entertainment, information, and communication needs. Through a set of business solutions that respond to specific market needs, we are integrating our products, software, and services solutions to work with our customers as they address Internet Protocol telephony deployment, high speed data deployment, high definition television content expansion, on demand video rollout, operations management, network integration, and business services opportunities.

Below are some key highlights and trends:

Financial Highlights

- Sales in 2011 were \$1.089 billion as compared to \$1.088 billion in 2010.
- Gross margin percentage was 37.7% in 2011, which compares to 39.0% in 2010. The decline reflects a product mix shift with higher percentage of Customer Premise Equipment and HFC equipment sales (which have lower than average margins) and lower percentage of CMTS equipment sales (which have higher than average margins). CPE margins were also impacted by higher costs associated with the initial introduction of DOCSIS 3.0 Wireless Gateways.
- We invested \$146.5 million in research and development in 2011, up \$6.1 million or approximately 4.3% from 2010.
- In the fourth quarter 2011 we recorded a \$88.6 million, or \$(0.51) per diluted share after tax impairment charge related to goodwill and intangible assets associated with our MCS segment.
- We ended 2011 with \$561.1 million of cash, cash equivalents, short-term & long-term marketable security investments, which compares to \$620.1 million at the end of 2010. We generated approximately \$113.2 million of cash from operating activities in 2011 and \$118.5 million during 2010.
- During 2011, we used \$109.1 million of cash to repurchase 10.0 million shares of our common stock at an average price of \$10.95 per share.
- During 2011, we used \$5.0 million of cash to retire \$5.0 million principal amount of our convertible notes.
- In the fourth quarter 2011 we acquired BigBand Networks for \$162.4 million or \$53.1 million, net of acquired cash and marketable securities.

Product Line Highlights

• **Broadband Communications Systems**

- CMTS
 - Downstream port shipments were approximately 316 thousand in 2011, as compared to 147 thousand in 2010.
 - Despite more than doubling in downstream capacity demand, overall revenue in 2011 was comparable to 2010 due to competitive price pressure. The introduction of the new 32D line card and the ability to expand capacity on existing 16D line cards maintained overall profitability for the product line.
 - Announced availability of new 32D and 24U line cards which double the capacity of current chassis.
 - Continued the development of next generation converged edge router CMTS product that will enable smooth transition of legacy video networks to IP.
- CPE
 - Approximately 5.3 million CPE units were shipped in 2011 as compared to 5.8 million CPE units in 2010. Shipments of DOCSIS 3.0 CPE increased to 40% of the total unit shipments in 2011 as compared to 29% in 2010.
 - Maintained number one EMTA market share for 28 consecutive quarters (source: Infonetics).
- Whole Home IP Video Solution

[Table of Contents](#)

- Began commercial deployment of a unique next generation hybrid whole home media solution, taking advantage of the technology and know-how from the Digeo acquisition and the core technologies from our DOCSIS CPE products.
- Have announced four initial customers with several more planned for launch in 2012.
- **Access, Transport & Supplies**
 - Commercial RFoG deployment at top MSO.
 - CORWave dual wavelength optical transmitter released to market.
 - CHP CORWave II C-Band transmitter platform qualified by top MSO.
 - Growth in professional services.
- **Media & Communications Systems**
 - Growing share of linear advertising back office and server in the North American market.
 - Expanded deployments of ServAssure and WorkAssure in North and South America.

[Table of Contents](#)

Non-GAAP Measures

As part of our ongoing review of financial information related to our business we regularly use non-GAAP measures, in particular Adjusted (“non-GAAP”) earnings per share, as we believe they provide a meaningful insight into our business and trends. We also believe that these non-GAAP measures provide readers of our financial statements with useful information and insight with respect to the results of our business. However, the presentation of non-GAAP information is not intended to be considered in isolation or as a substitute for results prepared in accordance with GAAP. Below are tables for 2011, 2010 and 2009 which detail and reconcile GAAP and non-GAAP earnings per share:

(in thousands, except per share data)

	For the Year Ended December 31, 2011					
	Gross Margin	Operating Expense	Operating Income	Other (Income) Expense	Income Tax Expense (Benefit)	Net Income (Loss)
GAAP	\$410,513	\$425,121	\$ (14,608)	\$ 13,903	\$(10,849)	\$ (17,662)
Purchase accounting impacts of deferred revenue	3,126		3,126	—		3,126
Stock compensation expense	2,040	(20,015)	22,055	—		22,055
Acquisition costs, restructuring, and integration costs	—	(7,565)	7,565	—		7,565
Amortization of intangible assets	—	(33,649)	33,649	—		33,649
Impairment of goodwill and intangible assets	—	(88,633)	88,633	—		88,633
Non-cash interest expense	—	—	—	(11,545)		11,545
Impairment of cost method investment	—	—	—	(3,000)		3,000
Loss on repurchase of debt	—	—	—	(19)		19
Tax related to items above	—	—	—	—	26,642	(26,642)
Adjustments of tax related to goodwill impairment and certain provision to return adjustments	—	—	—	—	25,584	(25,584)
Non-GAAP	<u>\$415,679</u>	<u>\$275,259</u>	<u>\$140,420</u>	<u>\$ (661)</u>	<u>\$ 41,377</u>	<u>\$ 99,704</u>
GAAP net income per share — diluted						<u>\$ (0.15)</u>
Non-GAAP net income per share — diluted						<u>\$ 0.81</u>
GAAP weighted average common shares—diluted						<u>120,157(1)</u>
Non-GAAP weighted average common shares — diluted						<u>122,555(2)</u>

(1) Basic shares used for 2011 as losses were reported for those periods and the inclusion of dilutive shares would be antidilutive

(2) Non-GAAP net income for 2011 is positive and, therefore, the diluted shares used in this calculation include the effect of options.

[Table of Contents](#)

(in thousands, except per share data)

	For the Year Ended December 31, 2010					
	Gross Margin	Operating Expense	Operating Income	Other (Income) Expense	Income Tax Expense (Benefit)	Net Income (Loss)
GAAP	\$424,089	\$314,184	\$109,905	\$ 15,275	\$30,502	\$ 64,128
Stock compensation expense	1,897	(19,930)	21,827	—	—	21,827
Acquisition costs, restructuring, and integration costs	—	(65)	65	—	—	65
Amortization of intangible assets	—	(35,957)	35,957	—	—	35,957
Non-cash interest expense	—	—	—	(11,325)	—	11,325
Gain on repurchase of debt	—	—	—	373	—	(373)
Tax related to items above	—	—	—	—	24,311	(24,311)
Adjustments of income tax valuation allowances, R&D credits, and other discrete tax items	—	—	—	—	(889)	889
Non-GAAP	<u>\$425,986</u>	<u>\$258,232</u>	<u>\$167,754</u>	<u>\$ 4,323</u>	<u>\$53,924</u>	<u>\$109,507</u>
GAAP net income per share — diluted						<u>\$ 0.50</u>
Non-GAAP net income per share — diluted						<u>\$ 0.85</u>
GAAP weighted average common shares — diluted						<u>128,271</u>
Non-GAAP weighted average common shares — diluted						<u>128,271</u>

(in thousands, except per share data)

	For the Year Ended December 31, 2009					
	Gross Margin	Operating Expense	Operating Income	Other (Income) Expense	Income Tax Expense	Net Income (Loss)
GAAP	\$462,763	\$314,016	\$148,747	\$ 14,129	\$43,849	\$ 90,769
Stock compensation expense	1,446	(14,475)	15,921	—	—	15,921
Acquisition costs, restructuring, and integration costs	—	(3,977)	3,977	—	—	3,977
Amortization of intangible assets	—	(37,361)	37,361	—	—	37,361
Non-cash interest expense	—	—	—	(11,136)	—	11,136
Gain on repurchase of debt	—	—	—	4,152	—	(4,152)
Tax related to items above	—	—	—	—	22,561	(22,561)
Adjustments of income tax valuation allowances, R&D credits, and other discrete tax items	—	—	—	—	3,133	(3,133)
Non-GAAP	<u>\$464,209</u>	<u>\$258,203</u>	<u>\$206,006</u>	<u>\$ 7,145</u>	<u>\$69,543</u>	<u>\$129,318</u>
GAAP net income per share — diluted						<u>\$ 0.71</u>
Non-GAAP net income per share — diluted						<u>\$ 1.01</u>
GAAP weighted average common shares — diluted						<u>128,085</u>
Non-GAAP weighted average common shares — diluted						<u>128,085</u>

[Table of Contents](#)

In managing and reviewing our business performance, we exclude a number of items required by GAAP. Management believes that excluding these items mentioned below is useful in understanding the trends and managing our operations. Historically, we have publicly presented these supplemental non-GAAP measures in order to assist the investment community to see ARRIS through the “eyes of management,” and therefore enhance understanding of ARRIS’ operating performance. Non-GAAP financial measures should be viewed in addition to, and not as an alternative to, the Company’s reported results prepared in accordance with GAAP. Our non-GAAP financial measures reflect adjustments based on the following items, as well as the related income tax effects:

Purchase Accounting Impacts Related to Deferred Revenue: In connection with our acquisition of BigBand, business combination rules require us to account for the fair values of deferred revenue arrangements for which acceptance has not been obtained, and post contract support in our purchase accounting. The non-GAAP adjustment to our sales and cost of sales is intended to include the full amounts of such revenues. We believe the adjustment to these revenues is useful as a measure of the ongoing performance of our business. We have historically experienced high renewal rates related to our support agreements and our objective is to increase the renewal rates on acquired post contract support agreements; however, we cannot be certain that our customers will renew our contracts.

Stock-Based Compensation Expense: We have excluded the effect of stock-based compensation expenses in calculating our non-GAAP operating expenses and net income (loss) measures. Although stock-based compensation is a key incentive offered to our employees, we continue to evaluate our business performance excluding stock-based compensation expenses. We record non-cash compensation expense related to grants of options and restricted stock. Depending upon the size, timing and the terms of the grants, the non-cash compensation expense may vary significantly but will recur in future periods.

Acquisition Costs: We have excluded the effect of acquisition related expenses in calculating our non-GAAP operating expenses and net income (loss) measures. We incurred significant expenses in connection with our recent acquisition of BigBand, which we generally would not have otherwise incurred in the periods presented as part of our continuing operations. Acquisition related expenses consist of transaction costs, costs for transitional employees, other acquired employee related costs, and integration related outside services. We believe it is useful to understand the effects of these items on our total operating expenses.

Restructuring Costs: We have excluded the effect of restructuring charges in calculating our non-GAAP operating expenses and net income (loss) measures. Restructuring expenses consist of employee severance, abandoned facilities, and other exit costs. We believe it is useful to understand the effects of these items on our total operating expenses.

Amortization of Intangible Assets: We have excluded the effect of amortization of intangible assets in calculating our non-GAAP operating expenses and net income (loss) measures. Amortization of intangible assets is non-cash, and is inconsistent in amount and frequency and is significantly affected by the timing and size of our acquisitions. Investors should note that the use of intangible assets contributed to our revenues earned during the periods presented and will contribute to our future period revenues as well. Amortization of intangible assets will recur in future periods.

Impairment of Goodwill and Intangibles: We have excluded the effect of the estimated impairment of goodwill and intangible assets in calculating our non-GAAP operating expenses and net income (loss) measures. Although an impairment does not directly impact the Company’s current cash position, such expense represents the declining value of the technology and other intangibles assets that were acquired. We exclude these impairments when significant and they are not reflective of ongoing business and operating results.

Non-Cash Interest on Convertible Debt: We have excluded the effect of non-cash interest in calculating our non-GAAP operating expenses and net income (loss) measures. We record the accretion of the debt discount related to the equity component non-cash interest expense. We believe it is useful to understand the component of interest expense that will not be paid out in cash.

[Table of Contents](#)

Impairment of Investment: We have excluded the effect of an other-than-temporary impairment of a cost method investment in calculating our non-GAAP financial measures. We believe it is useful to understand the effect of this non-cash item in our other expense (income).

Loss (Gain) on Retirement of Debt: We have excluded the effect of the loss (gain) on retirement of debt in calculating our non-GAAP financial measures. We believe it is useful for investors to understand the effect of this non-cash item in our other expense (income).

Income Tax Expense (Benefit): We have excluded the tax effect of the non-GAAP items mentioned above. Additionally, we have excluded the effects of certain tax adjustments related to state valuation allowances, research and development tax credits and provision to return differences.

Results of Operations

Overview

As highlighted earlier, we have faced, and in the future will face, significant changes in our industry and business. These changes have impacted our results of operations and are expected to do so in the future. As a result, we have implemented strategies both in anticipation and in reaction to the impact of these dynamics. These strategies were outlined in the Overview to the MD&A.

Below is a table that shows our key operating data as a percentage of sales. Following the table is a detailed description of the major factors impacting the year-over-year changes of the key lines of our results of operations.

Key Operating Data (as a percentage of net sales)

	Years Ended December 31,		
	2011	2010	2009
Net sales	100.0%	100.0%	100.0%
Cost of sales	62.3	61.0	58.2
Gross margin	37.7	39.0	41.8
Operating expenses:			
Selling, general, and administrative expenses	14.0	12.7	13.4
Research and development expenses	13.5	12.9	11.3
Impairment of goodwill and intangibles	8.1	—	—
Amortization of intangible assets	3.1	3.3	3.4
Restructuring charges	0.4	—	0.3
Operating income (loss)	(1.4)	10.1	13.4
Other expense (income):			
Interest expense	1.6	1.7	1.6
Gain on debt retirement	—	—	(0.4)
Loss (gain) on investments	0.1	(0.1)	(0.1)
Loss (gain) on foreign currency	(0.1)	—	0.3
Interest income	(0.3)	(0.2)	(0.1)
Other expense (income), net	(0.1)	—	(0.1)
Income (loss) before income taxes	(2.6)	8.7	12.2
Income tax expense	(1.0)	2.8	4.0
Net income (loss)	(1.6)%	5.9%	8.2%

[Table of Contents](#)

Comparison of Operations for the Three Years Ended December 31, 2011

Net Sales

The table below sets forth our net sales for the three years ended December 31, 2011, 2010 and 2009 for each of our business segments described in Item 1 of this Form 10-K (in thousands, except percentages):

Business Segment:	Net Sales			Increase (Decrease) Between Periods			
	For the Years Ended December 31,			2011 vs. 2010		2010 vs. 2009	
	2011	2010	2009	\$	%	\$	%
BCS	\$ 824,008	\$ 841,164	\$ 852,852	\$(17,156)	(2.0)%	\$(11,688)	(1.4)%
ATS	197,687	181,067	176,306	16,620	9.2%	4,761	2.7%
MCS	66,990	65,275	78,648	1,715	2.6%	(13,373)	(17.0)%
Total	<u>\$1,088,685</u>	<u>\$1,087,506</u>	<u>\$1,107,806</u>	<u>\$ 1,179</u>	0.1%	<u>\$(20,300)</u>	(1.8)%

The table below sets forth our domestic and international sales for the three years ended December 31, 2011, 2010 and 2009 (in thousands, except percentages):

	Net Sales			Increase (Decrease) Between Periods			
	For the Years Ended December 31,			2011 vs. 2010		2010 vs. 2009	
	2011	2010	2009	\$	%	\$	%
Domestic	\$ 748,167	\$ 705,221	\$ 814,357	\$ 42,947	6.1%	\$(109,136)	(13.4)%
International:							
Asia Pacific	59,194	63,492	56,091	(4,298)	(6.8)%	7,401	13.2%
EMEA	85,824	96,608	93,078	(10,784)	(11.2)%	3,530	3.8%
Latin America	99,413	146,980	81,608	(47,567)	(32.4)%	65,372	80.1%
Canada	96,087	75,205	62,672	20,881	27.8%	12,533	20.0%
Total international	<u>340,518</u>	<u>382,285</u>	<u>293,449</u>	<u>(41,768)</u>	(10.9)%	<u>88,836</u>	30.3%
Total	<u>\$1,088,685</u>	<u>\$1,087,506</u>	<u>\$1,107,806</u>	<u>\$ 1,179</u>	0.1%	<u>\$(20,300)</u>	(1.8)%

Broadband Communications Systems Net Sales 2011 vs. 2010

During the year ended December 31, 2011, sales of our BCS segment decreased \$17.2 million or approximately 2.0%, as compared to 2010.

- This decline in sales is primarily the result of lower sales of our CMTS products. The introduction of the higher density downstream line cards and upgrade licenses for installed base of 16 channel cards enable us to be more competitive and sell bandwidth at a reduced price per downstream thus resulted in lower sales for comparable port shipments of our CMTS products.
- Offsetting these declines in CMTS sales was the introduction of our Moxi Gateway product, resulting in higher CPE sales. Additionally, we had \$4.7 million of higher revenue related to sales of BigBand product.

Access, Transport & Supplies Net Sales 2011 vs. 2010

During the year ended December 31, 2011, Access, Transport & Supplies segment sales increased \$16.6 million or approximately 9.2%, as compared to the same period in 2010.

- The increase reflects growth in our professional and commercial services as well as several network upgrade projects.

[Table of Contents](#)

Media & Communications Systems Net Sales 2011 vs. 2010

During the year ended December 31, 2011, Media & Communications Systems segment sales increased \$1.7 million or 2.6%, as compared to the same period in 2010.

- The increase was primarily due to expansion of deployments for our Assurance product line as customers continue to focus on operating expense reductions and improving customer satisfaction.
- The revenues for this segment can vary as revenue recognition is significantly associated with non-linear purchases of licenses and customer acceptance.

Broadband Communications Systems Net Sales 2010 vs. 2009

During the year ended December 31, 2010, sales of our BCS segment decreased \$11.7 million or approximately 1.4%, as compared to 2009.

- This decline in sales is primarily the result of lower CMTS sales as some key customers have completed a significant portion of their initial DOCSIS 3.0 network deployments in 2009.
- The decline in CMTS was partially offset by higher sales of the DOCSIS 3.0 EMTA products in 2010. In 2010, we shipped 5.0 million EMTA units as compared to 4.7 million EMTA units in 2009.

Access, Transport & Supplies Net Sales 2010 vs. 2009

During the year ended December 31, 2010, Access, Transport & Supplies segment sales increased \$4.8 million or approximately 2.7%, as compared to the same period in 2009.

- The increase reflects higher professional services and a modest improvement in infrastructure spending by our customers.

Media & Communications Systems Net Sales 2010 vs. 2009

During the year ended December 31, 2010, Media & Communications Systems segment sales decreased \$13.4 million or 17.0%, as compared to the same period in 2009.

- The decrease was primarily due to lower bookings in 2010 as compared to 2009.
- The revenues for this segment can vary as revenue recognition is significantly associated with non-linear purchases of licenses and customer acceptance.

Gross Margin

The table below sets forth our gross margin for the three years ended December 31, 2011, 2010 and 2009 for each of our business segments (in thousands, except percentages):

<i>Business Segment:</i>	Gross Margin \$			Increase (Decrease) Between Periods			
	For the Years Ended December 31,			2011 vs. 2010		2010 vs. 2009	
	2011	2010	2009	\$	%	\$	%
BCS	\$319,925	\$343,884	\$379,248	\$(23,959)	(7.0)%	\$(35,364)	(9.3)%
ATS	49,272	45,971	40,055	3,301	7.2%	5,916	14.8%
MCS	41,316	34,234	43,460	7,082	20.7%	(9,226)	(21.2)%
Total	\$410,513	\$424,089	\$462,763	\$(13,576)	(3.2)%	\$(38,674)	(8.4)%

[Table of Contents](#)

The table below sets forth our gross margin percentages for the three years ended December 31, 2011, 2010 and 2009 for each of our business segments:

<i>Business Segment:</i>	<u>Gross Margin %</u>			<u>Percentage Point Increase (Decrease) Between Periods</u>	
	<u>For the Years Ended December 31,</u>			<u>2011 vs. 2010</u>	<u>2010 vs. 2009</u>
	<u>2011</u>	<u>2010</u>	<u>2009</u>		
BCS	38.8%	40.9%	44.5%	(2.1)	(3.6)
ATS	24.9%	25.4%	22.7%	(0.5)	2.7
MCS	61.7%	52.4%	55.3%	9.3	(2.9)
Total	37.7%	39.0%	41.8%	(1.3)	(2.8)

Our overall gross margins are dependent upon, among other factors, achievement of cost reductions, product mix, customer mix, product introduction costs, and price reductions granted to customers.

Broadband Communications Systems Gross Margin 2011 vs. 2010

The decrease in the BCS segment gross margin dollars and gross margin percentage in 2011 as compared to 2010 were related to the following factors:

- The decrease primarily reflects a product mix change with more sales of CPE products, which have lower than average margins, and less sales of CMTS products, which have higher than average margins. The decrease also reflects competitive price pressure for our CMTS products.

Access, Transport & Supplies Gross Margin 2011 vs. 2010

The increase in the ATS segment gross margin dollars and decrease in gross margin percentage in 2011 as compared to 2010 were related to the following factors:

- The increase in gross margin dollars was primarily the result of higher sales in 2011 as compared to 2010.
- The decrease in gross margin percentage was primarily the result of a change in product mix and pricing pressure associated with Supplies products.

Media & Communications Systems Gross Margin 2011 vs. 2010

The increase in the MCS segment gross margin dollars and gross margin percentage in 2011 as compared to 2010 are related to the following factors:

- The increase in gross margin dollars and percentage was primarily due to higher Assurance sales which have higher gross margins.

Broadband Communications Systems Gross Margin 2010 vs. 2009

The decrease in the BCS segment gross margin dollars and gross margin percentage in 2010 as compared to 2009 were related to the following factors:

- The decrease primarily reflects a product mix change as we had higher EMTA sales and lower CMTS sales. EMTA products have a lower gross margin than CMTS products.

Access, Transport & Supplies Gross Margin 2010 vs. 2009

The increase in the ATS segment gross margin dollars and gross margin percentage in 2010 as compared to 2009 were related to the following factors:

- The increase in gross margin dollars was primarily the result of an increase in sales in 2010 as compared to 2009.

[Table of Contents](#)

- The increase in gross margin percentage was primarily the result of a change in product mix (higher gross margins for professional services and optics product lines) and cost reduction initiatives late in 2009 to align production-related activities with current levels of demand.

Media & Communications Systems Gross Margin 2010 vs. 2009

The decrease in the MCS segment gross margin dollars and gross margin percentage in 2010 as compared to 2009 are related to the following factors:

- Lower year-over-year sales resulted in the decrease in both gross margin dollars and percentage.

Operating Expenses

The table below provides detail regarding our operating expenses (in thousands, except percentages):

	Operating Expenses			Increase (Decrease) Between Periods			
	For the Years Ended December 31,			2011 vs. 2010		2010 vs. 2009	
	2011	2010	2009	\$	%	\$	%
Selling, general, & administrative	\$148,755	\$137,694	\$148,403	\$ 11,061	8.0%	\$(10,709)	(7.2)%
Research & development	146,519	140,468	124,550	6,051	4.3%	15,918	12.8%
Impairment of goodwill & intangibles	88,633	—	—	88,633	100%	—	—
Amortization of intangible assets	33,649	35,957	37,361	(2,308)	(6.4)%	(1,404)	(3.8)%
Acquisition costs	3,205	—	—	3,205	100%	—	—
Restructuring	4,360	65	3,702	4,295	6607.7%	(3,637)	(98.2)%
Total	\$425,121	\$314,184	\$314,016	\$110,937	35.3%	\$ 168	0.1%

ARRIS acquired BigBand Networks on November 21, 2011. Prior to the acquisition by ARRIS, BigBand's reported operating expenses of \$19.0 million for the quarter ended September 30, 2011. In 2011, we estimate that we incurred approximately \$13.7 million of operating expenses, including \$7.6 million of acquisition and restructuring related costs related to BigBand for the 40 days we owned the business. As a result of the acquisition, we anticipate our operating expenses will increase in future periods. We estimate that SG&A and R&D expense will total approximately \$84—\$86 million in the first quarter of 2012. We also estimate that we will incur approximately \$5.0 million of restructuring charges in the first quarter of 2012.

Selling, General, and Administrative, or SG&A, Expenses

2011 vs. 2010

Several factors contributed to the \$11.1 million increase year over year:

- We acquired Bigband on November 21, 2011 and as a result incurred \$3.1 million of SG&A cost in 2011 that did not exist in 2010. Further, we incurred approximately \$3.2 million of higher professional and other fees associated with the acquisition.
- We incurred higher legal expenses as a result of various patent and other litigation matters (see Part I, Item 3, "Legal Proceedings").

2010 vs. 2009

Several factors contributed to the \$10.7 million decrease year over year:

- Lower variable compensation costs.
- Lower legal expenses as a result of decreased costs associated with various patent and other litigation matters (see Part I, Item 3, "Legal Proceedings").

[Table of Contents](#)

Research & Development, or R&D, Expenses

Included in our R&D expenses are costs directly associated with our development efforts (people, facilities, materials, etc.) and reasonable allocations of our information technology and corporate facility costs.

2011 vs. 2010

The increase of \$6.1 million year-over-year in research and development expense reflects:

- \$3.0 million incremental R&D expenses associated with BigBand, which were acquired in the fourth quarter of 2011.
- Higher prototype and incremental start up costs related to new product development.

2010 vs. 2009

The increase of \$15.9 million year-over-year in research and development expense reflects:

- Incremental R&D expenses associated with Digeo Inc. and EG Technology Inc., which were acquired in the second half of 2009. The Company continued to invest in the acquired technologies from these acquisitions into 2010.
- Higher compensation costs related to an increase in employees primarily focused on video development.

Acquisition Costs

During 2011, we recorded acquisition related expenses of \$3.2 million. These expenses were related to the acquisition of BigBand and consisted of transaction costs, employee related costs, and integration related outside services.

Restructuring Charges

During 2011, 2010 and 2009, we recorded restructuring charges of \$4.4 million, \$0.1 million and \$3.7 million, respectively. The majority of the charges recorded in 2011 relate to the restructuring initiative following the acquisition of BigBand to align our workforce and operating costs with current business opportunities. Charges in 2010 reflected changes in estimates related to real estate leases associated with the previous restructuring charges. The majority of the charges recorded in 2009 related to severance associated with a reduction of workforce within our ATS segment and changes in sublease assumptions related to idle leased space given the current market conditions.

Impairment of Goodwill and Intangible Assets

Goodwill relates to the excess of cost over the fair value of net assets resulting from an acquisition. On an annual basis, our goodwill is tested for impairment, or more frequently if events or changes in circumstances indicate that the asset might be impaired, in which case a test would be performed sooner. The annual tests were performed in the fourth quarters of 2011, 2010 and 2009, with a test date of October 1. No impairment resulted from the reviews in 2010 and 2009. As a result of the review in 2011, we recognized a total non-cash goodwill impairment loss of \$41.2 in the MCS reporting unit. The Company determined that the fair values of the MCS reporting unit was less than its respective carrying value, as a result of a decline in the expected future cash flows for the reporting unit. In making our assessment regarding MCS future cash flows, a number of specific factors arose from our annual strategic planning process in the fourth quarter, including an assessment of historical operating results, key customer inputs, and anticipated development expenditures required to migrate the product portfolio in line with the changing market dynamics, including the evolution from a proprietary to open standards IP architecture. As a result of these factors, the Company has decided to shift some investment from the MCS reporting unit to its BCS reporting unit. Given the decision to reduce our investment going forward, we correspondingly moderated our long-term projections for the MCS segment.

In 2011, indicators of impairment existed for long-lived assets associated with the MCS reporting unit due to changes in projected operating results and cash flows. As a result of the review in 2011, an impairment loss of \$47.4 million before tax (\$29.1 million after tax) related to MCS customer relationships was recorded. See Note 13 of Notes to the Consolidated Financial Statements for disclosures related to goodwill and intangible assets.

[Table of Contents](#)

Amortization of Intangible Assets

We acquired BigBand Networks on November 21, 2011 and recognized intangible assets of \$37.3 million as a component of the purchase price. The amortization of BigBand intangibles from acquisition date through the end of 2011 was approximately \$0.7 million and is expected to be approximately \$5.9 million in 2012.

We recorded \$33.6 million of intangibles amortization expense in 2011. Our intangibles amortization expenses in 2011, 2010 and 2009 are related to the acquisitions of BigBand Networks in November 2011, Digeo, Inc. in October 2009, EG Technology, Inc. in September 2009, Auspice Corporation in August 2008 and C-COR Incorporated in December 2007. Prior to 2008, other intangible amortization expense was related to the existing technology acquired from Arris Interactive L.L.C., from Cadant, Inc., from Com21, and cXm Broadband LLC., all of which were fully amortized by the end of 2008.

Other Expense (Income)

The table below provides detail regarding our other expense (income) (in thousands):

	Other Expense (Income)			Increase (Decrease)	
	For the Years Ended			Between Periods	
	December 31,			2011 vs. 2010	2010 vs. 2009
	2011	2010	2009		
Interest expense	\$16,939	\$17,965	\$17,670	\$ (1,026)	\$ 295
Loss (gain) on debt retirement	19	(373)	(4,152)	392	3,779
Loss (gain) on investments	1,570	(414)	(711)	1,985	297
Loss (gain) on foreign currency	(580)	(44)	3,445	(536)	(3,489)
Interest income	(3,154)	(1,997)	(1,409)	(1,157)	(588)
Other expense (income)	(891)	138	(714)	(1,031)	852
Total other expense	\$13,903	\$15,275	\$14,129	\$ (1,373)	\$ 1,146

Interest Expense

Interest expense reflects the amortization of deferred finance fees and the non-cash interest component of our convertible subordinated notes, interest paid on the notes, capital leases and other debt obligations.

Loss (Gain) on Debt Retirement

During 2011, the Company acquired \$5.0 million face value of the notes for approximately \$5.0 million. The Company allocated \$2 thousand to the reacquisition of the equity component of the notes. The Company also wrote off approximately \$33 thousand of deferred finance fees associated with the portion of the notes acquired. As a result, the Company realized a loss of approximately \$19 thousand on the retirement of the notes.

During 2010, we purchased \$24.0 million of face value of the convertible notes for approximately \$23.3 million. We allocated \$0.1 million to the reacquisition of the equity component of the notes. We wrote off approximately \$0.2 million of deferred finance fees associated with the portion of the notes acquired and realized a gain of approximately \$0.4 million on the retirement of the convertible notes.

During 2009, we purchased and retired \$15.0 million of the face value of our convertible notes for approximately \$10.6 million. We also wrote off approximately \$0.2 million of deferred finance fees associated with the portion of the notes retired. We realized a gain of approximately \$4.2 million on the retirement of the convertible notes.

Loss (Gain) on Investments

From time to time, we hold certain investments in the common stock of private and publicly-traded companies, a number of non-marketable equity securities, and investments in rabbi trusts associated with our deferred compensation plans.

[Table of Contents](#)

ARRIS recorded an other-than-temporary impairment on its cost method investment of \$3.0 million in the fourth quarter of 2011. During the evaluation performed as of December 31, 2011, ARRIS' concluded that the private company would be depleting cash balances in early 2012. Further, ARRIS was notified that the private company intends to raise capital by offering a new round of financing to its existing and new investors in the first quarter of 2012. Without the cash proceeds from this potential financing, the private company is at risk of being unable to continue to fund its operations. ARRIS concluded that the investee's need to raise additional funds was an indicator of impairment and therefore, performed steps to determine the fair value of its investment in the private company. ARRIS was unable to apply traditional valuation techniques as the required inputs to these techniques are unavailable. ARRIS determined that the best estimate of the fair value of its investment was to calculate it based upon the preliminary indication of value related to the new round of financing.

For further discussion on the classification and the accounting treatment of these investments, see the Investments section within Financial Liquidity and Capital Resources contained herein. During the years ended December 31, 2011, 2010 and 2009, we recorded net (gains) losses related to these investments of \$1.6 million, \$(0.4) million and \$(0.7) million, respectively.

Loss (Gain) on Foreign Currency

During 2011, 2010 and 2009, we recorded foreign currency (gains) losses related to our international customers whose receivables and collections are denominated in their local currency, primarily in euro. To mitigate the volatility related to fluctuations in the foreign exchange rates, we may enter into various foreign currency contracts. The (gain) loss on foreign currency is driven by the fluctuations in the foreign currency exchanges rates, primarily the euro.

Interest Income

Interest income reflects interest earned on cash, cash equivalents, short-term and long-term investments. Interest income was \$3.2 million in 2011, and \$2.0 million in 2010 as compared to \$1.4 million in 2009.

Income Tax Expense

Our annual provision for income taxes and determination of the deferred tax assets and liabilities require management to assess uncertainties, make judgments regarding outcomes, and utilize estimates. To the extent the final outcome differs from initial assessments and estimates, future adjustments to our tax assets and liabilities will be necessary.

In 2011, we recorded \$10.8 million of income tax benefit for U.S. federal and state taxes and foreign taxes, which was 38.1% of our pre-tax loss of \$28.5 million. Pre-tax income was negatively impacted by \$88.6 million as a result of our impairment of goodwill and intangibles, which generated an unfavorable permanent difference between book and taxable income of \$22.3 million and an unfavorable timing difference between book and taxable income of \$66.3 million. The allocation of a portion of the total impairment of goodwill to tax deductible goodwill favorably impacted income tax expense by \$7.3 million. The effective tax rate was favorably impacted by certain discrete tax events. The 2011 discrete tax events included the release of approximately \$4.0 million of state valuation allowances in the first quarter of 2011 and the reversal of \$2.7 million of tax liabilities from uncertain tax positions mostly attributable to the expiration of certain statutes of limitations in the third quarter of 2011, offset by approximately \$3.8 million of tax increases primarily due to non-deductible acquisition costs, and increases in U.S. Federal valuation allowances / other. Exclusive of the impairments and the discrete tax events, the effective income tax rate would have been approximately 29.7%.

In 2010, we recorded \$30.5 million of income tax expense for U.S. federal and state taxes and foreign taxes, which was 32.23% of our pre-tax income of \$94.6 million. During the fourth quarter of 2010, approximately \$4.1 million of research and development tax credits were recorded after Congress passed legislation retroactively extending the tax credits back to January 1, 2010. The research and development tax credit legislation was extended through December 31, 2011.

[Table of Contents](#)

In 2009, we recorded \$43.8 million of income tax expense for U.S. federal and state taxes and foreign taxes, which was 32.6% of our pre-tax income of \$134.6 million. The total income tax expense was favorably impacted by approximately \$3.1 million related to changes in valuation allowances associated with certain foreign and state deferred tax assets, primarily net operating losses.

Financial Liquidity and Capital Resources

Overview

As highlighted earlier, one of our key strategies is to maintain and improve our capital structure. The key metrics we focus on are summarized in the table below:

Liquidity & Capital Resources Data

	Year Ended December 31,		
	2011	2010	2009
	(in thousands, except DSO and Turns)		
Key Working Capital Items			
Cash provided by operating activities	\$113,153	\$118,509	\$240,977
Cash, cash equivalents, and short-term investments	\$518,779	\$620,102	\$625,596
Long-term U.S corporate bonds	\$ 42,366	\$ —	\$ —
Accounts Receivable, net	\$152,437	\$125,933	\$143,708
-Days Sales Outstanding	47	45	50
Inventory, net	\$115,912	\$101,763	\$ 95,851
- Turns	6.2	6.7	5.7
Key Debt Items			
Convertible notes at face value	\$232,050	\$237,050	\$261,050
Convertible notes at book value	\$209,766	\$202,615	\$211,248
Cash used for early redemption of convertible notes	\$ 4,984	\$ 23,287	\$ 10,556
Key Shareholder Equity Items			
Cash used for share repurchases	\$109,123	\$ 69,326	\$ —
Capital Expenditures	\$ 23,307	\$ 22,645	\$ 18,663

In managing our liquidity and capital structure, we have been and are focused on key goals, and we have and will continue in the future to implement actions to achieve them. They include:

- Liquidity — ensure that we have sufficient cash resources or other short term liquidity to manage day to day operations.
- Growth — implement a plan to ensure that we have adequate capital resources, or access thereto, fund internal growth and execute acquisitions while retiring our convertible notes in a timely fashion.
- Share repurchases — opportunistically repurchase our common stock.

Below is a description of key actions taken and an explanation as to their potential impact:

Accounts Receivable & Inventory

We use the number of times per year that inventory turns over (based upon sales for the most recent period, or turns) to evaluate inventory management, and days sales outstanding, or DSOs, to evaluate accounts receivable management.

Accounts receivable at the end of 2011 increased as compared to the end of 2010, primarily as a result of higher sales in the fourth quarter of 2011 as compared to the fourth quarter of 2010. In addition, as part of the BigBand acquisition, we acquired approximately \$4.6 million of accounts receivable. DSOs increased slightly

[Table of Contents](#)

- (1) ARRIS may redeem the notes at any time on or after November 15, 2013, subject to certain conditions. In addition, the holders may require us to purchase all or a portion of their convertible notes on or after November 15, 2013. Does not include interest, which is payable at the rate of 2% per annum.
- (2) Includes leases which are reflected in restructuring accruals on the consolidated balance sheets.
- (3) Represents obligations under agreements with non-cancelable terms to purchase goods or services. The agreements are enforceable and legally binding, and specify terms, including quantities to be purchased and the timing of the purchase.
- (4) Approximately \$25.8 million of uncertain tax position have been excluded from the contractual obligation table because we are unable to make reasonably reliable estimates of the period of cash settlement with the respective taxing authorities.

Off-Balance Sheet Arrangements

We do not have any material off-balance sheet arrangements as defined in Item 303(a)(4)(ii) of Regulation S-K.

Cash Flow

Below is a table setting forth the key lines of our Consolidated Statements of Cash Flows (in thousands):

	2011	2010	2009
Net cash provided by operating activities	\$ 113,153	\$ 118,509	\$ 240,977
Net cash used in investing	(134,613)	(176,699)	(153,403)
Net cash provided by (used in) financing	(95,786)	(89,254)	3,097
Net increase (decrease) in cash and cash equivalents	<u>\$(117,246)</u>	<u>\$(147,444)</u>	<u>\$ 90,671</u>

Operating Activities:

Below are the key line items affecting cash from operating activities (in thousands):

	2011	2010	2009
Net income (loss)	\$ (17,662)	\$ 64,128	\$ 90,769
Adjustments to reconcile net income (loss) to cash provided by operating activities	141,077	97,837	90,338
Net income including adjustments	123,415	161,965	181,107
Decrease (increase) in accounts receivable	(22,093)	18,058	21,704
(Increase) decrease in inventory	(7,144)	(5,912)	38,906
Increase (decrease) in accounts payable and accrued liabilities	433	(48,308)	4,707
Other, net	18,542	(7,294)	(5,447)
Net cash provided by operating activities	<u>\$113,153</u>	<u>\$118,509</u>	<u>\$240,977</u>

2011 vs. 2010

Net income (loss), including adjustments, decreased \$38.6 million during 2011 as compared to 2010 reflecting lower gross margin and higher operating expense as discussed above. In 2011, net loss included a goodwill & intangible impairment of \$88.6 million and a related tax benefit of \$25.6 million arising from the allocation of a portion of the total impairment of goodwill to tax deductible goodwill and the impairment of intangibles.

[Table of Contents](#)

Accounts receivable increased \$22.1 million in 2011 as a result of higher sales in the fourth quarter of 2011 as compared to fourth quarter of 2010 and payment patterns of our customers.

Inventory increased by \$7.1 million in 2011. The increase in inventory was primarily related to an increase in BCS inventory level to ensure adequate supply.

2010 vs. 2009

Net income (loss), including adjustments, decreased \$19.1 million during 2010 as compared to 2009.

Accounts receivable declined \$18.1 million in 2010. These decreases were primarily related to lower sales in the fourth quarter of 2010 as compared to the fourth quarter of 2009, and also are impacted by the payment patterns of our customers. It is possible that both accounts receivable and DSOs may increase in future periods, particularly if we have an increase in international sales, which tend to have longer payment terms.

Inventory increased by \$5.9 million in 2010 primarily as a result of the decision to increase our inventory of EMTAs.

Accounts payable and accrued liabilities decreased by \$48.3 million in 2010. The significant component of this change was a decrease in deferred revenue year-over-year, coupled with a decrease in accrued volume rebates for certain customers.

Investing Activities:

Below are the key line items affecting investing activities (in thousands):

	<u>2011</u>	<u>2010</u>	<u>2009</u>
Capital expenditures	\$ (23,307)	\$ (22,645)	\$ (18,663)
Acquisitions/other	(130,227)	(4,000)	(22,734)
Purchases of investments	(277,937)	(514,376)	(216,704)
Sales of investments	296,774	364,077	104,488
Cash proceeds from sale of property, plant and equipment	84	245	210
Net cash used in investing activities	<u>\$(134,613)</u>	<u>\$(176,699)</u>	<u>\$(153,403)</u>

Capital Expenditures — Capital expenditures are mainly for test equipment, laboratory equipment, and computing equipment. We anticipate investing approximately \$25 million in 2012.

Acquisitions/Other — This represents cash investments we have made in our various acquisitions. In 2011, we paid \$ 162.4 million cash, or \$53.1 million net of cash and marketable securities acquired, for the acquisition of BigBand Networks. In 2010, we paid \$4.0 million related to a deferral of the purchase price of Digeo, Inc. In 2009, ARRIS paid cash for the acquisitions of Digeo, Inc. and EG Technology, Inc.

Purchases and Disposals of Investments — This represents purchases and sales of securities.

Cash proceeds from Sale of Property, Plant and Equipment — This represents the cash proceeds we received from the sale of property, plant and equipment.

[Table of Contents](#)

Financing Activities:

Below are the key items affecting our financing activities (in thousands):

	2011	2010	2009
Payment of debt obligations	\$ —	\$ (124)	\$ (158)
Early retirement of convertible notes	(4,984)	(23,287)	(10,556)
Repurchase of common stock	(109,123)	(69,326)	—
Proceeds from issuance of common stock, net	22,985	7,178	12,984
Repurchase of shares to satisfy minimum tax withholdings	(8,332)	(6,447)	(2,180)
Excess tax benefits from stock-based compensation plans	3,668	2,752	3,007
Net cash provided by (used in) financing activities	<u>\$ (95,786)</u>	<u>\$(89,254)</u>	<u>\$ 3,097</u>

Payment of Debt Obligation — This represents the payment of the short term loan to the Pennsylvania Industrial Development Authority (PIDA) for the cost of expansion of the facility in State College, Pennsylvania. The debt was repaid in 2010.

Early Retirement of Long — Term Debt — During 2011, the Company acquired \$5.0 million face value of the notes for approximately \$5.0 million. The Company allocated \$2 thousand to the reacquisition of the equity component of the notes. The Company also wrote off approximately \$33 thousand of deferred finance fees associated with the portion of the notes acquired. As a result, the Company realized a loss of approximately \$19 thousand on the retirement of the notes.

In 2010, we purchased \$24.0 million of the face value of our convertible debt for approximately \$23.3 million. We allocated \$0.1 million to the reacquisition of the equity component of the notes. We also wrote off approximately \$0.2 million of deferred finance fees associated with the portion of the notes retired. We realized a gain of approximately \$0.4 million on the retirement of the convertible notes.

In 2009, we purchased \$15.0 million of the face value of our convertible debt for approximately \$10.6 million. We also wrote off approximately \$0.2 million of deferred finance fees associated with the portion of the notes retired. We realized a gain of approximately \$4.2 million on the retirement of the convertible notes.

Repurchase of Common Stock — In March 2009, our Board of Directors authorized a plan for ARRIS to purchase up to \$100 million of our common stock. We did not purchase any shares under the 2009 Plan during 2009.

In 2010, ARRIS repurchased 6.8 million shares of our common stock at an average price of \$10.24 per share for an aggregate consideration of approximately \$69.3 million. In May 2011, the share repurchase authorization amount under the 2009 plan was exhausted.

In May 2011, our Board of Directors authorized a new plan for ARRIS to repurchase up to \$150 million of our common stock. During 2011, ARRIS repurchased 10.0 million shares of our common stock at an average price of \$10.95 per share for an aggregate consideration of approximately \$109.1 million. As of December 31, 2011, the remaining authorized amount for future repurchases was \$71.6 million.

Proceeds from Issuance of Common Stock, Net — This represents cash proceeds related to the exercise of stock options by employees, offset with expenses paid related to the issuance of common stock.

Repurchase of Shares to Satisfy Minimum Tax Withholdings — This represents the minimum shares withheld to satisfy the minimum tax withholding when restricted stock vests.

Excess Tax Benefits from Stock-Based Compensation Plans — This represents the cash that otherwise would have been paid for income taxes if increases in the value of equity instruments also had not been deductible in determining taxable income.

[Table of Contents](#)

Income Taxes

During 2011, approximately \$3.7 million of U.S. federal tax benefits were obtained from tax deductions arising from equity-based compensation deductions, all of which resulted from 2011 exercises of non-qualified stock options and lapses of restrictions on restricted stock awards. In 2010, approximately \$2.6 million of U.S. federal and state tax benefits were obtained from tax deductions arising from equity-based compensation deductions, all of which resulted from 2010 exercises of non-qualified stock options and lapses of restrictions on restricted stock awards. During 2009, approximately \$2.1 million of U.S. federal tax benefits were obtained from tax deductions arising from equity-based compensation deductions, all of which resulted from 2009 exercises of non-qualified stock options and lapses of restrictions on restricted stock awards.

Interest Rates

As of December 31, 2011, we did not have any floating rate indebtedness or outstanding interest rate swap agreements.

Foreign Currency

A significant portion of our products are manufactured or assembled in China, Ireland, Israel, Mexico, Taiwan, and other foreign countries. Our sales into international markets have been and are expected in the future to be an important part of our business. These foreign operations are subject to the usual risks inherent in conducting business abroad, including risks with respect to currency exchange rates, economic and political destabilization, restrictive actions and taxation by foreign governments, nationalization, the laws and policies of the United States affecting trade, foreign investment and loans, and foreign tax laws.

We have certain international customers who are billed in their local currency. We use a hedging strategy and enter into forward or currency option contracts based on a percentage of expected foreign currency revenues. The percentage can vary, based on the predictability of the revenues denominated in the foreign currency.

Financial Instruments

In the ordinary course of business, we, from time to time, will enter into financing arrangements with customers. These financial arrangements include letters of credit, commitments to extend credit and guarantees of debt. These agreements could include the granting of extended payment terms that result in longer collection periods for accounts receivable and slower cash inflows from operations and/or could result in the deferral of revenue.

ARRIS executes letters of credit in favor of certain landlords and vendors to guarantee performance on lease and insurance contracts. Additionally, we have cash collateral account agreements with our financial institutions as security against potential losses with respect to our foreign currency hedging activities. The letters of credit and cash collateral accounts are reported as restricted cash. As of December 31, 2011 and 2010, we had approximately \$4.1 million and \$4.9 million outstanding, respectively, of cash collateral.

Cash, Cash Equivalents, and Investments

Our cash and cash equivalents (which are highly-liquid investments with an original maturity of three months or less) are primarily held in money market funds that pay either taxable or non-taxable interest. We also

[Table of Contents](#)

hold investments consisting of mutual funds and debt securities classified as available-for-sale, which are stated at estimated fair value. The debt securities consist primarily of commercial paper, certificates of deposits, short term corporate obligations and U.S. government agency financial instruments.

From time to time, we hold certain investments in the common stock of publicly-traded companies, which were classified as available-for-sale. As of December 31, 2011 and December 31, 2010, our holdings in these investments were \$4.8 million and \$5.8 million, respectively. Changes in the market value of these securities typically are recorded in other comprehensive income and gains or losses on related sales of these securities are recognized in income (loss).

ARRIS holds an investment in a private company. This investment is recorded using the cost method, which was \$1.0 million and \$4.0 million as of December 31, 2011 and 2010, respectively. Due to the fact the investment is in a private company, we are exempt from estimating the fair value on an interim basis. However, ARRIS is required to estimate the fair value if there has been an identifiable event or change in circumstance that may have a significant adverse effect on the fair value of the investment. Each quarter, we evaluate our investment for any other-than-temporary impairment, by reviewing the current revenues, bookings and long-term plan of the private company. During the evaluation performed as of December 31, 2011, ARRIS concluded that the private company would be depleting cash balances in early 2012. Further, ARRIS was notified that the private company intends to raise capital by offering a new round of financing to its existing and new investors in the first quarter of 2012. Without the cash proceeds from this potential financing, the private company is at risk of being unable to continue to fund its operations. ARRIS concluded that the investee's need to raise further capital was an indicator of impairment and therefore, performed steps to determine the fair value of its investment in the private company. ARRIS was unable to apply traditional valuation techniques as the required inputs to these techniques are unavailable. ARRIS determined that the best estimate of the fair value of its investment was to calculate it based upon the preliminary indication of value related to the new round of financing. As a result of these considerations, ARRIS recorded an other-than-temporary impairment on its investment of \$3.0 million in the fourth quarter of 2011.

See Note 5 of Notes to the Consolidated Financial Statements for disclosures related to the fair value of our investments.

We have a deferred compensation plan that was available to certain current and former officers and key executives of C-COR. During 2008, this plan was merged into a new non-qualified deferred compensation plan which is also available to our key executives. Employee compensation deferrals and matching contributions are held in a rabbi trust, which is a funding vehicle used to protect the deferred compensation from various events (but not from bankruptcy or insolvency).

Additionally, we previously offered a deferred compensation arrangement to certain senior employees. As of December 31, 2004, the plan was frozen and no further contributions are allowed. The deferred earnings are invested in a rabbi trust.

We also have a deferred retirement salary plans, which were limited to certain current or former officers of C-COR. We hold investments to cover the liability.

ARRIS also funds its nonqualified defined benefit plan for certain executives in a rabbi trust.

Capital Expenditures

Capital expenditures are made at a level designed to support the strategic and operating needs of the business. Capital expenditures were \$23.3 million in 2011 as compared to \$22.6 million in 2010 and \$18.7 million in 2009. We had no significant commitments for capital expenditures at December 31, 2011. Management expects to invest approximately \$25.0 million in capital expenditures for the year 2012.

Deferred Income Tax Assets – Including Net Operating Loss Carryforwards and Research and Development Credit Carryforwards, and Valuation Allowances

Deferred income tax assets represent amounts available to reduce income taxes payable on taxable income in future years. Such assets arise because of temporary differences between the financial reporting and tax bases

[Table of Contents](#)

of assets and liabilities, as well as from net operating loss and tax credit carryforwards. We evaluate the recoverability of these future tax deductions and credits by assessing the adequacy of future expected taxable income from all sources, including reversal of taxable temporary differences, forecasted operating earnings and available tax planning strategies. If we conclude that deferred tax assets are more-likely-than-not to be realized, then we record a valuation allowance against those assets. We continually review the adequacy of the valuation allowances established against deferred tax assets. As part of that review, we regularly project taxable income based on book income projections by legal entity. Our ability to utilize our state deferred tax assets is dependent upon our future taxable income by legal entity. During 2011, we merged certain historical loss generating legal entities into a historically profitable legal entity, resulting in a release of approximately \$4.0 million of state valuation allowances. A material portion of ARRIS' income tax filings are in the United States. In order to realize the \$44.6 million of U.S. Federal deferred income tax assets in excess of liabilities that are reported at December 31, 2011, ARRIS will need to generate future U.S. Federal taxable income of approximately \$127.5 million.

As of December 31, 2011, we had net operating loss, or NOL, carryforwards for U.S. federal, U.S. state, and foreign income tax purposes of approximately \$123.5 million, \$208.3 million, and \$38.4 million, respectively. The U.S. federal NOLs expire through 2030. Foreign NOLs related to our Irish subsidiary in the amount of \$18.9 million have an indefinite life. Other significant foreign NOLs arise from our Dutch subsidiaries (\$5.1 million, expiring during the next 7 years), our French branch (\$5.8 million, no expiration), and our U.K. branch (\$6.8 million, no expiration). The net operating losses are subject to various limitations on how and when the losses can be used to offset against taxable income. Approximately \$74.6 million of U.S. federal NOLs, \$67.5 million of U.S. state NOLs, and \$2.3 million of the foreign NOLs are subject to valuation allowances because we do not believe the ultimate realization of the deferred tax assets associated with these U.S. federal and state NOLs is more-likely-than-not.

During 2011, we utilized approximately \$1.5 million of U.S. federal NOLs and \$14.7 million of U.S. state NOLs to offset against taxable income. We used approximately \$20.2 million of U.S. federal NOLs and \$11.4 million of U.S. state NOLs to reduce taxable income in 2010.

During the tax years ending December 31, 2011, and 2010, we utilized \$11.0 million and \$6.2 million, respectively of U.S. federal and state research and development tax credits, to offset against U.S. federal and state income tax liabilities. As of December 31, 2011, ARRIS has \$3.9 million of available U.S. federal research and development tax credits and \$10.9 million of available U.S. state research and development tax credits. The remaining unutilized U.S. federal research and development tax credits can be carried back one year and carried forward twenty years. The U.S. state research and development tax credits carry forward and will expire pursuant to the various applicable state rules.

Since the acquisition of C COR Incorporated in 2007, ARRIS has generally reported taxable income in excess of its pre-tax net book income for financial reporting purposes. A significant reconciling item between the taxable income and the pre-tax net book income has been the book amortization expense relating to the separately stated intangible assets arising from the C COR transaction. Additionally, each tax year ARRIS includes in its taxable income all items of revenue that are deferred for financial reporting purposes. Other significant reconciling items between taxable income and pre-tax net book income are certain reserves that are recorded as expenses for pre-tax net book income purposes which are not deductible for income tax purposes until they are paid.

The Company obtains significant benefits from U.S. Federal research and development tax credits, which are used to reduce the Company's U.S. Federal income tax liability. During December of 2010, Congress passed legislation that provides for an extension of these tax credits so that the Company can continue to calculate and claim research and development tax credits for the 2010 and 2011 tax years. Currently, these tax credits are not permanently enacted. Therefore, the Company would require an extension of the research and development tax credit statutes to continue to claim benefits after December 31, 2011, which as of February 29, 2012 has not occurred.

[Table of Contents](#)

Defined Benefit Pension Plans

ARRIS sponsors a qualified and a non-qualified non-contributory defined benefit pension plan that cover certain U.S. employees. As of January 1, 2000, we froze the qualified defined pension plan benefits for its participants. These participants elected to enroll in ARRIS' enhanced 401(k) plan. Due to the cessation of plan accruals for such a large group of participants, a curtailment was considered to have occurred.

The U.S. pension plan benefit formulas generally provide for payments to retired employees based upon their length of service and compensation as defined in the plans. ARRIS' investment policy is to fund the qualified plan as required by the Employee Retirement Income Security Act of 1974 ("ERISA") and to the extent that such contributions are tax deductible. For 2011, the plan assets were comprised of approximately 43%, 54%, and 3% of equity, debt securities, and money market funds, respectively. For 2010, the plan assets were comprised of approximately 48%, 49%, and 3% of equity, debt securities, and money market funds, respectively. For 2012, the plan's current target allocations are 45% equity securities, 50% debt securities, and 5% money market funds. Liabilities or amounts in excess of these funding levels are accrued and reported in the consolidated balance sheets. ARRIS has established a rabbi trust to fund the pension obligations of the Chief Executive Officer under his Supplemental Retirement Plan including the benefit under our non-qualified defined benefit plan. In addition, we have established a rabbi trust for certain executive officers to fund the pension liability to those officers under the non-qualified plan.

The investment strategies of the plans place a high priority on benefit security. The plans invest conservatively so as not to expose assets to depreciation in adverse markets. The plans' strategy also places a high priority on earning a rate of return greater than the annual inflation rate along with maintaining average market results. The plan has targeted asset diversification across different asset classes and markets to take advantage of economic environments and to also act as a risk minimizer by dampening the portfolio's volatility.

The weighted-average actuarial assumptions used to determine the benefit obligations for the three years presented are set forth below:

	<u>2011</u>	<u>2010</u>	<u>2009</u>
Assumed discount rate for non-qualified plan participants	4.50%	5.50%	5.75%
Assumed discount rate for qualified plan participants	4.50%	5.50%	5.75%
Rate of compensation increase	3.75%	3.75%	3.75%

The weighted-average actuarial assumptions used to determine the net periodic benefit costs are set forth below:

	<u>2011</u>	<u>2010</u>	<u>2009</u>
Assumed discount rate for non-qualified plan participants	5.50%	5.75%	6.25%
Assumed discount rate for qualified plan participants	5.50%	5.75%	6.25%
Rate of compensation increase	3.75%	3.75%	3.75%
Expected long-term rate of return on plan assets	7.50%	7.50%	7.50%

The expected long-term rate of return on assets is derived using the building block approach which includes assumptions for the long term inflation rate, real return, and equity risk premiums.

No minimum funding contributions are required in 2012 for the plan.

Other Benefit Plans

ARRIS has established defined contribution plans pursuant to the Internal Revenue Code Section 401(k) that cover all eligible U.S. employees. ARRIS contributes to these plans based upon the dollar amount of each participant's contribution. ARRIS made matching contributions to these plans of approximately \$5.0 million, \$4.9 million, and \$4.4 million in 2011, 2010 and 2009, respectively.

[Table of Contents](#)

We have a deferred compensation plan that does not qualify under Section 401(k) of the Internal Revenue Code, that was available to certain current and former officers and key executives of C-COR. During 2008, this plan was merged into a new non-qualified deferred compensation plan which is also available to our key executives. Employee compensation deferrals and matching contributions are held in a rabbi trust. The total of net employee deferrals and matching contributions, which is reflected in other long-term liabilities, were \$2.6 million and \$2.3 million at December 31, 2011 and 2010, respectively. Total expenses included in continuing operations for the matching contributions were approximately \$215 thousand in 2011 and \$321 thousand in 2010.

We previously offered a deferred compensation arrangement, that allowed certain employees to defer a portion of their earnings and defer the related income taxes. As of December 31, 2004, the plan was frozen and no further contributions are allowed. The deferred earnings are invested in a rabbi trust. The total of net employee deferral and matching contributions, which is reflected in other long-term liabilities, was \$2.6 million and \$2.8 million at December 31, 2011 and 2010, respectively.

We also have a deferred retirement salary plan, which was limited to certain current or former officers of C-COR. The present value of the estimated future retirement benefit payments is being accrued over the estimated service period from the date of signed agreements with the employees. The accrued balance of this plan, the majority of which is included in other long-term liabilities, was \$2.2 million and \$2.1 million at December 31, 2011 and 2010, respectively. Total expense included in continuing operations for the deferred retirement salary plan were approximately \$0.2 million and \$(0.2) million for 2011 and 2010, respectively.

Critical Accounting Policies

The accounting and financial reporting policies of ARRIS are in conformity with U.S. generally accepted accounting principles. The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the 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. Management has discussed the development and selection of the critical accounting estimates discussed below with the audit committee of the Board of Directors and the audit committee has reviewed the related disclosures.

a) Revenue Recognition

ARRIS generates revenue as a result of varying activities, including the delivery of stand-alone equipment, custom design and installation services, and bundled sales arrangements inclusive of equipment, software and services. The revenue from these activities is recognized in accordance with applicable accounting guidance and their related interpretations.

Revenue is recognized when all of the following criteria have been met:

- *When persuasive evidence of an arrangement exists.* Contracts and customer purchase orders are used to determine the existence of an arrangement. For professional services evidence that an agreement exists includes information documenting the scope of work to be performed, price, and customer acceptance. These are contained in the signed Contract, Purchase Order, or other documentation that shows scope, price and customer acceptance.
- *Delivery has occurred.* Shipping documents, proof of delivery and customer acceptance (when applicable) are used to verify delivery.
- *The fee is fixed or determinable.* Pricing is considered fixed or determinable at the execution of a customer arrangement, based on specific products and quantities to be delivered at specific prices. This determination includes a review of the payment terms associated with the transaction and whether the sales price is subject to refund or adjustment or future discounts.

[Table of Contents](#)

- *Collectability is reasonably assured.* We assess the ability to collect from customers based on a number of factors that include information supplied by credit agencies, analyzing customer accounts, reviewing payment history and consulting bank references. Should a circumstance arise where a customer is deemed not creditworthy, all revenue related to the transaction will be deferred until such time that payment is received and all other criteria to allow us to recognize revenue have been met.

Revenue is deferred if any of the above revenue recognition criteria is not met as well as when certain circumstances exist for any of our products or services, including, but not limited to:

- When undelivered products or services that are essential to the functionality of the delivered product exist, revenue is deferred until such undelivered products or services are delivered as the customer would not have full use of the delivered elements.
- When required acceptance has not occurred.
- When trade-in rights are granted at the time of sale, that portion of the sale is deferred until the trade-in right is exercised or the right expires. In determining the deferral amount, management estimates the expected trade-in rate and future value of the product upon trade-in. These factors are periodically reviewed and updated by management, and the updates may result in either an increase or decrease in the deferral.

Equipment — We provide cable system operators with equipment that can be placed within various stages of a broadband cable system that allows for the delivery of cable telephony, video and high speed data as well as outside plant construction and maintenance equipment. For equipment sales, revenue recognition is generally established when the products have been shipped, risk of loss has transferred, objective evidence exists that the product has been accepted, and no significant obligations remain relative to the transaction. Additionally, based on historical experience, ARRIS has established reliable estimates related to sales returns and other allowances for discounts. These estimates are recorded as a reduction to revenue at the time the revenue is initially recorded.

Software Sold Without Tangible Equipment — ARRIS sells internally developed software as well as software developed by outside third parties that does not require significant production, modification or customization. For arrangements that contain only software and the related post-contract support, we recognize revenue in accordance with the applicable software revenue recognition guidance. If the arrangement includes multiple elements that are software only, then the software revenue recognition guidance is applied and the fee is allocated to the various elements based on vendor-specific objective evidence ("VSOE") of fair value. If sufficient VSOE of fair value does not exist for the allocation of revenue to all the various elements in a multiple element software arrangement, all revenue from the arrangement is deferred until the earlier of the point at which such sufficient VSOE of fair value is established or all elements within the arrangement are delivered. If VSOE of fair value exists for all undelivered elements, but does not exist for one or more delivered elements, the arrangement consideration is allocated to the various elements of the arrangement using the residual method of accounting. Under the residual method, the amount of the arrangement consideration allocated to the delivered elements is equal to the total arrangement consideration less the aggregate fair value of the undelivered elements. Under the residual method, if VSOE exists for the undelivered element, generally post contract support ("PCS"), the fair value of the undelivered element is deferred and recognized ratably over the term of the PCS contract, and the remaining portion of the arrangement is recognized as revenue upon delivery. If sufficient VSOE of fair value does not exist for PCS, revenue is recognized ratably over the term of support.

Standalone Services — Installation, training, and professional services are generally recognized as service revenues when performed or upon completion of the service when the final act is significant in relation to the overall service transaction. The key element for Professional Services in determining when service transaction revenue has been earned is determining the pattern of delivery or performance which determines the extent to which the earnings process is complete and the extent to which customers have received value from services provided. The delivery or performance conditions of our service transactions are typically evaluated under the proportional performance or completed performance model.

Incentives — Customer incentive programs that include consideration, primarily rebates/credits to be used against future product purchases and certain volume discounts, have been recorded as a reduction of revenue when the shipment of the requisite equipment occurs.

[Table of Contents](#)

Value Added Resellers—ARRIS employs the sell-in method of accounting for revenue when using a Value Added Reseller (“VAR”) as our channel to market. Because product returns are restricted, revenue under this method is generally recognized at the time of shipment to the VAR provided all criteria for recognition are met.

Multiple Element Arrangements — Certain customer transactions may include multiple deliverables based on the bundling of equipment, software and services. When a multiple element arrangement exists, the fee from the arrangement is allocated to the various deliverables, to the extent appropriate, so that the proper amount can be recognized as revenue as each element is delivered. Based on the composition of the arrangement, we analyze the provisions of the accounting guidance to determine the appropriate model that is applied towards accounting for the multiple element arrangement. If the arrangement includes a combination of elements that fall within different applicable guidance, ARRIS follows the provisions of the hierarchical literature to separate those elements from each other and apply the relevant guidance to each.

For multiple element arrangements that include software or have a software-related element that is more than incidental and does involve significant production, modification or customization, revenue is recognized using the contract accounting guidelines by applying the percentage of completion or completed contract method. We recognize software license and associated professional services revenue for certain software license product installations using the percentage of completion method of accounting as we believe that our estimates of costs to complete and extent of progress toward completion of such contracts are reliable. For certain software license arrangements where professional services are being provided and are deemed to be essential to the functionality or are for significant production, modification, or customization of the software product, both the software and the associated professional service revenue are recognized using the completed contract method. The completed contract method is used for these particular arrangements because they are considered short-term arrangements and the financial position and results of operations would not be materially different from those under the percentage-of-completion method. Under the completed contract method, revenue is recognized when the contract is complete, and all direct costs and related revenues are deferred until that time. The entire amount of an estimated loss on a contract is accrued at the time a loss on a contract is projected. Actual profits and losses may differ from these estimates.

For arrangements that fall within the software revenue recognition guidance, the fee is allocated to the various elements based on VSOE of fair value. If sufficient VSOE of fair value does not exist for the allocation of revenue to all the various elements in a multiple element arrangement, all revenue from the arrangement is deferred until the earlier of the point at which such sufficient VSOE is established or all elements within the arrangement are delivered. If VSOE of fair value exists for all undelivered elements, but does not exist for one or more delivered elements, the arrangement consideration is allocated to the various elements of the arrangement using the residual method of accounting. Under the residual method, the amount of the arrangement consideration allocated to the delivered elements is equal to the total arrangement consideration less the aggregate fair value of the undelivered elements. Using this method, any potential discount on the arrangement is allocated entirely to the delivered elements, which ensures that the amount of revenue recognized at any point in time is not overstated. Under the residual method, if VSOE exists for the undelivered element, generally PCS, the fair value of the undelivered element is deferred and recognized ratably over the term of the PCS contract, and the remaining portion of the arrangement is recognized as revenue upon delivery, which generally occurs upon delivery of the product or implementation of the system. License revenue allocated to software products, in certain circumstances, is recognized upon delivery of the software products.

Many of ARRIS’ products are sold in combination with customer support and maintenance services, which consist of software updates and product support. Software updates provide customers with rights to unspecified software updates that ARRIS chooses to develop and to maintenance releases and patches that we choose to release during the term of the support period. Product support services include telephone support, remote diagnostics, email and web access, access to on-site technical support personnel and repair or replacement of hardware in the event of damage or failure during the term of the support period. Maintenance and support service fees are recognized ratably under the straight-line method over the term of the contract, which is generally one year. We do not record receivables associated with maintenance revenues without a firm, non-cancelable order

[Table of Contents](#)

from the customer. VSOE of fair value is determined based on the price charged when the same element is sold separately and based on the prices at which our customers have renewed their customer support and maintenance. For elements that are not yet being sold separately, the price established by management, if it is probable that the price, once established, will not change before the separate introduction of the element into the marketplace is used to measure VSOE of fair value for that element.

We elected to early adopt accounting standards on a prospective basis related to multiple element arrangements. We apply the previous applicable accounting guidance for arrangements originating prior to the adoption date of January 1, 2010.

Below is a comparison of: 1) units of accounting, 2) allocation of arrangement consideration and 3) timing of revenue recognition applying the old and new guidance.

Units of Accounting:

Before January 1, 2010: For multiple element arrangements originating before January 1, 2010, the deliverables are separated into more than one unit of accounts when the following criteria are met: (i) the delivered element(s) have value to the customer on a stand-alone basis, (ii) objective and reliable evidence of fair value exists for the undelivered element(s), and (iii) delivery of the undelivered element(s) is probable and substantially in the our control.

After December 31, 2009: For multiple element arrangements (other than software sold without tangible equipment) originating or materially modified after December 31, 2009, the deliverables are separated into more than one unit of accounting when the following criteria are met: (i) the delivered element(s) have value to the customer on a stand-alone basis, and (ii) if a general right of return exists relative to the delivered item, delivery or performance of the undelivered element(s) is probable and substantially in our control.

Allocation of Arrangement Consideration:

Before January 1, 2010: Revenue is allocated to each unit of accounting based on the relative fair value of each accounting unit or by using the residual method if objective evidence of fair value does not exist for the delivered element(s).

After December 31, 2009: We use best estimated selling price ("BESP") of the element(s) for the allocation of arrangement consideration when unable to establish VSOE or third-party evidence of selling price ("TPE"). The objective of BESP is to determine the price at which we would transact a sale if the product or service were sold on a stand-alone basis. BESP is generally used for new or highly customized offerings and solutions or elements not priced within a narrow range. We determine BESP for a product or service by considering multiple factors including, but not limited to, geographies, market conditions, competitive landscape, internal costs, gross margin objectives, and pricing practices. We use the relative selling price basis for the allocation of the arrangement consideration.

b) Goodwill and Intangible Assets

Goodwill

Goodwill relates to the excess of cost over the fair value of net assets resulting from an acquisition. Our goodwill is tested for impairment on an annual basis, or more frequently if events or changes in circumstances indicate that the asset is more likely than not impaired. Our goodwill impairment testing date is October 1, which aligns with the timing of the Company's annual strategic planning process, which enables the Company to incorporate the reporting units' long-term financial projections which are generated from the annual strategic planning process as a basis for performing our impairment testing. For purposes of impairment testing, we have determined that our reporting units are the reportable segments based on our organizational structure, the financial information that is provided to and reviewed by segment management and aggregation criteria applicable to component businesses that are economically similar. The impairment testing is a two-step process. The first step

[Table of Contents](#)

is to identify a potential impairment by comparing the fair value of a reporting unit with its carrying amount. We concluded that a taxable transaction approach should be used. We determined the fair value of each of its reporting units using a combination of an income approach using discounted cash flow analysis and a market approach comparing actual market transactions of businesses that are similar to our business. In addition, market multiples of publicly traded guideline companies also were considered. We considered the relative strengths and weaknesses inherent in the valuation methodologies utilized in each approach and consulted with a third party valuation specialist to assist in determining the appropriate weighting. The discounted cash flow analysis requires us to make various judgmental assumptions, including assumptions about future cash flows, growth rates and weighted average cost of capital (discount rate). The assumptions about future cash flows and growth rates are based on the current and long-term business plans of each reporting unit. Discount rate assumptions are based on an assessment of the risk inherent in the future cash flows of the respective reporting units. If necessary, the second step of the goodwill impairment test compares the implied fair value of the reporting unit's goodwill with the carrying amount of that goodwill. If the carrying amount of a reporting unit's goodwill exceeds the implied fair value of that goodwill, an impairment loss is recognized in an amount in excess of the carrying amount of goodwill over its implied fair value. The implied fair value of goodwill is determined in a similar manner as the determination of goodwill recognized in a business combination. We allocate the fair value of a reporting unit to all of the assets and liabilities of that unit, including intangible assets, as if the reporting unit had been acquired in a business combination. Any excess of the fair value of a reporting unit over the amounts assigned to its assets and liabilities represents the implied fair value of goodwill.

The valuation methodologies described above have been consistently applied for all years presented below.

2009 Impairment Analysis — The 2009 annual impairment test was performed as of October 1, 2009. Our step one analysis indicated that there were no indicators of impairment for our BCS and MCS reporting units, as their respective fair values were greater than their carrying values. For the ATS reporting unit, our step one analysis indicated that its fair value was less than its carrying value. As a result, step two analysis was performed to determine the implied fair value of our ATS goodwill. We determined the implied fair value of the ATS goodwill was 34% greater than its carrying value, thus no reportable impairments were determined to have occurred in 2009.

2010 Impairment Analysis — Based on the annual goodwill impairment assessment performed as of October 1, 2010, we determined that our BCS and ATS, reporting units were not at risk of failing step one of the goodwill impairment test. Our MCS reporting unit valuation included estimates of future operating performance and cash flows. The fair value of our MCS reporting unit exceeded its carrying value by 4.2% and thus was at risk of failing step one of the goodwill impairment test, and was therefore at risk of a future impairment in the event of significant unfavorable changes in the forecasted cash flows or the key assumptions used in our analysis, including the weighted average cost of capital (discount rate) and growth rates utilized in the discounted cash flow analysis.

2011 Impairment Analysis — Based on our most recent annual goodwill impairment assessment performed as of October 1, 2011, the Company determined that our BCS reporting unit was not at risk of failing step one of the goodwill impairment test. In performing step one of impairment testing, the Company determined that the fair values of the MCS reporting unit was less than its respective carrying value, as a result of a decline in the expected future cash flows for the reporting unit. In making our assessment regarding MCS future cash flows, a number of specific factors arose from our annual strategic planning process in the fourth quarter, including an assessment of historical operating results, key customer inputs, and anticipated development expenditures required to migrate the product portfolio in line with the changing market dynamics, including the evolution from a proprietary to open standards IP architecture. As a result of these factors, the Company has decided to shift some investment from the MCS reporting unit to its BCS reporting unit. Given the decision to reduce our investment going forward, we correspondingly moderated our long term projections for the MCS segment. The Company proceeded to step two of the goodwill impairment test to determine the implied fair value of the MCS goodwill. The Company concluded that the implied fair value of the goodwill was less than its carrying value, which resulted in a write off of all goodwill as of October 1, 2011 of \$41.2 million before tax (\$33.9 million after tax) for the MCS reporting unit. This expense was recorded in impairment of goodwill and intangibles line on the consolidated statements of operations.

[Table of Contents](#)

The fair value of our ATS reporting unit exceeded its carrying value by \$21.9 million, or 7.6%, and thus was at risk of failing step one of the goodwill impairment test, and was therefore at risk of a future impairment in the event of significant unfavorable changes in the forecasted cash flows or the key assumptions used in our analysis, including the weighted average cost of capital (discount rate) and growth rates utilized in the discounted cash flow analysis.

The following table sets forth the information regarding our ATS reporting unit as of October 1, 2011 (annual goodwill impairment testing date), including key assumptions (dollars in thousands):

	Key Assumptions		% Fair Value Exceeds Carrying Value as of October 1, 2011	Goodwill as of October 1, 2011	
	Discount Rate	Terminal Growth Rate	Percentage	Amount	Percent of Total Assets
ATS	14.0%	3.0%	7.6%	\$35,905	9.3%

Assumptions and estimates about future cash flows and discount rates are complex and often subjective. They are sensitive to changes in underlying assumptions and can be affected by a variety of factors, including external factors such as industry and economic trends, and internal factors such as changes in our business strategy and our internal forecasts. Our assessment includes significant estimates and assumptions including the timing and amount of future discounted cash flows, the discount rate and the perpetual growth rate used to calculate the terminal value.

Our discounted cash flow analysis included projected cash flows over a ten-year period, using our three-year business plans plus an additional seven years of projected cash flows based on the most recent three-year plan. These forecasted cash flows took into consideration management's outlook for the future and were compared to historical performance to assess reasonableness. A discount rate was applied to the forecasted cash flows. The discount rate considered market and industry data, as well as the specific risk profile of the reporting unit. A terminal value was calculated, which estimates the value of annual cash flow to be received after the discrete forecast periods. The terminal value was based upon an exit value of annual cash flow after the discrete forecast period in year ten.

Examples of events or circumstances that could reasonably be expected to negatively affect the underlying key assumptions and ultimately impact the estimated fair value of the aforementioned reporting unit may include such items as the following:

- a prolonged decline in capital spending for constructing, rebuilding, maintaining, or upgrading broadband communications systems;
- rapid changes in technology occurring in the broadband communication markets which could lead to the entry of new competitors or increased competition from existing competitors that would adversely affect our sales and profitability;
- the concentration of business we receive from several key customers, the loss of which would have a material adverse effect on our business;
- continued consolidation of our customers base in the telecommunications industry could result in delays or reductions in purchases of our products and services, if the acquirer decided not to continue using us as a supplier;
- new products and markets currently under development may fail to realize anticipated benefits;
- changes in business strategies affecting future investments in businesses, products and technologies to complement or expand our business could result in adverse impacts to existing business and products;
- volatility in the capital (equity and debt) markets, resulting in a higher discount rate; and
- legal proceeding settlements and/or recoveries, and its affect on future cash flows.

[Table of Contents](#)

As a result, there can be no assurance that the estimates and assumptions made for purposes of the annual goodwill impairment test will prove to be accurate predictions of the future. Although management believes the assumptions and estimates made are reasonable and appropriate, different assumptions and estimates could materially impact the reported financial results. The table below provides sensitivity analysis related to the impact of each of the key assumptions, on a standalone basis, on the resulting percentage change in fair value of our ATS reporting unit as of October 1, 2011:

	Percentage Reduction in Fair Value (Income Approach)		
	Assuming Hypothetical 10% Reduction in cash flows	Assuming Hypothetical 1% increase in Discount Rate	Assuming Hypothetical 1% decrease in Terminal Growth Rate
ATS	-5.9%	-5.9%	-2.3%

Intangible Assets

We test our long-lived assets for recoverability when events or changes in circumstances indicate that their carrying amounts may not be recoverable. Examples of such circumstances include, but are not limited to, operating or cash flow losses from the use of such assets or changes in our intended uses of such assets. To test for recovery, we group assets (an "asset group") in a manner that represents the lowest level for which identifiable cash flows are largely independent of the cash flows of other groups of assets and liabilities. The carrying amount of a long-lived asset or an asset group is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset or asset group. In determining future undiscounted cash flows, we have made a "policy decision" to use pre-tax cash flows in our evaluation, which is consistently applied.

If we determine that an asset or asset group is not recoverable, then we would record an impairment charge if the carrying value of the asset or asset group exceeds its fair value. Fair value is based on estimated discounted future cash flows expected to be generated by the asset or asset group. The assumptions underlying cash flow projections would represent management's best estimates at the time of the impairment review.

No review for impairment of long-lived assets was conducted in 2009 or 2010 as no indicators of impairment existed. In 2011, indicators of impairment existed for long-lived assets associated with the MCS reporting unit due to changes in projected operating results and cash flows. As such, we tested the MCS long-lived assets for recoverability by grouping assets at the lowest level for which identifiable cash flows are largely independent of the cash flows of other groups of assets and liabilities. This was determined to be the MCS reporting unit level. We compared the undiscounted cash flows over the estimated useful life of the primary asset in the group. The estimated cash flows included revenues and expenses directly associated with and arise from the use of the asset group. Based upon the analysis, the undiscounted cash flows used in the recoverability test were less than the carrying amount of the asset group. We determined the fair value of the long-lived asset group and recognized an impairment loss for the amount the carrying amount of the long-lived asset group exceeded its fair value. In the fourth quarter of 2011, an impairment loss of \$47.4 million before tax (\$29.1 million after tax) related to MCS customer relationships was recorded.

c) Allowance for Doubtful Accounts and Sales Returns

We establish a reserve for doubtful accounts based upon our historical experience and leading market indicators in collecting accounts receivable. A majority of our accounts receivable are from a few large cable system operators, either with investment rated debt outstanding or with substantial financial resources, and have very favorable payment histories. Unlike businesses with relatively small individual accounts receivable from a large number of customers, if we were to have a collection problem with one of our major customers, it is possible the reserve that we have established will not be sufficient. We calculate our reserve for uncollectible accounts using a model that considers customer payment history, recent customer press releases, bankruptcy filings, if any, Dun & Bradstreet reports, and financial statement reviews. Our calculation is reviewed by management to assess whether additional research is necessary, and if complete, whether there needs to be an adjustment to the reserve

[Table of Contents](#)

for uncollectible accounts. The reserve is established through a charge to the provision and represents amounts of current and past due customer receivable balances of which management deems a loss to be both probable and estimable. In the past several years, two of our major customers encountered significant financial difficulty due to the industry downturn and tightening financial markets.

In the event that we are not able to predict changes in the financial condition of our customers, resulting in an unexpected problem with collectability of receivables and our actual bad debts differ from estimates, or we adjust estimates in future periods, our established allowances may be insufficient and we may be required to record additional allowances. Alternatively, if we provided more allowances than are ultimately required, we may reverse a portion of such provisions in future periods based on our actual collection experience. In the event we adjust our allowance estimates, it could materially affect our operating results and financial position.

We also establish a reserve for sales returns and allowances. The reserve is an estimate of the impact of potential returns based upon historic trends.

Our reserves for uncollectible accounts and sales returns and allowances were \$1.4 million and \$1.6 million as of December 31, 2011 and 2010, respectively.

d) Inventory Valuation

Inventory is reflected in our financial statements at the lower of average cost, approximating first-in, first-out, or market value.

We continuously evaluate future usage of product and where supply exceeds demand, we may establish a reserve. In reviewing inventory valuations, we also review for obsolete items. This evaluation requires us to estimate future usage, which, in an industry where rapid technological changes and significant variations in capital spending by system operators are prevalent, is difficult. As a result, to the extent that we have overestimated future usage of inventory, the value of that inventory on our financial statements may be overstated. When we believe that we have overestimated our future usage, we adjust for that overstatement through an increase in cost of sales in the period identified as the inventory is written down to its net realizable value. Inherent in our valuations are certain management judgments and estimates, including markdowns, shrinkage, manufacturing schedules, possible alternative uses and future sales forecasts, which can significantly impact ending inventory valuation and gross margin. The methodologies utilized by ARRIS in its application of the above methods are consistent for all periods presented.

We conduct physical inventory counts at all ARRIS locations, either annually or through ongoing cycle-counts, to confirm the existence of its inventory.

e) Warranty

We offer warranties of various lengths to our customers depending on product specifics and agreement terms with our customers. We provide, by a current charge to cost of sales in the period in which the related revenue is recognized, an estimate of future warranty obligations. The estimate is based upon historical experience. The embedded product base, failure rates, cost to repair and warranty periods are used as a basis for calculating the estimate. We also provide, via a charge to current cost of sales, estimated expected costs associated with non-recurring product failures. In the event of a significant non-recurring product failure, the amount of the reserve may not be sufficient. In the event that our historical experience of product failure rates and costs of correcting product failures change, our estimates relating to probable losses resulting from a significant non-recurring product failure changes, or to the extent that other non-recurring warranty claims occur in the future, we may be required to record additional warranty reserves. Alternatively, if we provided more reserves than we needed, we may reverse a portion of such provisions in future periods. In the event we change our warranty reserve estimates, the resulting charge against future cost of sales or reversal of previously recorded charges may materially affect our operating results and financial position.

[Table of Contents](#)

f) Stock-Based Compensation

All share-based payments to employees, including grants of employee stock options, are required to be recognized in the financial statements as compensation cost based on the fair value at the date of grant. In general, we determine fair value of such awards using the Black-Scholes option pricing model. The Black-Scholes option pricing model incorporates certain assumptions, such as risk-free interest rate, expected volatility, and expected life of options, in order to arrive at a fair value estimate. Because changes in assumptions can materially affect the fair value estimate, the Black-Scholes model may not provide a reliable single measure of the fair value of our share-based payment awards. For certain performance shares related to market conditions, the fair value of such awards is determined using a lattice model. Management will continue to assess the assumptions and methodologies used to calculate estimated fair value of share-based compensation. Circumstances may change and additional data may become available over time, which could result in changes to these assumptions and methodologies and thereby materially impact our fair value determination. If factors change and we employ different assumptions in determining the fair value in future periods, the compensation expense that we record may differ significantly from what we have recorded in the current period.

Forward-Looking Statements

Certain information and statements contained in this Management's Discussion and Analysis of Financial Condition and Results of Operations and other sections of this report, including statements using terms such as "may," "expect," "anticipate," "intend," "estimate," "believe," "plan," "continue," "could be," or similar variations thereof, constitute forward-looking statements with respect to the financial condition, results of operations, and business of ARRIS, including statements that are based on current expectations, estimates, forecasts, and projections about the markets in which we operate and management's beliefs and assumptions regarding these markets. Any other statements in this document that are not statements about historical facts also are forward-looking statements. We caution investors that forward-looking statements made by us are not guarantees of future performance and that a variety of factors could cause our actual results to differ materially from the anticipated results or other expectations expressed in our forward-looking statements. Important factors that could cause results or events to differ from current expectations are described in the risk factors set forth in Item 1A, "Risk Factors." These factors are not intended to be an all-encompassing list of risks and uncertainties that may affect the operations, performance, development and results of our business, but instead are the risks that we currently perceive as potentially being material. In providing forward-looking statements, ARRIS expressly disclaims any obligation to update publicly or otherwise these statements, whether as a result of new information, future events or otherwise except to the extent required by law.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to various market risks, including interest rates and foreign currency rates. The following discussion of our risk-management activities includes "forward-looking statements" that involve risks and uncertainties. Actual results could differ materially from those projected in the forward-looking statements.

A significant portion of our products are manufactured or assembled in China, Ireland, Mexico, Taiwan, and other countries outside the United States. Our sales into international markets have been and are expected in the future to be an important part of our business. These foreign operations are subject to the usual risks inherent in conducting business abroad, including risks with respect to currency exchange rates, economic and political destabilization, restrictive actions and taxation by foreign governments, nationalization, the laws and policies of the United States affecting trade, foreign investment and loans, and foreign tax laws.

We have certain international customers who are billed in their local currency. Changes in the monetary exchange rates may adversely affect our results of operations and financial condition. To manage the volatility relating to these typical business exposures, we may enter into various derivative transactions, when appropriate. We do not hold or issue derivative instruments for trading or other speculative purposes. The euro is the predominant currency of the customers who are billed in their local currency. Taking into account the effects of foreign currency fluctuations of the euro and pesos versus the dollar, a hypothetical 10% weakening of the U.S. dollar (as of December 31, 2011) would provide a gain on foreign currency of approximately \$0.9 million. Conversely, a

[Table of Contents](#)

hypothetical 10% strengthening of the U.S. dollar would provide a loss on foreign currency of approximately \$0.9 million. Any gain or loss would be partially mitigated by the hedges as discussed below. As of December 31, 2011, we had no material contracts, other than accounts receivable, denominated in foreign currencies.

We regularly review our forecasted sales in euros and enter into option contracts when appropriate. In the event that we determine a hedge to be ineffective prior to expirations, earnings may be effected by the change in the hedge value. As of December 31, 2011, we had option collars outstanding with notional amounts totaling 25.0 million euros and 18 million Israeli shekels maturing in 2012. As of December 31, 2011, we had forward contracts outstanding with notional amounts totaling 5.0 million euros, which mature through 2012. The fair value of these option collars and forward contracts was a net asset of approximately \$2.7 million as of December 31, 2011.

Item 8. Consolidated Financial Statements and Supplementary Data

The report of our independent registered public accounting firm and consolidated financial statements and notes thereto for the Company are included in this Report and are listed in the Index to Consolidated Financial Statements.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

N/A

Item 9A. Controls and Procedures

(a) *Evaluation of Disclosure Controls and Procedures.* Our principal executive officer and principal financial officer evaluated the effectiveness of our disclosure controls and procedures (as such term is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934 as of the end of the period covered by this report (the "Evaluation Date"). Based on that evaluation, such officers concluded that, as of the Evaluation Date, our disclosure controls and procedures were effective as contemplated by the Act.

(b) *Changes in Internal Control over Financial Reporting.* Our principal executive officer and principal financial officer evaluated the changes in our internal control over financial reporting that occurred during the most recent fiscal quarter. Based on that evaluation, our principal executive officer and principal financial officer concluded that there had been no change in our internal control over financial reporting during the most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

Not Applicable

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

ARRIS' management is responsible for establishing and maintaining an adequate system of internal control over financial reporting as required by the Sarbanes-Oxley Act of 2002 and as defined in Exchange Act Rule 13a-15(f). A control system can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

Under management's supervision, an evaluation of the design and effectiveness of ARRIS' internal control over financial reporting was conducted based on the framework in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this evaluation, management concluded that ARRIS' internal control over financial reporting was effective as of December 31, 2011.

The effectiveness of ARRIS' internal control over financial reporting as of December 31, 2011 has been audited by Ernst & Young LLP, an independent registered public accounting firm retained as auditors of ARRIS Group, Inc.'s financial statement, as stated in their report which is included herein.

/s/ R J STANZIONE

Robert J. Stanzone
Chief Executive Officer, Chairman

/s/ DAVID B. POTTS

David B. Potts
Executive Vice President, Chief Financial Officer,
Chief Accounting Officer,
and Chief Information Officer

February 29, 2012

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of ARRIS Group, Inc.

We have audited ARRIS Group, Inc.'s internal control over financial reporting as of December 31, 2011, based on criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). ARRIS Group, Inc.'s management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report On Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

In our opinion, ARRIS Group, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2011, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of ARRIS Group, Inc. as of December 31, 2011 and 2010, and the related consolidated statements of operations, stockholder's equity, and cash flows for each of the three years in the period ended December 31, 2011, and our report dated February 29, 2012 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Atlanta, Georgia
February 29, 2012

[Table of Contents](#)

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

	Page
Report of Independent Registered Public Accounting Firm	72
Consolidated Balance Sheets at December 31, 2011 and 2010	73
Consolidated Statements of Operations for the years ended December 31, 2011, 2010 and 2009	74
Consolidated Statements of Cash Flows for the years ended December 31, 2011, 2010 and 2009	75
Consolidated Statements of Stockholders' Equity for the years ended December 31, 2011, 2010 and 2009	77
Notes to the Consolidated Financial Statements	78

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of ARRIS Group, Inc.

We have audited the accompanying consolidated balance sheets of ARRIS Group, Inc. as of December 31, 2011 and 2010 and the related consolidated statements of operations, cash flows and stockholders' equity for each of the three years in the period ended December 31, 2011. Our audits also included the financial statement schedule listed in the Index at Item 15(a). These financial statements and schedule are the responsibility of ARRIS' management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

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

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of ARRIS Group, Inc. at December 31, 2011 and 2010, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2011, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

As discussed in Notes 2 (e) to the consolidated financial statements, ARRIS Group, Inc adopted the Financial Accounting Standards Board's amended accounting standards related to revenue recognition for arrangements with multiple deliverables and arrangements that include software elements on January 1, 2010.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), ARRIS Group, Inc.'s internal control over financial reporting as of December 31, 2011, based on criteria established in *Internal Control-Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 29, 2012 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Atlanta, Georgia
February 29, 2012

ARRIS GROUP, INC.
CONSOLIDATED BALANCE SHEETS

	December 31,	
	2011	2010
	(in thousands except share and per share data)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 235,875	\$ 353,121
Short-term investments, at fair value	282,904	266,981
Total cash, cash equivalents and short-term investments	518,779	620,102
Restricted cash	4,101	4,937
Accounts receivable (net of allowances for doubtful accounts of \$1,443 in 2011 and \$1,649 in 2010)	152,437	125,933
Other receivables	8,789	6,528
Inventories (net of reserves of \$12,243 in 2011 and \$16,316 in 2010)	115,912	101,763
Prepays	10,408	9,237
Current deferred income tax assets	22,048	19,819
Other current assets	27,071	33,054
Total current assets	859,545	921,373
Property, plant and equipment (net of accumulated depreciation of \$130,331 in 2011 and \$109,267 in 2010)	61,375	56,306
Goodwill	194,542	234,964
Intangible assets (net of accumulated amortization of \$209,374 in 2011 and \$226,679 in 2010)	124,823	168,616
Investments	71,095	31,015
Noncurrent deferred income tax assets	38,433	6,293
Other assets	10,997	5,520
	<u>\$ 1,360,810</u>	<u>\$ 1,424,087</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 40,671	\$ 50,736
Accrued compensation, benefits and related taxes	36,764	28,778
Accrued warranty	3,350	2,945
Deferred revenue	43,746	31,625
Other accrued liabilities	33,325	18,847
Total current liabilities	157,856	132,931
Long-term debt, net of current portion	209,766	202,615
Accrued pension	25,260	17,213
Noncurrent income tax liability	24,450	17,702
Noncurrent deferred income tax liabilities	337	29,151
Other noncurrent liabilities	26,936	15,406
Total liabilities	444,605	415,018
Stockholders' equity:		
Preferred stock, par value \$1.00 per share, 5.0 million shares authorized; none issued and outstanding	—	—
Common stock, par value \$0.01 per share, 320.0 million shares authorized; 114.8 million and 120.8 million shares issued and outstanding in 2011 and 2010, respectively	1,449	1,409
Capital in excess of par value	1,245,115	1,206,157
Treasury stock at cost, 29.8 million and 19.8 million shares in 2011 and 2010	(254,409)	(145,286)
Accumulated deficit	(65,268)	(47,606)
Unrealized gain (loss) on marketable securities (net of accumulated tax (expense) benefit of of (\$119) in 2011 and \$224 in 2010)	(267)	392
Unfunded pension liability (net of accumulated tax effect of \$3,257 in 2011 and \$662 in 2010)	(10,231)	(5,813)
Cumulative translation adjustments	(184)	(184)
Total stockholders' equity	916,205	1,009,069
	<u>\$ 1,360,810</u>	<u>\$ 1,424,087</u>

See accompanying notes to the consolidated financial statements.

ARRIS GROUP, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS

	For the Years Ended December 31,		
	2011	2010	2009
	(in thousands, except per share data)		
Net sales:			
Products	\$ 944,338	\$ 963,815	\$ 998,734
Services	144,347	123,691	109,072
Total net sales	1,088,685	1,087,506	1,107,806
Cost of sales:			
Products	606,653	604,859	594,133
Services	71,519	58,558	50,910
Total cost of sales	678,172	663,417	645,043
Gross margin	410,513	424,089	462,763
Operating expenses:			
Selling, general, and administrative expenses	148,755	137,694	148,403
Research and development expenses	146,519	140,468	124,550
Impairment of goodwill and intangible assets	88,633	—	—
Amortization of intangible assets	33,649	35,957	37,361
Acquisition costs	3,205	—	—
Restructuring charges	4,360	65	3,702
Total operating expenses	425,121	314,184	314,016
Operating income (loss)	(14,608)	109,905	148,747
Other expense (income):			
Interest expense	16,939	17,965	17,670
Loss (gain) on debt retirement	19	(373)	(4,152)
Loss (gain) on investments	1,570	(414)	(711)
Loss (gain) on foreign currency	(580)	(44)	3,445
Interest income	(3,154)	(1,997)	(1,409)
Other expense (income), net	(891)	138	(714)
Income (loss) before income taxes	(28,511)	94,630	134,618
Income tax expense (benefit)	(10,849)	30,502	43,849
Net income (loss)	\$ (17,662)	\$ 64,128	\$ 90,769
Net income (loss) per common share:			
Basic	\$ (0.15)	\$ 0.51	\$ 0.73
Diluted	\$ (0.15)	\$ 0.50	\$ 0.71
Weighted average common shares:			
Basic	120,157	125,157	124,716
Diluted	120,157	128,271	128,085

See accompanying notes to the consolidated financial statements.

ARRIS GROUP, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
	2011	2010	2009
	(in thousands)		
Operating activities:			
Net income (loss)	\$ (17,662)	\$ 64,128	\$ 90,769
Depreciation	24,139	22,865	20,862
Amortization of intangible assets	33,649	35,957	37,361
Amortization of deferred finance fees	647	691	728
Impairment of goodwill and intangible assets	88,633	—	—
Deferred income tax provision	(12,144)	8,588	13,052
Deferred income tax related to goodwill and intangible assets impairments	(25,584)	—	—
Stock compensation expense	22,055	21,827	15,921
Provision for doubtful accounts	200	(283)	(1,280)
Loss (gain) on debt retirement	19	(373)	(4,152)
Non cash interest expense	11,545	11,325	11,136
Loss on disposal of fixed assets	16	406	428
Loss (gain) on investments	1,570	(414)	(711)
Excess income tax benefits from stock-based compensation plans	(3,668)	(2,752)	(3,007)
Changes in operating assets and liabilities, net of effect of acquisitions and dispositions:			
Accounts receivable	(22,093)	18,058	21,704
Other receivables	(1,635)	(59)	(2,383)
Inventories	(7,144)	(5,912)	38,906
Accounts payable and accrued liabilities	433	(48,308)	4,707
Other, net	20,177	(7,235)	(3,064)
Net cash provided by operating activities	113,153	118,509	240,977
Investing activities:			
Purchases of investments	(277,937)	(514,376)	(216,704)
Sales of investments	296,774	364,077	104,488
Purchases of property, plant and equipment	(23,307)	(22,645)	(18,663)
Cash proceeds from sale of property, plant, and equipment	84	245	210
Cash paid for acquisition, net of cash acquired	(130,227)	(4,000)	(22,734)
Net cash used in investing activities	(134,613)	(176,699)	(153,403)

See accompanying notes to the consolidated financial statements.

ARRIS GROUP, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS (continued)

	Years Ended December 31,		
	2011	2010	2009
	(in thousands)		
Financing activities:			
Fees and proceeds from issuance of common stock, net	\$ 22,985	\$ 7,178	\$ 12,984
Repurchase of common stock	(109,123)	(69,326)	—
Payment of debt obligations	—	(124)	(158)
Early redemption of convertible notes	(4,984)	(23,287)	(10,556)
Excess income tax benefits from stock-based compensation plans	3,668	2,752	3,007
Repurchase of shares to satisfy employee tax withholdings	(8,332)	(6,447)	(2,180)
Net cash provided by (used in) financing activities	(95,786)	(89,254)	3,097
Net increase (decrease) in cash and cash equivalents	(117,246)	(147,444)	90,671
Cash and cash equivalents at beginning of year	353,121	500,565	409,894
Cash and cash equivalents at end of year	<u>\$ 235,875</u>	<u>\$ 353,121</u>	<u>\$500,565</u>
Supplemental investing activity information:			
Landlord funded leasehold improvements	<u>\$ 725</u>	<u>\$ 79</u>	<u>\$ 50</u>
Supplemental cash flow information:			
Interest paid during the year	<u>\$ 4,731</u>	<u>\$ 5,137</u>	<u>\$ 5,483</u>
Income taxes paid during the year	<u>\$ 5,949</u>	<u>\$ 36,598</u>	<u>\$ 30,878</u>

See accompanying notes to the consolidated financial statements.

ARRIS GROUP, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(in thousands)	Common Stock	Capital in Excess of Par Value	Treasury Stock	Accumulated Deficit	Unrealized (Loss) Gain on Marketable Securities	Unfunded Pension Liability	Cumulative Translation Adjustments	Total
Balance, January 1, 2009	\$ 1,362	\$1,159,097	\$ (75,960)	\$ (202,503)	\$ (274)	\$ (8,070)	\$ (184)	\$ 873,468
Comprehensive income (loss):								
Net income	—	—	—	90,769	—	—	—	90,769
Unrealized gain on marketable securities	—	—	—	—	302	—	—	302
Change in unfunded pension liability, net of \$1,169 of income tax impact	—	—	—	—	—	2,029	—	2,029
Comprehensive income								93,100
Compensation under stock award plans	—	15,921	—	—	—	—	—	15,921
Issuance of common stock and other	26	10,827	—	—	—	—	—	10,853
Impact of debt redemption, net of deferred taxes	—	(2,127)	—	—	—	—	—	(2,127)
Income tax benefit related to exercise of stock options	—	154	—	—	—	—	—	154
Balance, December 31, 2009	1,388	1,183,872	(75,960)	(111,734)	28	(6,041)	(184)	991,369
Comprehensive income (loss):								
Net income	—	—	—	64,128	—	—	—	64,128
Unrealized gain on marketable securities, net of \$224 of income tax impact	—	—	—	—	364	—	—	364
Change in unfunded pension liability, net of \$283 of income tax impact	—	—	—	—	—	228	—	228
Comprehensive income								64,720
Compensation under stock award plans	—	21,827	—	—	—	—	—	21,827
Issuance of common stock and other	21	710	—	—	—	—	—	731
Repurchase of common stock	—	—	(69,326)	—	—	—	—	(69,326)
Impact of debt redemption, net of deferred taxes	—	(2,449)	—	—	—	—	—	(2,449)
Income tax benefit related to exercise of stock options	—	2,197	—	—	—	—	—	2,197
Balance, December 31, 2010	1,409	1,206,157	(145,286)	(47,606)	392	(5,813)	(184)	1,009,069
Comprehensive loss:								
Net loss	—	—	—	(17,662)	—	—	—	(17,662)
Unrealized gain on marketable securities, net of \$(343) of income tax impact	—	—	—	—	(659)	—	—	(659)
Change in unfunded pension liability, net of \$(2,595) of income tax impact	—	—	—	—	—	(4,418)	—	(4,418)
Comprehensive loss								(22,739)
Compensation under stock award plans	—	22,055	—	—	—	—	—	22,055
Issuance of common stock and other	40	14,894	—	—	—	—	—	14,934
Repurchase of common stock	—	—	(109,123)	—	—	—	—	(109,123)
Impact of debt redemption, net of deferred taxes	—	(604)	—	—	—	—	—	(604)
Income tax benefit related to exercise of stock options	—	2,613	—	—	—	—	—	2,613
Balance, December 31, 2011	<u>\$ 1,449</u>	<u>\$1,245,115</u>	<u>\$(254,409)</u>	<u>\$ (65,268)</u>	<u>\$ (267)</u>	<u>\$ (10,231)</u>	<u>\$ (184)</u>	<u>\$ 916,205</u>

See accompanying notes to the consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Note 1. Organization and Basis of Presentation

ARRIS Group, Inc. (together with its consolidated subsidiaries, except as the context otherwise indicates, "ARRIS" or the "Company"), is a global communications technology company, headquartered in Suwanee, Georgia. ARRIS operates in three business segments, Broadband Communications Systems, Access, Transport & Supplies, and Media & Communications Systems. ARRIS specializes in integrated broadband network solutions that include products, systems and software for content and operations management (including video on demand, or VOD), and professional services. ARRIS is a leading developer, manufacturer and supplier of telephony, data, video, construction, rebuild and maintenance equipment for the broadband communications industry. In addition, the Company is a leading supplier of infrastructure products used by cable system operators to build-out and maintain hybrid fiber-coaxial ("HFC") networks. The Company provides its customers with products and services that enable reliable, high speed, two-way broadband transmission of video, telephony, and data.

Note 2. Summary of Significant Accounting Policies

(a) Consolidation

The accompanying consolidated financial statements include the accounts of the Company and its wholly owned foreign and domestic subsidiaries. Intercompany accounts and transactions have been eliminated in consolidation.

(b) Use of Estimates

The preparation of the consolidated financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ from those estimates.

(c) Cash, Cash Equivalents, and Investments

ARRIS' cash and cash equivalents (which are highly-liquid investments with an original maturity of three months or less) are primarily held in money market funds that pay either taxable or non-taxable interest. The Company holds investments consisting of mutual funds and debt securities classified as available-for-sale, which are stated at estimated fair value. The debt securities consist primarily of commercial paper, certificates of deposits, short term corporate obligations and U.S. government agency financial instruments. These investments are on deposit with major financial institutions.

From time to time, the Company has held certain investments in the common stock or preferred stock of publicly-traded and private companies, which were classified as available-for-sale or cost-method investments. As of December 31, 2011 and 2010, the Company's holdings in these investments were \$5.8 million and \$9.8 million, respectively. As of December 31, 2011 and 2010, ARRIS had unrealized gains (losses) related to available-for-sale securities of approximately \$(0.3) million and \$0.4, respectively, included in accumulated other comprehensive income (loss).

The Company has a deferred compensation plan that does not qualify under Section 401(k) of the Internal Revenue Code, which was available to certain current and former officers and key executives of C-COR Incorporated (C-COR). During 2008, this plan was merged into a new non-qualified deferred compensation plan which is also available to key executives of the Company. Employee compensation deferrals and matching contributions are held in a rabbi trust, which is a funding vehicle used to protect the deferred compensation from various events (but not from bankruptcy or insolvency).

The Company previously offered a deferred compensation arrangement, which allowed certain employees to defer a portion of their earnings and defer the related income taxes. As of December 31, 2004, the plan was frozen and no further contributions are allowed. The deferred earnings are invested and held in a rabbi trust.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The Company also has a deferred retirement salary plan, which was limited to certain current or former officers of C-COR. The present value of the estimated future retirement benefit payments is being accrued over the estimated service period from the date of signed agreements with the employees. ARRIS holds an investment to cover its liability.

(d) Inventories

Inventories are stated at the lower of average cost, approximating first-in, first-out, or market. The cost of work-in-process and finished goods is comprised of material, labor, and overhead.

(e) Revenue recognition

ARRIS generates revenue as a result of varying activities, including the delivery of stand-alone equipment, custom design and installation services, and bundled sales arrangements inclusive of equipment, software and services. The revenue from these activities is recognized in accordance with applicable accounting guidance and their related interpretations.

Revenue is recognized when all of the following criteria have been met:

- *When persuasive evidence of an arrangement exists.* Contracts and customer purchase orders are used to determine the existence of an arrangement. For professional services evidence that an agreement exists includes information documenting the scope of work to be performed, price, and customer acceptance. These are contained in the signed contract, purchase order, or other documentation that shows scope, price and customer acceptance.
- *Delivery has occurred.* Shipping documents, proof of delivery and customer acceptance (when applicable) are used to verify delivery.
- *The fee is fixed or determinable.* Pricing is considered fixed or determinable at the execution of a customer arrangement, based on specific products and quantities to be delivered at specific prices. This determination includes a review of the payment terms associated with the transaction and whether the sales price is subject to refund or adjustment or future discounts.
- *Collectability is reasonably assured.* The Company assesses the ability to collect from customers based on a number of factors that include information supplied by credit agencies, analyzing customer accounts, reviewing payment history and consulting bank references. Should a circumstance arise where a customer is deemed not creditworthy, all revenue related to the transaction will be deferred until such time that payment is received and all other criteria to allow the Company to recognize revenue have been met.

Revenue is deferred if any of the above revenue recognition criteria is not met as well as when certain circumstances exist for any of our products or services, including, but not limited to:

- When undelivered products or services that are essential to the functionality of the delivered product exist, revenue is deferred until such undelivered products or services are delivered as the customer would not have full use of the delivered elements.
- When required acceptance has not occurred.
- When trade-in rights are granted at the time of sale, that portion of the sale is deferred until the trade-in right is exercised or the right expires. In determining the deferral amount, management estimates the expected trade-in rate and future value of the product upon trade-in. These factors are periodically reviewed and updated by management, and the updates may result in either an increase or decrease in the deferral.

Equipment — The Company provides cable system operators with equipment that can be placed within various stages of a broadband cable system that allows for the delivery of cable telephony, video and high speed

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

data as well as outside plant construction and maintenance equipment. For equipment sales, revenue recognition is generally established when the products have been shipped, risk of loss has transferred, objective evidence exists that the product has been accepted, and no significant obligations remain relative to the transaction. Additionally, based on historical experience, ARRIS has established reliable estimates related to sales returns and other allowances for discounts. These estimates are recorded as a reduction to revenue at the time the revenue is initially recorded.

Software Sold Without Tangible Equipment — ARRIS sells internally developed software as well as software developed by outside third parties that does not require significant production, modification or customization. For arrangements that contain only software and the related post-contract support, the Company recognizes revenue in accordance with the applicable software revenue recognition guidance. If the arrangement includes multiple elements that are software only, then the software revenue recognition guidance is applied and the fee is allocated to the various elements based on vendor-specific objective evidence (“VSOE”) of fair value. If sufficient VSOE of fair value does not exist for the allocation of revenue to all the various elements in a multiple element software arrangement, all revenue from the arrangement is deferred until the earlier of the point at which such sufficient VSOE of fair value is established or all elements within the arrangement are delivered. If VSOE of fair value exists for all undelivered elements, but does not exist for one or more delivered elements, the arrangement consideration is allocated to the various elements of the arrangement using the residual method of accounting. Under the residual method, the amount of the arrangement consideration allocated to the delivered elements is equal to the total arrangement consideration less the aggregate fair value of the undelivered elements. Under the residual method, if VSOE exists for the undelivered element, generally post contract support (“PCS”), the fair value of the undelivered element is deferred and recognized ratably over the term of the PCS contract, and the remaining portion of the arrangement is recognized as revenue upon delivery. If sufficient VSOE of fair value does not exist for PCS, revenue is recognized ratably over the term of support.

Standalone Services — Installation, training, and professional services are generally recognized in service revenues when performed or upon completion of the service when the final act is significant in relation to the overall service transaction. The key element for Professional Services in determining when service transaction revenue has been earned is determining the pattern of delivery or performance which determines the extent to which the earnings process is complete and the extent to which customers have received value from services provided. The delivery or performance conditions of our service transactions are typically evaluated under the proportional performance or completed performance model.

Incentives — Customer incentive programs that include consideration, primarily rebates/credits to be used against future product purchases and certain volume discounts, have been recorded as a reduction of revenue when the shipment of the requisite equipment occurs.

Value Added Resellers—ARRIS employs the sell-in method of accounting for revenue when using a Value Added Reseller (“VAR”) as our channel to market. Because product returns are restricted, revenue under this method is generally recognized at the time of shipment to the VAR provided all criteria for recognition are met.

Multiple Element Arrangements — Certain customer transactions may include multiple deliverables based on the bundling of equipment, software and services. When a multiple element arrangement exists, the fee from the arrangement is allocated to the various deliverables, to the extent appropriate, so that the proper amount can be recognized as revenue as each element is delivered. Based on the composition of the arrangement, the Company analyzes the provisions of the accounting guidance to determine the appropriate model that is applied towards accounting for the multiple element arrangement. If the arrangement includes a combination of elements that fall within different applicable guidance, ARRIS follows the provisions of the hierarchal literature to separate those elements from each other and apply the relevant guidance to each.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

For multiple element arrangements that include software or have a software-related element that is more than incidental and does involve significant production, modification or customization, revenue is recognized using the contract accounting guidelines by applying the percentage of completion or completed contract method. The Company recognizes software license and associated professional services revenue for its mobile workforce management software license product installations using the percentage of completion method of accounting as the Company believes that its estimates of costs to complete and extent of progress toward completion of such contracts are reliable. For certain software license arrangements where professional services are being provided and are deemed to be essential to the functionality or are for significant production, modification, or customization of the software product, both the software and the associated professional service revenue are recognized using the completed contract method. The completed contract method is used for these particular arrangements because they are considered short-term arrangements and the financial position and results of operations would not be materially different from those under the percentage-of-completion method. Under the completed contract method, revenue is recognized when the contract is complete, and all direct costs and related revenues are deferred until that time. The entire amount of an estimated loss on a contract is accrued at the time a loss on a contract is projected. Actual profits and losses may differ from these estimates.

For arrangements that fall within the software revenue recognition guidance, the fee is allocated to the various elements based on VSOE of fair value. If sufficient VSOE of fair value does not exist for the allocation of revenue to all the various elements in a multiple element arrangement, all revenue from the arrangement is deferred until the earlier of the point at which such sufficient VSOE is established or all elements within the arrangement are delivered. If VSOE of fair value exists for all undelivered elements, but does not exist for one or more delivered elements, the arrangement consideration is allocated to the various elements of the arrangement using the residual method of accounting. Under the residual method, the amount of the arrangement consideration allocated to the delivered elements is equal to the total arrangement consideration less the aggregate fair value of the undelivered elements. Using this method, any potential discount on the arrangement is allocated entirely to the delivered elements, which ensures that the amount of revenue recognized at any point in time is not overstated. Under the residual method, if VSOE exists for the undelivered element, generally PCS, the fair value of the undelivered element is deferred and recognized ratably over the term of the PCS contract, and the remaining portion of the arrangement is recognized as revenue upon delivery, which generally occurs upon delivery of the product or implementation of the system. License revenue allocated to software products, in certain circumstances, is recognized upon delivery of the software products.

Many of ARRIS' products are sold in combination with customer support and maintenance services, which consist of software updates and product support. Software updates provide customers with rights to unspecified software updates that ARRIS chooses to develop and to maintenance releases and patches that the Company chooses to release during the period of the support period. Product support services include telephone support, remote diagnostics, email and web access, access to on-site technical support personnel and repair or replacement of hardware in the event of damage or failure during the term of the support period. Maintenance and support service fees are recognized ratably under the straight-line method over the term of the contract, which is generally one year. The Company does not record receivables associated with maintenance revenues without a firm, non-cancelable order from the customer. VSOE of fair value is determined based on the price charged when the same element is sold separately and based on the prices at which our customers have renewed their customer support and maintenance. For elements that are not yet being sold separately, the price established by management, if it is probable that the price, once established, will not change before the separate introduction of the element into the marketplace is used to measure VSOE of fair value for that element.

The Company elected to early adopt accounting standards on a prospective basis related to multiple element arrangements. The Company applies the previous applicable accounting guidance for arrangements originating prior to the adoption date of January 1, 2010.

Below is a comparison of: 1) units of accounting, 2) allocation of arrangement consideration and 3) timing of revenue recognition applying the old and new guidance.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Units of Accounting:

Before January 1, 2010: For multiple element arrangements originating before January 1, 2010, the deliverables are separated into more than one unit of accounts when the following criteria are met: (i) the delivered element(s) have value to the customer on a stand-alone basis, (ii) objective and reliable evidence of fair value exists for the undelivered element(s), and (iii) delivery of the undelivered element(s) is probable and substantially in the control of the Company.

After December 31, 2009: For multiple element arrangements (other than software sold without tangible equipment) originating or materially modified after December 31, 2009, the deliverables are separated into more than one unit of accounting when the following criteria are met: (i) the delivered element(s) have value to the customer on a stand-alone basis, and (ii) if a general right of return exists relative to the delivered item, delivery or performance of the undelivered element(s) is probable and substantially in the control of the Company.

Allocation of Arrangement Consideration:

Before January 1, 2010: Revenue is allocated to each unit of accounting based on the relative fair value of each accounting unit or by using the residual method if objective evidence of fair value does not exist for the delivered element(s).

After December 31, 2009: The Company uses best estimated selling price ("BESP") of the element(s) for the allocation of arrangement consideration when unable to establish VSOE or third-party evidence of selling price ("TPE"). The objective of BESP is to determine the price at which the Company would transact a sale if the product or service were sold on a stand-alone basis. BESP is generally used for new or highly customized offerings and solutions or elements not priced within a narrow range. The Company determines BESP for a product or service by considering multiple factors including, but not limited to, geographies, market conditions, competitive landscape, internal costs, gross margin objectives, and pricing practices. The Company uses the relative selling price basis for the allocation of the arrangement consideration.

(f) Shipping and Handling Fees

Shipping and handling costs for the years ended December 31, 2011, 2010, and 2009 were approximately \$3.3 million, \$11.3 million and \$4.0 million, respectively, and are classified in net sales and cost of sales.

(g) Depreciation of Property, Plant and Equipment

The Company provides for depreciation of property, plant and equipment on the straight-line basis over estimated useful lives of 10 to 40 years for buildings and improvements, 2 to 10 years for machinery and equipment, and the shorter of the term of the lease or useful life for leasehold improvements. Included in depreciation expense is the amortization of landlord funded tenant improvements which amounted to \$0.6 million in 2011 and \$0.5 million in 2010. Depreciation expense, including amortization of capital leases, for the years ended December 31, 2011, 2010, and 2009 was approximately \$24.1 million, \$22.9 million, and \$20.9 million, respectively.

(h) Goodwill and Long-Lived Assets

Goodwill relates to the excess of cost over the fair value of net assets resulting from an acquisition. On an annual basis, the Company's goodwill is tested for impairment, or more frequently if events or changes in circumstances indicate that the asset is more likely than not impaired, in which case a test would be performed sooner. The impairment testing is a two-step process. The first step is to identify a potential impairment by

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

comparing the fair value of a reporting unit with its carrying amount. ARRIS has determined that its reporting units are the reportable segments based on the organizational structure, the financial information that is provided to and reviewed by segment management and aggregation criteria of its component businesses that are economically similar. The estimates of fair value of a reporting unit are determined based on a discounted cash flow analysis and guideline public company analysis. A discounted cash flow analysis requires the Company to make various judgmental assumptions, including assumptions about future cash flows, growth rates and discount rates. The assumptions about future cash flows and growth rates are based on the current and long-term business plans of each reporting unit. Discount rate assumptions are based on an assessment of the risk inherent in the future cash flows of the respective reporting units. If necessary, the second step of the goodwill impairment test compares the implied fair value of the reporting unit's goodwill with the carrying amount of that goodwill. The implied fair value of goodwill is determined in a similar manner as the determination of goodwill recognized in a business combination. As part of management's review process of the fair values assumed for the reporting units, the Company reconciled the combined fair value of the reporting units to the market capitalization of ARRIS and concluded that the fair values used were reasonable.

The annual tests were performed in the fourth quarters of 2009, 2010, and 2011 with a test date of October 1.

In 2009 and 2010, no impairments of goodwill were recorded. In 2011, in performing step one of impairment testing, the Company determined that the fair value of the MCS reporting unit was less than its respective carrying value, as a result of a decline in the expected future cash flows for the reporting unit. The Company proceeded to step two of the goodwill impairment test to determine the implied fair value of the MCS goodwill. The Company concluded that the implied fair value of the goodwill was less than its carrying value, which resulted in a full impairment charge as of October 1, 2011 of \$41.2 million before tax (\$33.9 million after tax) for the MCS reporting unit.

As of December 31, 2011, the Company had remaining goodwill of \$194.5 million, of which \$35.8 million related to the ATS reporting unit and \$158.7 million related to the BCS reporting unit.

Other intangible assets represent purchased intangible assets, which include developed technology, in-process research and development, customer relationships, covenants not-to-compete, and order backlog. Amounts allocated to other identifiable intangible assets with finite useful lives are amortized on a straight-line basis over their estimated useful lives as follows:

Intangibles with finite useful lives:

Purchased technology	4 - 10 years
Customer relationships	2 - 10 years
Non-compete agreements	2 years
Trademarks	2 years
Order backlog	1 - 2 years

Intangibles with indefinite useful lives:

In-process research and development	Indefinite
-------------------------------------	------------

Acquired in-process research and development assets are initially recognized at fair value and classified as indefinite-lived assets until the successful completion or abandonment of the associated research and development efforts. Accordingly, during the development period after the acquisition date, this asset will not be amortized as charges to earnings; instead these assets will be subject to periodic impairment testing. Upon successful completion of the development process for the acquired in-process research and development project, the asset would then be considered a finite-lived intangible asset and amortization of the asset will commence.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

As of December 31, 2011, the financial statements included intangible assets of \$124.8 million, net of accumulated amortization of \$209.4 million. As of December 31, 2010, the financial statements included intangible assets of \$168.6 million, net of accumulated amortization of \$226.7 million. The values assigned were calculated using an income approach utilizing the cash flow expected to be generated by these intangible assets.

No review for impairment of long-lived assets was conducted in 2010 as no indicators of impairment existed. In 2011, indicators of impairment existed for long-lived assets associated with the MCS reporting unit due to changes in projected operating results and cash flows. In the fourth quarter of 2011, an impairment loss of \$47.4 million before tax (\$29.1 million after tax) related to MCS customer relationships was recorded.

See Note 13 of Notes to the Consolidated Financial Statements for further information on goodwill and intangible assets.

(i) Advertising and Sales Promotion

Advertising and sales promotion costs are expensed as incurred. Advertising expense was approximately \$0.6 million, \$0.7 million, and \$0.6 million for the years ended December 31, 2011, 2010 and 2009, respectively.

(j) Research and Development

Research and development ("R&D") costs are expensed as incurred. ARRIS' research and development expenditures for the years ended December 31, 2011, 2010 and 2009 were approximately \$146.5 million, \$140.5 million, and \$124.6 million, respectively. The expenditures include compensation costs, materials, other direct expenses, and allocated costs of information technology, telecommunications, and facilities.

(k) Warranty

ARRIS provides warranties of various lengths to customers based on the specific product and the terms of individual agreements. For further discussion, see Note 8 of the Notes to the Consolidated Financial Statements, Guarantees for further discussion.

(l) Income Taxes

ARRIS uses the liability method of accounting for income taxes, which requires recognition of temporary differences between financial statement and income tax bases of assets and liabilities, measured by enacted tax rates.

If necessary, the measurement of deferred tax assets is reduced by the amount of any tax benefits that are not expected to be realized based on available evidence. ARRIS reports a liability for unrecognized tax benefits resulting from uncertain tax positions taken or expected to be taken in a tax return. The Company recognizes interest and penalties, if any, related to unrecognized tax benefits in income tax expense.

See Note 16 of Notes to the Consolidated Financial Statements for further discussion.

(m) Foreign Currency Translation

A significant portion of the Company's products are manufactured or assembled in Mexico, Taiwan, China, Ireland, and other foreign countries. Sales into international markets have been and are expected in the future to be an important part of the Company's business. These foreign operations are subject to the usual risks inherent in conducting business abroad, including risks with respect to currency exchange rates, economic and political destabilization, restrictive actions and taxation by foreign governments, nationalization, the laws and policies of the United States affecting trade, foreign investment and loans, and foreign tax laws.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Certain international customers are billed in their local currency. The Company uses a hedging strategy and enters into forward or currency option contracts based on a percentage of expected foreign currency revenues. The percentage can vary, based on the predictability of the revenues denominated in foreign currency.

As of December 31, 2011, the Company had option collars outstanding with notional amounts totaling 25.0 million euros and 18 million Israeli shekels, which mature through 2012. As of December 31, 2011, the Company had forward contracts outstanding with notional amounts totaling 5.0 million euros, which mature through 2012. The fair value of option and forward contracts as of December 31, 2011 and 2010 were a net asset (liability) of approximately \$2.7 million and \$(0.2) million. During the years ended December 31, 2011, 2010 and 2009, the Company recognized net (gain) losses of \$(0.8) million, \$(1.0) million, and \$3.0 million, respectively, related to option contracts.

Currently, all foreign currency hedges are recorded at fair value and the gains or losses are included in loss (gain) on foreign currency on the Consolidated Statements of Operations.

(n) Israeli Severance Pay

The Company's wholly-owned subsidiary located in Israel is required to fund future severance liabilities determined in accordance with Israeli severance pay laws. Under these laws, employees are entitled upon termination to one month's salary for each year of employment or portion thereof. The Company records compensation expense to accrue for these costs over the employment period, based on the assumption that the benefits to which the employee is entitled, if the employee separates immediately. The Company funds the liability by monthly deposits in insurance policies and severance funds. The value of the severance fund assets are primarily recorded in other non-current assets on the Company's consolidated balance sheets, which was \$3.7 million as of December 31, 2011. The liability for long-term severance accrued on the Company's consolidated balance sheets was \$4.3 million as of December 31, 2011.

(o) Stock-Based Compensation

See Note 18 of Notes to the Consolidated Financial Statements for further discussion of the Company's significant accounting policies related to stock based compensation.

(p) Concentrations of Credit Risk

Financial instruments that potentially subject ARRIS to concentrations of credit risk consist principally of cash, cash equivalents and short-term investments, and accounts receivable. ARRIS places its temporary cash investments with high credit quality financial institutions. Concentrations with respect to accounts receivable occur as the Company sells primarily to large, well-established companies including companies outside of the United States. The Company's credit policy generally does not require collateral from its customers. ARRIS closely monitors extensions of credit to other parties and, where necessary, utilizes common financial instruments to mitigate risk or requires cash on delivery terms. Overall financial strategies and the effect of using a hedge are reviewed periodically. When deemed uncollectible, accounts receivable balances are written off against the allowance for doubtful accounts.

The following methods and assumptions were used by the Company in estimating its fair value disclosures for financial instruments:

- Cash, cash equivalents, and short-term investments: The carrying amounts reported in the consolidated balance sheets for cash, cash equivalents, and short-term investments approximate their fair values.
- Accounts receivable and accounts payable: The carrying amounts reported in the balance sheet for accounts receivable and accounts payable approximate their fair values. The Company establishes a reserve for doubtful accounts based upon its historical experience in collecting accounts receivable.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

- **Marketable securities:** The fair values for trading and available-for-sale equity securities are based on quoted market prices or observable prices based on inputs not in active markets but corroborated by market data.
- **Non-marketable securities:** Non-marketable equity securities are subject to a periodic impairment review; however, there are no open-market valuations, and the impairment analysis requires significant judgment. This analysis includes assessment of the investee's financial condition, the business outlook for its products and technology, its projected results and cash flow, recent rounds of financing, and the likelihood of obtaining subsequent rounds of financing.
- **Long-term debt:** The fair value of the Company's convertible subordinated debt is based on its quoted market price and totaled approximately \$233.8 million and \$242.7 million at December 31, 2011 and 2010, respectively.
- **Foreign exchange contracts:** The fair values of the Company's foreign currency contracts are estimated based on dealer quotes, quoted market prices of comparable contracts adjusted through interpolation where necessary, maturity differences or if there are no relevant comparable contracts on pricing models or formulas by using current assumptions. As of December 31, 2011, the Company had option collars outstanding with notional amounts totaling 25.0 million euros and 18 million Israeli shekels, which mature through 2012. As of December 31, 2011, the Company had forward contracts outstanding with notional amounts totaling 5.0 million euros, which mature through 2012. The fair value of option and forward contracts as of December 31, 2011 and 2010 were net asset (liability) of approximately \$2.7 million and \$(0.2) million.

(q) Computer Software

The Company capitalizes costs associated with internally developed and/or purchased software systems for internal use that have reached the application development stage and meet recoverability tests. Capitalized costs include external direct costs of materials and services utilized in developing or obtaining internal-use software and payroll and payroll-related expenses for employees who are directly associated with and devote time to the internal-use software project. Capitalization of such costs begins when the preliminary project stage is complete and ceases no later than the point at which the project is substantially complete and ready for its intended purpose. These capitalized costs are amortized on a straight-line basis over periods of two to seven years, beginning when the asset is ready for its intended use. Capitalized costs are included in property, plant, and equipment on the consolidated balance sheets. The carrying value of the software is reviewed regularly and impairment is recognized if the value of the estimated undiscounted cash flow benefits related to the asset is less than the remaining unamortized costs.

Research and development costs are charged to expense as incurred. ARRIS generally has not capitalized any such development costs because the costs incurred between the attainment of technological feasibility for the related software product through the date when the product is available for general release to customers has been insignificant.

(r) Comprehensive Income (Loss)

The components of comprehensive income (loss) include net income (loss), foreign currency translation adjustments, unrealized gains (losses) on available-for-sale securities, and change in unfunded pension liability, net of tax, if applicable. Comprehensive income (loss) is presented in the consolidated statements of stockholders' equity.

Note 3. Impact of Recently Issued Accounting Standards

In September 2011, the Financial Accounting Standards Board ("FASB") issued new accounting guidance intended to simplify goodwill impairment testing. Entities will be allowed to perform a qualitative assessment on

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

goodwill impairment to determine whether a quantitative assessment is necessary. This guidance is effective for goodwill impairment tests performed in interim and annual periods for fiscal years beginning after December 15, 2011. Early adoption is permitted. The adoption of this guidance will not have a material impact on our financial statements.

In June 2011, FASB issued guidance regarding the presentation of comprehensive income. This guidance requires presentation of total comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. The guidance is effective on a retrospective basis for the interim and annual periods ending on or after December 15, 2011. The adoption of this guidance will not have a significant impact on the Company's consolidated financial statements.

In May 2011, FASB issued amendments to some fair value measurement principles and disclosure requirements for fair value measurements. The provisions of this guidance are effective for the interim and annual periods ending on or after December 15, 2011. The adoption of this guidance will not have a significant impact on the Company's consolidated financial statements.

Note 4. Investments

ARRIS' investments as of December 31, 2011 and 2010 consisted of the following (in thousands):

	As of December 31, 2011	As of December 31, 2010
Current Assets:		
Available-for-sale securities	\$ 282,904	\$ 266,981
Noncurrent Assets:		
Available-for-sale securities	70,095	27,015
Cost method investments	1,000	4,000
Total classified as non-current assets	71,095	31,015
Total	\$ 353,999	\$ 297,996

ARRIS' investments in debt and marketable equity securities are categorized as available-for-sale. The Company currently does not hold any trading or held-to-maturity securities. Realized and unrealized gains and losses on trading securities and realized gains and losses on available-for-sale securities are included in net income. Unrealized gains and losses on available-for-sale securities are included in our consolidated balance sheet as a component of accumulated other comprehensive income (loss). The total losses (gains) included in the accumulated other comprehensive income related to available-for-sale securities were \$0.3 million and \$(0.4) million as of December 31, 2011 and December 31, 2010, respectively. The unrealized gains and losses by individual investment as of December 31, 2011 and 2010 were not material. The amortized cost basis of the Company's investments approximates fair value.

As of December 31, 2011 and 2010, ARRIS' cost method investment is an investment in a private company, which is recorded at cost of \$1.0 million and \$4.0 million, respectively. In the third quarter of 2010, the private company raised additional financing at the same price and terms that ARRIS had invested. Each quarter ARRIS evaluates its investment for any other-than-temporary impairment, by reviewing the current revenues, bookings and long-term plan of the private company. As of December 31, 2010, ARRIS believes there has been no other-than-temporary impairment but will continue to evaluate the investment for impairment. Due to the fact the

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

investment is in a private company, ARRIS is exempt from estimating the fair value on an interim basis. However, ARRIS is required to estimate the fair value if there has been an identifiable event or change in circumstance that may have a significant adverse effect on the fair value of the investment. During the evaluation performed as of December 31, 2011, ARRIS' concluded that the private company would be depleting cash balances in early 2012. Further, ARRIS was notified that the private company intends to raise capital by offering a new round of financing to its existing and new investors in the first quarter of 2012. Without the cash proceeds from this potential financing, the private company is at risk of being unable to continue to fund its operations. ARRIS concluded that the investee's need to raise additional funds was an indicator of impairment and therefore, performed steps to determine the fair value of its investment in the private company. ARRIS was unable to apply traditional valuation techniques as the required inputs to these techniques are unavailable. ARRIS determined that the best estimate of the fair value of its investment was to calculate it based upon the preliminary indication of value related to the new round of financing. As a result of these considerations, ARRIS recorded an other-than-temporary impairment on its investment of \$3.0 million in the fourth quarter of 2011.

Classification of available-for-sale securities as current or non-current is dependent upon management's intended holding period, the security's maturity date and liquidity consideration based on market conditions. If management intends to hold the securities for longer than one year as of the balance sheet date, they are classified as non-current.

Note 5. Fair Value Measurements

Fair value is based on the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The authoritative guidance establishes a fair value hierarchy that is based on the extent and level of judgement used to estimate the fair value of assets and liabilities. In order to increase consistency and comparability in fair value measurements, the FASB has established a fair value hierarchy that prioritizes observable and unobservable inputs used to measure fair value into three broad levels. An asset or liability's categorization within the fair value hierarchy is based upon the lowest level of input that is significant to the measurement of its fair value. The three levels of input defined by the authoritative guidance are as follows:

Level 1: Quoted prices (unadjusted) in active markets that are accessible at the measurement date for assets or liabilities. The fair value hierarchy gives the highest priority to Level 1 inputs.

Level 2: Observable prices that are based on inputs not quoted on active markets, but corroborated by market data.

Level 3: Unobservable inputs are used when little or no market data is available. The fair value hierarchy gives the lowest priority to Level 3 inputs.

The following table presents the Company's assets measured at fair value on a recurring basis as of December 31, 2011 (in thousands):

	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
Current investments	\$105,500	\$177,404	\$ —	\$282,904
Noncurrent investments	19,293	50,802	—	70,095
Foreign currency contracts — asset position	3,295	—	—	3,295
Foreign currency contracts — liability position	546	—	—	546

In addition to the amounts disclosed in the above table, the fair value of the Company's Israeli severance pay assets, which were almost fully comprised of Level 2 assets, was \$3.7 million as of December 31, 2011.

All of the Company's short-term and long-term investments instruments at December 31, 2011 are classified within Level 1 or Level 2 of the fair value hierarchy as they are valued using quoted market prices, market prices for similar securities, or alternative pricing sources with reasonable levels of price transparency. The types

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

of instruments valued based on quoted market prices in active markets include the Company's investment in money market funds, mutual funds, U.S. government bonds and investments in public companies. Such instruments are generally classified within Level 1 of the fair value hierarchy. The types of instruments valued based on other observable inputs include the Company's cash surrender value of company owned life insurance, corporate obligations and bonds, commercial paper and certificates of deposit. Such instruments are classified within Level 2 of the fair value hierarchy.

In determining the value of certain Level 2 instruments, ARRIS has performed steps to verify the accuracy of the valuations provided by ARRIS' brokerage firms. ARRIS has reviewed the most recent Statement on Standards for Attestation Engagements No. 16 (SSAE report) for each brokerage firm holding investments for ARRIS. The SSAE report for each did not identify any control weakness in the brokerages' policies and procedures, in particular as they relate to the pricing and valuation of financial instruments. ARRIS has determined the third party pricing source used by each firm to be a reliable recognized source of financial valuations. In addition ARRIS has performed further testing on a large sample of its corporate obligations and commercial paper investments. These tests did not show any material discrepancies in the valuations provided by the brokerage firms. It is the Company's intent to continue to verify valuations on a quarterly basis, using one or more reliable recognized third party pricing providers. See Note 4 and Note 6 for further information on the Company's investments and derivative instruments.

All of the Company's foreign currency contracts are over-the-counter instruments. There is an active market for these instruments, and therefore, they are classified as Level 1 in the fair value hierarchy. ARRIS does not enter into currency contracts for trading purposes. The Company has a master netting agreement with the primary counterparty to the derivative instruments. This agreement allows for the net settlement of assets and liabilities arising from different transactions with the same counterparty.

Note 6. Derivative Instruments and Hedging Activities

ARRIS has certain international customers who are billed in their local currency. Changes in the monetary exchange rates may adversely affect the Company's results of operations and financial condition. When appropriate, ARRIS enters into various derivative transactions to enhance its ability to manage the volatility relating to these typical business exposures. The Company does not hold or issue derivative instruments for trading or other speculative purposes. The Company's derivative instruments are recorded in the Consolidated Balance Sheets at their fair values. The Company's derivative instruments are not designated as hedges, and accordingly, all changes in the fair value of the instruments are recognized as a loss (gain) on foreign currency in the Consolidated Statements of Operations. The maximum time frame for ARRIS' derivatives is currently less than 12 months. Derivative instruments which are subject to master netting arrangements are not offset in the Consolidated Balance Sheets.

The fair values of ARRIS' derivative instruments recorded in the Consolidated Balance Sheet as of December 31, 2011 and 2010 were as follows (in thousands):

	As of December 31, 2011		As of December 31, 2010	
	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value
Derivatives not designated as hedging instruments:				
Foreign exchange contracts — asset derivatives	Other current assets	\$ 3,295	Other current assets	\$ 607
Foreign exchange contracts — liability derivatives	Other accrued liabilities	\$ 546	Other accrued liabilities	\$ 828

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The change in the fair values of ARRIS' derivative instruments recorded in the Consolidated Statements of Operations during the years ended December 31, 2011, 2010, and 2009 were as follows (in thousands):

	Statement of Operations Location	Years Ended December 31,		
		2011	2010	2009
Derivatives not designated as hedging instruments:				
Foreign exchange contracts	Loss (gain) on foreign currency	\$(809)	\$(957)	\$3,016

ARRIS performs additional testing, on a quarterly basis, of the valuations provided by the financial institutions who are counter-parties to the derivative positions. This testing, to date, has not shown any material or significant differences to the valuations reported by the counter-party financial institutions.

Note 7. Business Acquisitions***Acquisition of BigBand Networks, Inc.***

On November 21, 2011, ARRIS completed its tender offer for all outstanding shares of common stock of BigBand Networks, Inc. Pursuant to the Agreement and Plan of Merger, all outstanding shares of common stock of BigBand were canceled and converted into the right to receive cash equal to \$2.24 per share, without interest and net of applicable withholding taxes.

This transaction was accounted for as a business combination. The acquisition supports the Company's strategy of expanding its video product suite and investing in the evolution towards network convergence on an all IP platform. This expanded portfolio and access to new market channels is expected to provide greater opportunities to grow the Company's customer base worldwide. The goodwill and intangible assets resulting from this acquisition are recorded in the BCS segment.

The results of operations of BigBand Networks, Inc. from November 22, 2011 through December 31, 2011 are included in the Company's consolidated statements of operations for the three and twelve months ended December 31, 2011. Revenue related to BigBand for this period was approximately \$4.7 million.

Purchase Price and Preliminary Allocation

The purchase price was allocated to the tangible assets and identifiable intangible assets acquired and liabilities assumed based on their relative fair values. The excess of the purchase price over the net tangible and identifiable intangible assets and liabilities assumed was recorded as goodwill. While the Company uses its best estimates and assumptions as a part of the purchase price allocation process to accurately value assets acquired and liabilities assumed at the acquisition date, the estimates are inherently uncertain and subject to refinement. As a result, during the measurement period, which may be up to one year from the acquisition date, ARRIS records adjustments to the assets acquired and liabilities assumed, with the corresponding offset to goodwill. Upon the conclusion of the measurement period, any subsequent adjustments are recorded to the consolidated statements of operations.

Accounting for business combinations requires management to make significant estimates and assumptions, especially at the acquisition date with respect to intangible assets, obligations assumed and pre-acquisition contingencies. Although the Company believes the assumptions and estimates made in the past have been reasonable and appropriate, they are based in part on historical experience and information obtained from the management of the acquired companies and are inherently uncertain.

In addition, uncertain tax positions and tax related valuation allowances assumed in connection with a business combination are initially estimated as of the acquisition date and the Company re-evaluates these items quarterly with certain adjustments to the preliminary estimates being recorded to goodwill provided that it is within the measurement period and the Company continues to collect information in order to determine their estimated

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

values. Subsequent to the measurement period or the final determination of the uncertain tax positions estimated value or tax related valuation allowances, changes to these uncertain tax positions and tax related valuation allowances will affect the provision for income taxes in the consolidated statement of operations and could have a material impact on the results of operations and financial position.

The total purchase price includes the aggregate cash consideration which was paid out at the closing date of acquisition. The following is a summary of the total purchase price of the transaction and preliminary allocation of the preliminary purchase price (in thousands):

Cash paid at \$2.24 per common share	\$162,417
Converted restricted shares for which service was performed pre-acquisition	280
Total preliminary purchase price	<u>\$162,697</u>
Tangible assets and liabilities acquired:	
Cash, short-term and long-term investments	\$109,263
Account receivable	4,612
Inventory	7,005
Other assets	9,670
Property, plant and equipment	6,010
Deferred tax assets	22,721
Deferred revenue	(9,967)
Accrued compensation, including change of control and Israeli severance liabilities	(19,427)
Accrued legal liabilities(1)	(495)
Other liabilities	(6,342)
Net tangible assets acquired	123,050
Identifiable intangible assets:	
Acquired in-process research and development	7,800
Other identifiable intangible assets:	
Existing technology	16,400
Order backlog	700
Customer relationships	12,400
Identifiable intangible assets	37,300
Goodwill	<u>2,347</u>
Preliminary allocation of purchase price	<u>\$162,697</u>

(1) Relates to the settlement of a lawsuit.

In connection with the transaction, ARRIS also incurred acquisition related costs of approximately \$2.7 million and \$3.2 million during the three and twelve months ending December 31, 2011, respectively. These costs are disclosed on the acquisition cost line of the Consolidated Statements of Operations.

The Company recorded a total \$37.3 of identifiable intangible assets, of which \$7.8 million represented acquired in-process research and development and \$29.5 million represented other identifiable intangibles with finite useful lives at the date of acquisition.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**Acquired In-Process Research & Development**

The Company recorded \$7.8 million, or 21% of the identified intangible assets, for acquired in-process research and development (“in-process R&D”) related to research and development projects of BigBand which had not yet reached technological feasibility, and if unsuccessful, have no alternative future use. Acquired in-process R&D assets are initially recognized at fair value and are classified as indefinite-lived assets until the successful completion or abandonment of the associated research and development efforts. Accordingly, during the development period after the acquisition date, this asset will not be amortized as charges to earnings; instead these assets will be subject to periodic impairment testing. Upon successful completion of the development process for the acquired in-process R&D project, the asset would then be considered a finite-lived intangible asset and amortization of the asset will commence. The fair value of the in-process R&D was determined based on an income approach using the discounted cash flow method. The risk adjusted discount rate applied to the project’s cash flows was 22.0%. The preliminary remaining useful life is currently estimated to be 5 years from the completion date, but is subject to change based on a reassessment at the completion date.

The project activities that fell within the in-process R&D valuation included: Media Services Platform (MSP), MSP-based QAM and Converged Video Exchange (CVEx).

Media Services Platform (MSP): This platform is designed to manage large numbers of IP video streams combined with rich media processing to enable a range of personalized video applications such as linear, zoned, and addressable advertising. Activities in this area are primarily focused on implementing a next generation product to provide ad insertion, and video processing capabilities as a replacement for the legacy broadband multimedia-services router.

MSP-based QAM: This platform provides new applications for the MSP platform within the cable market, providing RF QAM functionality. Activities in this area reflect work on a next-generation product.

Converged Video Exchange (CVEx): This platform is designed to manage large numbers of video sessions while optimizing network bandwidth utilization. Activities in this area are focused on incremental features targeted at providing specific functionalities within the platform.

The estimated costs to complete the projects described above were approximately \$8.7 million as of the date of acquisition. The projects are tentatively expected to be completed by the end of May 2012.

Other Identifiable Intangible Assets

The following table represents details of the other purchased intangible assets as part of the acquisition (in thousands):

	<u>Amount</u>	<u>Estimated Useful Life</u>
Existing technology	\$16,400	4 or 5 years
Customer relationships	12,400	10 years
Order backlog	700	13 months
Total	<u>\$29,500</u>	

Existing Technology

The Company recorded \$16.4 million, or 44% of the identified intangible assets, for existing technology with an estimated useful life of either 4 or 5 years. The fair value of existing technology was determined based on an income approach using the discounted cash flow method. The remaining useful life for the existing technology was based on historical product development cycles, the projected rate of technology attrition, and the pattern of projected economic benefit of the asset.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

These technologies include network-based platforms that enable cable multiple system operators (MSOs) and telecommunications companies to offer video services over coaxial, fiber and copper networks. These solutions include Broadcast Video, Telco TV, Switched Digital Video and IPTV (personalized Video) solutions. ARRIS believes that it will be able to leverage the market position and technologies in product solutions that encompass all of BigBand's products and ARRIS' products, in order to expand its market and market share. As a result, relatively higher value has been placed on the existing technologies of BigBand product solutions.

Customer Relationships

The Company recorded \$12.4 million, or 33% of the identified intangible assets, for customer relationships with an estimated useful life of 10 years. The fair value of the customer relationships asset was determined based on an income approach using the discounted cash flow method. The remaining useful life of customer relationships was estimated based on customer attrition, new customer acquisition and future economic benefit of the asset. Key factors leading to the allocation include:

- The cable and telecommunication operator industry, in general is dominated by large companies, resulting in customer concentration. The BigBand products are sold to cable MSOs and telecommunications companies worldwide. In particular, significant customers have included Verizon, AT&T, Cox and Time Warner Cable.
- The Company believes that BigBand's position with MSO's is complementary and will expand ARRIS's core customer relationships, creating synergistic value.
- In addition, the Company believes relationships with telecommunications companies such as Verizon and AT&T will enable customer diversification.

Order Backlog

The company recorded \$0.7 million, or 2% of the identified intangible assets, for order backlog with an estimated useful life of 13 months. The fair value of order backlog was determined based on an income approach using the discounted cash flow method. The remaining useful life for the order backlog was based on the projected economic benefit expected to be received from the asset.

Goodwill

The Company recorded goodwill of \$2.3 million, which represents the excess of the total purchase price over the net of the amounts assigned to tangible and identifiable intangible assets acquired and liabilities assumed from BigBand. Goodwill of \$2.3 million is not deductible for tax purposes.

Supplemental Pro Forma Information

Presented below is unaudited supplemental pro forma information for the Company and BigBand to give effect to the transaction. This summary unaudited information is derived from the historical financial statements of the Company and BigBand. This information assumes the transactions were consummated at the beginning of the applicable period. This information is presented for illustrative purposes only and does not purport to represent what the financial position or results of operations of the Company and BigBand or the combined entity would actually have been had the transactions occurred at the applicable date, or to project the Company's, BigBand's, or the combined entity's results of operations for any future period or date. The actual results of BigBand are included in the Company's operations from November 22, 2011 to December 31, 2011.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
Unaudited Supplemental Pro Forma Information For the years ended December 31,
(in millions, except per share data)

	2011	2010
Net sales	\$1,158.1	\$1,199.2
Net income (loss) from continuing operations	<u>(45.0)</u>	<u>40.6</u>
Income (loss) from continuing operations per common share:		
Basic	\$ (0.37)	\$ 0.32
Diluted	<u>\$ (0.37)</u>	<u>\$ 0.32</u>

Note 8. Guarantees**Warranty**

ARRIS provides warranties of various lengths to customers based on the specific product and the terms of individual agreements. The Company provides for the estimated cost of product warranties based on historical trends, the embedded base of product in the field, failure rates, and repair costs at the time revenue is recognized. Expenses related to product defects and unusual product warranty problems are recorded in the period that the problem is identified. While the Company engages in extensive product quality programs and processes, including actively monitoring and evaluating the quality of its suppliers, the estimated warranty obligation could be affected by changes in ongoing product failure rates, material usage and service delivery costs incurred in correcting a product failure, as well as specific product failures outside of ARRIS' baseline experience. If actual product failure rates, material usage or service delivery costs differ from estimates, revisions (which could be material) would be recorded against the warranty liability.

The Company offers extended warranties and support service agreements on certain products. Revenue from these agreements is deferred at the time of the sale and recognized on a straight-line basis over the contract period. Costs of services performed under these types of contracts are charged to expense as incurred, which approximates the timing of the revenue stream.

Information regarding the changes in ARRIS' aggregate product warranty liabilities for the years ending December 31, 2011 and 2010 were as follows (in thousands):

	2011	2010
January 1,	\$ 5,340	\$ 7,679
Accruals related to warranties (including changes in estimates)	3,445	937
Settlements made (in cash or in kind)	<u>(2,398)</u>	<u>(3,276)</u>
Balance at December 31,	<u>\$ 6,387</u>	<u>\$ 5,340</u>

Note 9. Segment Information

The "management approach" has been used to present the following segment information. This approach is based upon the way the management of the Company organizes segments within an enterprise for making operating decisions and assessing performance. Financial information is reported on the basis that it is used internally by the chief operating decision maker ("CODM") for evaluating segment performance and deciding how to allocate resources to segments. The Company's chief executive officer has been identified as the CODM.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The *Broadband Communications Systems* segment's product solutions include Headend and Subscriber Premises equipment that enable cable operators to provide Voice over IP, Video over IP and high speed data services to residential and business subscribers.

The *Access, Transport & Supplies* segment's product lines cover all components of a HFC network, including managed and scalable headend and hub equipment, optical nodes, radio frequency products, transport products and supplies.

The *Media & Communications Systems* segment provides content and operations management systems, including products for Video on Demand, Ad Insertion, Digital Advertising, Service Assurance, Service Fulfillment and Mobile Workforce Management.

These operating segments were determined based on the nature of the products and services offered.

The Company evaluates performance based on several factors, of which the primary financial measures are revenues and gross margins. A measure of assets is not applicable, as segment assets are not regularly reviewed by the CODM for evaluating performance and allocating resources to the segment. The accounting policies of the operating segments are the same as those described in Note 2 of the Notes to the Consolidated Financial Statements .

The table below presents information about the Company's reporting segments for the years ended December 31 (in thousands):

	Years ended December 31,		
	2011	2010	2009
<i>Business Segment:</i>			
BCS:			
Sales	\$ 824,008	\$ 841,164	\$ 852,852
Gross Margin	319,925	343,884	379,248
ATS:			
Sales	197,687	181,067	176,306
Gross Margin	49,272	45,971	40,055
MCS:			
Sales	66,990	65,275	78,648
Gross Margin	41,316	34,234	43,460
Total :			
Sales	\$1,088,685	\$1,087,506	\$1,107,806
Gross Margin	\$ 410,513	\$ 424,089	\$ 462,763

The following table summarizes the Company's net intangible assets and goodwill by reportable segment as of December 31, 2011 and 2010 (in thousands):

	Broadband Communications Systems	Access, Transport & Supplies	Media & Communications Systems	Total
<u>December 31, 2011</u>				
Goodwill	\$ 158,682	\$ 35,860	\$ —	\$194,542
Intangible assets, net	47,601	73,764	3,458	124,823
<u>December 31, 2010</u>				
Goodwill	\$ 156,335	\$ 36,856	\$ 41,773	\$234,964
Intangible assets, net	12,581	94,799	61,236	168,616

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The Company's two largest customers (including their affiliates, as applicable) are Comcast and Time Warner Cable. Over the past year, certain customers' beneficial ownership may have changed as a result of mergers and acquisitions. Therefore the revenue for ARRIS' customers for prior periods has been adjusted to include the affiliates under common control. A summary of sales to these customers for 2011, 2010 and 2009 is set forth below (in thousands):

	Years ended December 31,		
	2011	2010	2009
	(in thousands)		
Comcast and affiliates	\$286,987	\$268,149	\$348,169
% of sales	26.4%	24.7%	31.4%
Time Warner Cable and affiliates	\$162,060	\$174,471	\$230,211
% of sales	14.9%	16.0%	20.8%

ARRIS sells its products primarily in the United States. The Company's international revenue is generated from Asia Pacific, Europe, Latin America and Canada. The Asia Pacific market primarily includes China, Hong Kong, Japan, Korea, Singapore, and Taiwan. The European market primarily includes Austria, Belgium, France, Germany, the Netherlands, Norway, Poland, Portugal, Spain, Sweden, Switzerland, Great Britain, Ireland, Turkey, Russia, Romania, Hungary and Israel. The Latin American market primarily includes Argentina, Brazil, Chile, Columbia, Mexico, Peru, Puerto Rico, Ecuador, Honduras, Costa Rica, Panama, Jamaica, and Bahamas. Sales to international customers were approximately 31.3%, 35.2% and 26.5% of total sales for the years ended December 31, 2011, 2010 and 2009, respectively. International sales for the years ended December 31, 2011, 2010 and 2009 were as follows (in thousands):

	Years Ended December 31,		
	2011	2010	2009
Asia Pacific	\$ 59,194	\$ 63,492	\$ 56,091
EMEA	85,824	96,608	93,078
Latin America	99,413	146,980	81,608
Canada	96,087	75,205	62,672
Total	<u>\$340,518</u>	<u>\$382,285</u>	<u>\$293,449</u>

The following table summarizes ARRIS' international long-lived assets by geographic region as of December 31, 2011 and 2010 (in thousands):

	As of December 31,	
	2011	2010
Asia Pacific	\$1,948	\$ 1,665
EMEA	4,042	1,682
Latin America Latin America	408	275
Canada	3	2
Total	<u>\$6,401</u>	<u>\$ 3,624</u>

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Note 10. Restructuring Charges

ARRIS has restructuring accruals representing contractual obligations that relate to excess leased facilities and equipment in ARRIS' ATS segment. Payments will be made over their remaining lease terms through 2014, unless terminated earlier (in thousands):

Balance as of December 31, 2010	\$1,517
Payments	(373)
Adjustments to accrual	—
Balance as December 31, 2011	<u>\$1,144</u>

During the third quarter of 2011, the Company implemented a restructuring initiative to align its workforce and operating costs with current business opportunities. This initiative affected all segments. The total estimated cost of this one-time termination benefits was approximately \$1.0 million. The remaining payments were made in the fourth quarter of 2011 (in thousands):

Balance as of December 31, 2010	\$ —
Restructuring charges	969
Payments	(969)
Balance as December 31, 2011	<u>\$ —</u>

In the fourth quarter of 2011, the Company initiated a restructuring plan as a result of its acquisition of BigBand Networks. The plan focuses on the rationalization of personnel, facilities and systems across multiple segments in the ARRIS organization. During the fourth quarter of 2011, ARRIS recorded a restructuring charge of \$3.4 million, of which \$3.3 million was related to severance and termination benefits and \$0.1 million was related to facilities. As of December 31, 2011, the total liability remaining for this restructuring plan was approximately \$2.8 million, the majority of which is expected to be paid during the first half of 2012 (in thousands):

Balance as of December 31, 2010	\$ —
Restructuring charges	3,391
Payments	(567)
Balance as December 31, 2011	<u>\$2,824</u>

Additionally, ARRIS acquired remaining restructuring accruals of approximately \$0.4 million representing BigBand contractual obligations that related to excess leased facilities and equipment. ARRIS expects the remaining payments to be made by the first quarter of 2012. The restructuring accruals are in ARRIS's BCS segment (in thousands):

Balance as of December 31, 2010	\$ —
Restructuring charge	350
Payments	(122)
Balance as December 31, 2011	<u>\$ 228</u>

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**Note 11. Inventories**

Inventories are stated at the lower of average cost, approximating first-in, first-out, or market. The components of inventory are as follows, net of reserves (in thousands):

	December 31,	
	2011	2010
Raw material	\$ 22,759	\$ 19,053
Work in process	3,551	4,176
Finished goods	89,602	78,534
Total inventories	<u>\$115,912</u>	<u>\$101,763</u>

Note 12. Property, Plant and Equipment

Property, plant and equipment, at cost, consisted of the following (in thousands):

	December 31,	
	2011	2010
Land	\$ 2,612	\$ 2,612
Buildings and leasehold improvements	25,243	23,580
Machinery and equipment	163,851	139,381
	191,706	165,573
Less: Accumulated depreciation	(130,331)	(109,267)
Total property, plant and equipment, net	<u>\$ 61,375</u>	<u>\$ 56,306</u>

Note 13. Goodwill and Intangible Assets

Goodwill relates to the excess of cost over the fair value of net assets resulting from an acquisition. The Company's goodwill is tested for impairment on an annual basis, or more frequently if events or changes in circumstances indicate that the asset is more likely than not impaired. The Company's goodwill impairment testing date is October 1, which aligns with the timing of the Company's annual strategic planning process, which enables the Company to incorporate the reporting units' long-term financial projections which are generated from the annual strategic planning process as a basis for performing our impairment testing. For purposes of impairment testing, the Company has determined that its reporting units are the reportable segments based on our organizational structure, the financial information that is provided to and reviewed by segment management and aggregation criteria applicable to component businesses that are economically similar. The impairment testing is a two-step process. The first step is to identify a potential impairment by comparing the fair value of a reporting unit with its carrying amount. The Company concluded that a taxable transaction approach should be used. The Company determined the fair value of each of its reporting units using a combination of an income approach using discounted cash flow analysis and a market approach comparing actual market transactions of businesses that are similar to those of the Company. In addition, market multiples of publicly traded guideline companies also were considered. The Company considered the relative strengths and weaknesses inherent in the valuation methodologies utilized in each approach and consulted with a third party valuation specialist to assist in determining the appropriate weighting. The discounted cash flow analysis requires the Company to make various judgmental assumptions, including assumptions about future cash flows, growth rates and weighted average cost of capital (discount rate). The assumptions about future cash flows and growth rates are based on the current and long-term business plans of each reporting unit. Discount rate assumptions are based on an assessment of the risk inherent in the future cash flows of the respective reporting units. If necessary, the second step of the goodwill impairment test compares the implied fair value of the reporting

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

unit's goodwill with the carrying amount of that goodwill. If the carrying amount of a reporting unit's goodwill exceeds the implied fair value of that goodwill, an impairment loss is recognized in an amount in excess of the carrying amount of goodwill over its implied fair value. The implied fair value of goodwill is determined in a similar manner as the determination of goodwill recognized in a business combination. The Company allocates the fair value of a reporting unit to all of the assets and liabilities of that unit, including intangible assets, as if the reporting unit had been acquired in a business combination. Any excess of the fair value of a reporting unit over the amounts assigned to its assets and liabilities represents the implied fair value of goodwill.

The valuation methodologies described above have been consistently applied for all years presented below. See Part II, Item 7, Critical Accounting Policies for further information regarding the Company's goodwill impairment testing, including key assumptions and sensitivity analysis.

2009 Impairment Analysis - The 2009 annual impairment test was performed as of October 1, 2009. The step one analysis indicated that there were no indicators of impairment for the Company's BCS and MCS reporting units, as their respective fair values were greater than their carrying values. For the Company's ATS reporting unit, step one analysis indicated that its fair value was less than its carrying value. As a result, step two analysis was performed to determine the implied fair value of our ATS goodwill. The Company determined the implied fair value of the ATS goodwill was 34% greater than its carrying value, thus no reportable impairments were determined to have occurred in 2009.

2010 Impairment Analysis - Based on the annual goodwill impairment assessment performed as of October 1, 2010, the Company determined that its BCS and ATS, reporting units were not at risk of failing step one of the goodwill impairment test. The fair value of MCS reporting unit valuation included estimates of future operating performance and cash flows. The fair value of our MCS reporting unit exceeded its carrying value by 4.2% and thus was at risk of failing step one of the goodwill impairment test, and was therefore at risk of a future impairment in the event of significant unfavorable changes in the forecasted cash flows or the key assumptions used in the analysis, including the weighted average cost of capital (discount rate) and growth rates utilized in the discounted cash flow analysis.

2011 Impairment Analysis - Based on the most recent annual goodwill impairment assessment performed as of October 1, 2011, the Company determined that its BCS reporting unit was not at risk of failing step one of the goodwill impairment test. In performing step one of impairment testing, the Company determined that the fair values of the MCS reporting unit was less than its respective carrying value, as a result of a decline in the expected future cash flows for the reporting unit. In making the assessment regarding MCS future cash flows, a number of specific factors arose from the annual strategic planning process in the fourth quarter, including an assessment of historical operating results, key customer inputs, and anticipated development expenditures required to migrate the product portfolio in line with the changing market dynamics, including the evolution from a proprietary to open standards IP architecture. As a result of these factors, the Company has decided to shift some investment from the MCS reporting unit to its BCS reporting unit. Given the decision to reduce our investment going forward, the Company correspondingly moderated its long term projections for the MCS segment. The Company proceeded to step two of the goodwill impairment test to determine the implied fair value of the MCS goodwill. The Company concluded that the implied fair value of the goodwill was less than its carrying value, which resulted in a write off of all goodwill as of October 1, 2011 of \$41.2 million before tax (\$33.9 million after tax) for the MCS reporting unit. This expense was recorded in the impairment of goodwill and intangibles line on the consolidated statements of operations.

The fair value of the ATS reporting unit exceeded its carrying value by \$21.9 million, or 7.6%, and thus was at risk of failing step one of the goodwill impairment test, and was therefore at risk of a future impairment in the event of significant unfavorable changes in the forecasted cash flows or the key assumptions used in the analysis, including the weighted average cost of capital (discount rate) and growth rates utilized in the discounted cash flow analysis.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The following table sets forth the information regarding the ATS reporting unit as of October 1, 2011 (annual goodwill impairment testing date), including key assumptions (dollars in thousands):

	Key Assumptions		% Fair Value Exceeds Carrying Value as of October 1, 2011	Goodwill as of October 1, 2011	
	Discount Rate	Terminal Growth Rate	Percentage	Amount	Percent of Total Assets
	ATS	14.0%	3.0%	7.6%	\$35,905

The table below provides sensitivity analysis related to the impact of each of the key assumptions, on a standalone basis, on the resulting percentage change in fair value of the ATS reporting unit as of October 1, 2011:

	Percentage Reduction in Fair Value (Income Approach)		
	Assuming Hypothetical 10% Reduction in cash flows	Assuming Hypothetical 1% increase in Discount Rate	Assuming Hypothetical 1% decrease in Terminal Growth Rate
	ATS	-5.9%	-5.9%

Following is a summary of the Company's goodwill activity (in thousands):

	BCS	ATS	MCS	Total
Balance as of December 31, 2009	\$156,335	\$37,074	\$ 41,979	\$235,388
Adjustment to deferred tax assets – C-COR acquisition	—	(218)	(206)	(424)
Balance as of December 31, 2010	\$156,335	\$36,856	\$ 41,773	\$234,964
Adjustment to deferred tax assets – C-COR acquisition	—	(996)	(583)	(1,579)
Acquisition of BigBand Networks	2,347	—	—	2,347
Impairment	—	—	(41,190)	(41,190)
Balance as of December 31, 2011	<u>\$158,682</u>	<u>\$35,860</u>	<u>\$ —</u>	<u>\$194,542</u>

Intangibles

ARRIS tests its long-lived assets for recoverability when events or changes in circumstances indicate that their carrying amounts may not be recoverable. Examples of such circumstances include, but are not limited to, operating or cash flow losses from the use of such assets or changes in our intended uses of such assets. To test for recovery, the Company groups assets (an "asset group") in a manner that represents the lowest level for which identifiable cash flows are largely independent of the cash flows of other groups of assets and liabilities. The carrying amount of a long-lived asset or an asset group is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset or asset group. In determining future undiscounted cash flows, the Company has made a "policy decision" to use pre-tax cash flows in our evaluation, which is consistently applied.

If the Company determines that an asset or asset group is not recoverable, then the Company would record an impairment charge if the carrying value of the asset or asset group exceeds its fair value. Fair value is based on estimated discounted future cash flows expected to be generated by the asset or asset group. The assumptions underlying cash flow projections would represent management's best estimates at the time of the impairment review.

No review for impairment of long-lived assets was conducted in 2009 or 2010 as no indicators of impairment existed. In 2011, indicators of impairment existed for long-lived assets associated with the MCS reporting unit due to changes in projected operating results and cash flows. As such, the Company tested the MCS long-lived assets for recoverability by grouping assets at the lowest level for which identifiable cash flows are largely independent of the

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

cash flows of other groups of assets and liabilities. The Company compared the undiscounted cash flows over the estimated useful life of the primary asset in the group. The estimated cash flows included revenues and expenses directly associated with and arise from the use of the asset group. Based upon the analysis, the undiscounted cash flows used in the recoverability test were less than the carrying amount of the asset group. The Company determined the fair value of the long-lived asset group and recognized an impairment loss for the amount the carrying amount of the long-lived asset group exceeded its fair value. In the fourth quarter of 2011, an impairment loss of \$47.4 million before tax (\$29.1 million after tax) related to MCS customer relationships was recorded.

Acquired in-process research and development assets of \$7.8 million associated with the BigBand acquisition has been initially recognized at fair value and are classified as indefinite-lived assets until the successful completion or abandonment of the associated research and development efforts. Accordingly, during the development period after the acquisition date, this asset will not be amortized as charges to earnings; instead these assets will be subject to periodic impairment testing. Upon successful completion of the development process for the acquired in-process research and development project, the asset would then be considered a finite-lived intangible asset and amortization of the asset will commence.

The Company's intangible assets (excluding acquired in-process research and development assets) have an amortization period of six months to ten years. The gross carrying amount and accumulated amortization of the Company's intangible assets as of December 31, 2011 and December 31, 2010 are as follows (in thousands):

	December 31, 2011				December 31, 2010			
	Gross Amount	Accumulated Amortization	Net Book Value	Weighted Average Remaining Life (Years)	Gross Amount	Accumulated Amortization	Net Book Value	Weighted Average Remaining Life (Years)
Customer relationships	\$250,009	\$ 172,648	\$ 77,361	4.9	\$328,359	\$ 190,963	\$137,396	4.9
Developed technology	69,969	30,809	39,160	4.6	53,569	22,452	31,117	5.1
Trademarks & patents	257	257	—	—	317	214	103	0.8
Order backlog	3,000	2,498	502	1.0	7,940	7,940	—	—
Non-compete agreements	3,162	3,162	—	—	5,110	5,110	—	—
In-Process R&D (1)	7,800	—	7,800	5.0	—	—	—	—
Total	\$334,197	\$ 209,374	\$124,823		\$395,295	\$ 226,679	\$168,616	

(1) Amortization will begin upon completion of the development period.

Amortization expense recorded on the intangible assets listed in the above table for the years ended December 31, 2011, 2010 and 2009 was \$33.6 million, \$36.0 million, and \$37.4 million, respectively. Amortization on the in-process research and development assets is estimated to begin in the second quarter of 2012. The estimated total amortization expense for each of the next five fiscal years is as follows (in thousands):

2012	\$30,619
2013	30,245
2014	23,845
2015	23,203
2016	6,773
Thereafter	10,138

Note 14. Convertible Senior Notes

In 2006, the Company issued \$276.0 million of 2% convertible senior notes due 2026. The notes are convertible, at the option of the holder, based on an initial conversion rate, subject to adjustment, of 62.1504 shares per \$1,000 principal amount (which represents an initial conversion price of approximately \$16.09 per share of our common stock), into cash up to the principal amount and, if applicable, shares of the Company's common stock,

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

cash or a combination thereof. The notes are unsecured senior obligations, and are effectively subordinated to all liabilities, including trade payables and lease obligations of the Company's subsidiaries. The notes may be converted during any calendar quarter in which the closing price of ARRIS' common stock for 20 or more trading days in a period of 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter exceeds 120% of the conversion price in effect at that time (which, based on the current conversion price, would be \$19.31) and upon the occurrence of certain other events. Upon conversion, the holder will receive the principal amount in cash and an additional payment, in either cash or stock at the option of the Company. The additional payment will be based on a formula which calculates the difference between the initial conversion rate (\$16.09) and the market price at the date of the conversion. As of February 24, 2011, the notes could not be converted by the holders thereof. Interest is payable on May 15 and November 15 of each year. The Company may redeem the notes at any time on or after November 15, 2013, subject to certain conditions. In addition, the holders may require the Company to purchase all or a portion of their convertible notes on or after November 15, 2013. There are no significant financial covenants related to the notes.

During 2011, the Company acquired \$5.0 million face value of the notes for approximately \$5.0 million. The Company allocated \$2 thousand to the reacquisition of the equity component of the notes. The Company also wrote off approximately \$33 thousand of deferred finance fees associated with the portion of the notes acquired. As a result, the Company realized a loss of approximately \$19 thousand on the retirement of the notes.

During 2010, ARRIS acquired \$24.0 million principal amount of the notes, which had a book value, net of debt discount, of \$20.0 million for approximately \$23.3 million. The Company allocated \$0.1 million to the reacquisition of the equity component of the notes. The Company also wrote off approximately \$0.2 million of deferred finance fees associated with the portion of the notes acquired. As a result, the Company realized a gain of approximately \$0.4 million on the retirement of the notes.

ARRIS accounts for the liability and equity components of the notes separately. The Company is accreting the debt discount related to the equity component to non-cash interest expense over the estimated seven year life of the convertible notes, which represents the first redemption date of November 15, 2013 when the Company may redeem the notes at its election or the note holders may require their redemption. The equity and liability components related to the notes were as follows (in thousands):

	December 31, 2011	December 31, 2010
Carrying amount of the equity component	\$ 48,209	\$ 48,527
Principal amount of the liability component	\$ 232,050	\$ 237,050
Unamortized discount	(22,284)	(34,435)
Net carrying amount of the liability component	\$ 209,766	\$ 202,615

The following table presents the contractual interest coupon and the amortization of the discount on the equity component related to the notes as of December 31, 2011 and December 31, 2010. (in thousands):

	December 31, 2011	December 31, 2010
Contractual interest recognized	\$ 4,706	\$ 5,048
Amortization of discount	11,545	11,325

The effective annual interest rate on the debt component is 7.93%.

The Company paid approximately \$7.8 million of finance fees related to the issuance of the notes. Of the \$7.8 million, approximately \$5.3 million was attributed to the debt component and \$2.5 million was attributed to the equity component of the convertible debt instrument. The portion related to the debt component is being amortized over seven years. The remaining balance of unamortized financing costs from these notes as of December 31, 2011 and December 31, 2010 was \$1.2 million and \$1.9 million, respectively.

The Company has not paid cash dividends on its common stock since its inception.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Note 15. Earnings Per Share

The following is a reconciliation of the numerators and denominators of the basic and diluted earnings (loss) per share computations for the periods indicated (in thousands except per share data):

	For the Years Ended December 31,		
	2011	2010	2009
Basic:			
Net income (loss)	\$ (17,662)	\$ 64,128	\$ 90,769
Weighted average shares outstanding	120,157	125,157	124,716
Basic earnings (loss) per share	\$ (0.15)	\$ 0.51	\$ 0.73
Diluted:			
Net income (loss)	\$ (17,662)	\$ 64,128	\$ 90,769
Weighted average shares outstanding	120,157	125,157	124,716
Net effect of dilutive shares	—	3,114	3,369
Total	120,157	128,271	128,085
Diluted earnings (loss) per share	\$ (0.15)	\$ 0.50	\$ 0.71

In November 2006, the Company issued \$276.0 million of convertible senior notes. Upon conversion, ARRIS will satisfy at least the principal amount in cash, rather than common stock. This reduced the potential earnings dilution to only include the conversion premium, which is the difference between the conversion price per share of common stock and the average share price. The average share price in 2011, 2010 and 2009 was less than the conversion price of \$16.09 and, consequently, did not result in dilution.

Excluded from the dilutive securities described above are employee stock options to acquire 3.6 million, 3.8 million and 3.8 million shares as of December 31, 2011, 2010 and 2009, respectively. These exclusions are made if the exercise prices of these options are greater than the average market price of the common stock for the period, or if we have net losses, both of which have an anti-dilutive effect.

Note 16. Income Taxes

Income tax expense (benefit) consisted of the following (in thousands):

	Years Ended December 31,		
	2011	2010	2009
Current — Federal	\$ 20,901	\$15,482	\$26,586
State	2,223	4,274	3,867
Foreign	2,406	1,050	344
	<u>25,530</u>	<u>20,806</u>	<u>30,797</u>
Deferred — Federal	(31,084)	8,418	11,856
State	(6,358)	267	4,450
Foreign	1,063	1,011	(3,254)
	<u>(36,379)</u>	<u>9,696</u>	<u>13,052</u>
Income tax expense (benefit)	\$ (10,849)	\$30,502	\$43,849

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

A reconciliation of the statutory federal income tax rate of 35% and the effective income tax rates is as follows:

	Years Ended December 31,		
	2011	2010	2009
Statutory federal income tax expense (benefit)	(35.0)%	35.0%	35.0%
Effects of:			
State income taxes, net of federal benefit	(6.5)%	3.2%	(0.1)%
Impairment of goodwill	27.4%	—	—
Domestic manufacturing deduction	(9.6)%	(2.4)%	(2.0)%
Changes in valuation allowance	(8.0)%	0.1%	1.7%
Non-deductible officer compensation	2.4%	0.5%	—
Foreign taxes on U.S. entities less foreign tax credits	2.5%	(1.2)%	—
Facilitative acquisition costs	4.1%	—	—
Research and development tax credits	(20.0)%	(4.3)%	(3.5)%
Other, net	4.6%	1.3%	1.5%
	<u>(38.1)%</u>	<u>32.2%</u>	<u>32.6%</u>

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Deferred income taxes reflect the net tax effects of temporary differences between carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of ARRIS' net deferred income tax assets (liabilities) were as follows (in thousands):

	December 31,	
	2011	2010
Current deferred income tax assets:		
Inventory costs	\$ 6,509	\$ 8,339
Federal research and development credits	433	680
Federal/state net operating loss carryforwards	1,165	500
Foreign net operating loss carryforwards	750	—
Accrued vacation	1,793	1,255
Warranty reserve	788	576
Deferred revenue	18,820	10,016
Other, principally operating expenses	5,300	3,644
Total current deferred income tax assets	35,558	25,010
Noncurrent deferred income tax assets:		
Federal/state net operating loss carryforwards	51,753	7,365
Federal capital loss carryforwards	5,733	—
Investments	142	3,234
Foreign net operating loss carryforwards	7,115	8,944
Federal alternative minimum tax ("AMT") credit	—	839
Federal research and development credits	9,379	6,777
Pension and deferred compensation	11,351	7,876
Equity compensation	11,280	11,543
Warranty reserve	1,162	560
Capitalized R&D	10,146	—
Other, principally operating expenses	3,365	2,854
Total noncurrent deferred income tax assets	111,426	49,992
Total deferred income tax assets	146,984	75,002
Current deferred income tax liabilities:		
Other, principally operating expenses	(6,904)	(2,668)
Total current deferred income tax liabilities	(6,904)	(2,668)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Non-current deferred income tax liabilities:		
Property, plant and equipment, depreciation and basis differences	(4,612)	(2,030)
Excess tax on future repatriation of foreign earnings	(1,946)	—
Other noncurrent liabilities	(5,722)	(6,965)
Convertible debt	(8,187)	(12,554)
Goodwill and Intangibles	(17,548)	(36,897)
Total noncurrent deferred income tax liabilities	(38,015)	(58,446)
Total deferred income tax liabilities	(44,919)	(61,114)
Net deferred income tax assets	102,065	13,888
Valuation allowance	(42,039)	(16,926)
Net deferred income tax assets (liabilities)	<u>\$ 60,026</u>	<u>\$ (3,038)</u>

The valuation allowance for deferred income tax assets of \$42.0 million and \$16.9 million at December 31, 2011 and 2010, respectively, relates to the uncertainty surrounding the realization of certain deferred income tax assets in various jurisdictions. The \$25.1 million net increase in valuation allowances for the year was due primarily to the acquisition of BigBand and the related \$30.8 million of deferred tax assets for which management has concluded that ARRIS is not more-likely-than-not to utilize before the related statutes of limitations expire, offset by a net reduction of \$5.7 million in ARRIS legacy valuation allowances. A valuation allowance should be established and maintained when it is more-likely-than-not that all or a portion of deferred income tax assets will not be realized. The Company continually reviews the adequacy of its valuation allowances by reassessing whether it is more-likely-than-not to realize its various deferred income tax assets.

As of December 31, 2011 and December 31, 2010, ARRIS had \$123.5 million and \$5.6 million, respectively, of U.S. Federal net operating losses available to offset against future ARRIS taxable income. During 2011, ARRIS utilized approximately \$1.5 million of U.S. Federal net operating losses against taxable income. ARRIS acquired approximately \$120 million of U.S. Federal net operating losses in the BigBand transaction. Additionally, \$0.6 million of U.S. Federal net operating losses expired un-utilized in 2011. The U.S. Federal net operating losses may be carried forward for twenty years. The available acquired U.S. Federal net operating losses as of December 31, 2011, will expire between the years 2013 and 2030.

As of December 31, 2011, ARRIS also had \$208.3 million of U.S. state net operating loss carryforwards in various states. ARRIS acquired approximately \$72.1 million of U.S. state net operating losses as a result of the BigBand transaction. The amounts available for utilization vary by state due to the apportionment of the Company's taxable income and state law governing the expiration of these net operating losses. U.S. state net operating loss carryforwards of approximately \$30.5 million relate to the exercise of employee stock options and restricted stock ("equity compensation"). Any future cash benefit resulting from the utilization of these U.S. state net operating losses attributable to this portion of equity compensation will be credited directly to paid in capital during the year in which the cash benefit is realized.

Additionally, ARRIS has foreign net operating loss carryforwards available, as of December 31, 2011, of approximately \$38.4 million with varying expiration dates. Approximately \$18.9 million of the total foreign net operating loss carryforwards relate to ARRIS' Irish subsidiary and have an indefinite life.

ARRIS' ability to use U.S. Federal and state net operating loss carryforwards to reduce future taxable income, or to use research and development tax credit carryforwards to reduce future income tax liabilities, is subject to restrictions attributable to equity transactions that resulted in a change of ownership during prior tax years, as defined in Internal Revenue Code Sections 382 and 383. All of the tax attributes (net operating losses carried forward and tax credits carried forward) acquired from the C-COR Incorporated transaction and the BigBand Networks, Inc. transaction are subject to restrictions arising from equity transactions, including trans-

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

actions that created ownership changes within C-COR and BigBand prior to their acquisitions by ARRIS. With the exception of \$74.6 million of its U.S. federal net operating loss carryforwards, \$67.5 million of its U.S. state net operating loss carryforwards and \$3.5 million of R&D credit carryforwards, ARRIS does not expect that the limitations placed on its net operating losses and research and development tax credits as a result of applying these and other rules will result in the expiration of its net operating loss and research and development tax credit carryforwards. However, future equity transactions could further limit the utilization of these tax attributes.

During the past several years, ARRIS has identified and reported U.S. federal research and development tax credits in the amount of \$60.3 million, and domestic state research and development tax credits in the amount of \$14.7 million. During the tax years ending December 31, 2011, and 2010, we utilized \$11.0 million and \$6.2 million, respectively, to offset against U.S. federal and state income tax liabilities. As of December 31, 2011, ARRIS has \$3.9 million of available domestic federal research and development tax credits and \$10.9 million of available domestic state research and development tax credits to carry forward to subsequent years. The remaining unutilized domestic federal research and development tax credits can be carried back one year and carried forward twenty years. The domestic state research and development tax credits carry forward and will expire pursuant to the various applicable domestic state rules.

For the years ended December 31, 2011, 2010, and 2009, ARRIS reported \$4.2 million, \$3.3 million, and \$6.6 million, respectively, of pre-tax net income from non-U.S. entities operating in foreign jurisdictions. Pre-tax net income (loss) from the worldwide operations of U.S. entities was \$(32.7) million, \$91.3 million, and \$128.0 million for years ended December 31, 2011, 2010, and 2009.

With the exception of approximately \$8.9 million of earnings associated with its Israeli subsidiary, ARRIS intends to indefinitely reinvest the undistributed earnings of its foreign subsidiaries. ARRIS has recorded approximately \$1.9 million of deferred tax liability relating to the \$8.9 million of distributable earnings of the Israeli subsidiary. This deferred tax liability was recorded as part of purchase accounting for the acquisition of BigBand, and accordingly, the amount was offset by an increase in goodwill. No deferred income taxes have been recorded for the difference between its financial and tax basis investment in its other foreign subsidiaries. If the earnings of the other foreign subsidiaries were distributed to the U.S. in the form of dividends, or otherwise, ARRIS would have additional U.S. taxable income and, depending on the company's tax posture in the year of repatriation, may have to pay additional U.S. income taxes. Withholding taxes may also apply to the repatriation of foreign earnings. Determination of the amount of unrecognized income tax liability related to these permanently reinvested and undistributed foreign subsidiary earnings is currently not practicable. However, we expect that the income tax liability from a repatriation of these earnings would not be material because almost all of ARRIS' undistributed earnings are held by legal entities that file income tax returns in the United States.

Tabular Reconciliation of Unrecognized Tax Benefits (in thousands):

	December 31,		
	2011	2010	2009
Beginning balance	\$20,495	\$17,276	\$16,620
Gross increases — tax positions in prior period	374	606	24
Gross decreases — tax positions in prior period	(105)	—	(2,235)
Gross increases — current-period tax positions	5,922	2,841	2,867
Increases from acquired businesses	1,719	—	—
Decreases due to lapse of statute of limitations	(2,173)	(228)	—
Ending balance	<u>\$26,232</u>	<u>\$20,495</u>	<u>\$17,276</u>

The Company and its subsidiaries file income tax returns in the U.S. federal jurisdiction, and various state and foreign jurisdictions. With few exceptions, the Company is no longer subject to U.S. federal, state and local, or non-U.S. income tax examinations by tax authorities for years before 2001. The Company and its subsidiaries are currently under income tax audit in only five jurisdictions (the state of Georgia, the state of California, the

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

state of New York, the state of Illinois and Israel) and they have not received notices of any planned or proposed income tax audits. The Company has no outstanding unpaid income tax assessments for prior income tax audits.

At the end of 2011, the Company's total tax liability related to uncertain net tax positions totaled approximately \$25.8 million, all of which would cause the effective income tax rate to change upon the recognition. The difference between the \$26.2 million of unrecognized tax benefits reported in the tabular reconciliation above and the \$25.8 million of total tax liability relating to uncertain net tax positions are attributable to interest, penalties and the Federal benefit of state tax deductions. Based on information currently available, the Company anticipates that over the next twelve month period, statutes of limitations may close relating to existing unrecognized tax benefits of approximately \$2.8 million primarily arising from research and development tax credits. The Company reported approximately \$1.7 million and \$0.8 million, respectively, of interest and penalty accrual related to the anticipated payment of these potential tax liabilities as of December 31, 2011 and 2010. The Company classifies interest and penalties recognized on the liability for uncertain tax positions as income tax expense.

Note 17. Commitments

ARRIS leases office, distribution, and warehouse facilities as well as equipment under long-term leases expiring at various dates through 2023. Included in these operating leases are certain amounts related to restructuring activities; these lease payments and related sublease income are included in restructuring accruals on the consolidated balance sheets. Future minimum operating lease payments under non-cancelable leases at December 31, 2011 were as follows (in thousands):

	Operating Leases
2012	\$ 10,799
2013	9,167
2014	6,502
2015	5,168
2016	3,374
Thereafter	7,182
Less sublease income	(522)
Total minimum lease payments	<u>\$ 41,670</u>

Total rental expense for all operating leases amounted to approximately \$10.7 million, \$10.0 million and \$9.1 million for the years ended December 31, 2011, 2010 and 2009, respectively.

As of December 31, 2011, the Company had approximately \$4.1 million of restricted cash. Of the total restricted cash, \$2.1 million related to outstanding letters of credit that were cash collateralized and \$2.0 million is security for hedge transactions. Additionally, the Company had contractual obligations of approximately \$178.0 million under agreements with non-cancelable terms to purchase goods or services over the next year. All contractual obligations outstanding at the end of prior years were satisfied within a 12 month period, and the obligations outstanding as of December 31, 2011 are expected to be satisfied in 2012.

Note 18. Stock-Based Compensation

ARRIS grants stock options under its 2011 Stock Incentive Plan ("2011 SIP"), 2008 Stock Incentive Plan ("2008 SIP"), 2007 Stock Incentive Plan ("2007 SIP") and 2004 Stock Incentive Plan ("2004 SIP") and issues stock purchase rights under its Employee Stock Purchase Plan ("ESPP"). Upon approval of the 2011 SIP by stockholders on May 25, 2011, all shares available for grant under existing stock incentive plans were no longer available.

In 2011, the Board of Directors approved the 2011 SIP to facilitate the retention and continued motivation of key employees, consultants and directors, and to align more closely their interests with those of the Company and its stockholders. Awards under the 2011 SIP may be in the form of stock options, stock grants, stock units,

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

restricted stock, stock appreciation rights, performance shares and units, and dividend equivalent rights. A total of 17,500,000 shares of the Company's common stock may be issued pursuant to this plan. The Plan has been designed to allow for flexibility in the form of awards; however, awards denominated in shares of common stock other than stock options and stock appreciation rights will be counted against the Plan limit as 1.87 shares for every one share covered by such an award. The vesting requirements for issuance under this plan may vary; however, awards generally are required to have a minimum three-year vesting period or term.

In 2008, the Board of Directors approved the 2008 SIP to facilitate the retention and continued motivation of key employees, consultants and directors, and to align more closely their interests with those of the Company and its stockholders. Awards under the 2008 SIP may be in the form of stock options, stock grants, stock units, restricted stock, stock appreciation rights, performance shares and units, and dividend equivalent rights. A total of 12,300,000 shares of the Company's common stock were originally reserved for issuance under this plan. The Plan was designed to allow for flexibility in the form of awards; however, awards denominated in shares of common stock other than stock options and stock appreciation rights were counted against the Plan limit as 1.58 shares for every one share covered by such an award. The vesting requirements for issuance under this plan varied; however, awards generally were required to have a minimum three-year vesting period or term.

In 2007, the Board of Directors approved the 2007 SIP to facilitate the retention and continued motivation of key employees, consultants and directors, and to align more closely their interests with those of the Company and its stockholders. Awards under the 2007 SIP may be in the form of incentive stock options, non-qualified stock options, stock grants, stock units, restricted stock, stock appreciation rights, performance shares and units, and dividend equivalent rights. A total of 5,000,000 shares of the Company's common stock were originally reserved for issuance under this plan. The vesting requirements for issuance under this plan vary.

In 2004, the Board of Directors approved the 2004 SIP to facilitate the retention and continued motivation of key employees, consultants and directors, and to align more closely their interests with those of the Company and its stockholders. Awards under the 2004 SIP may be in the form of incentive stock options, non-qualified stock options, stock grants, stock units, restricted stock, stock appreciation rights, performance shares and units, dividend equivalent rights and reload options. A total of 6,000,000 shares of the Company's common stock were originally reserved for issuance under this plan. The vesting requirements for issuance under this plan vary.

In 2002, the Board of Directors approved the 2002 SIP to facilitate the retention and continued motivation of key employees, consultants and directors, and to align more closely their interests with those of the Company and its stockholders. Awards under the 2002 SIP may be in the form of incentive stock options, non-qualified stock options, stock grants, stock units, restricted stock, stock appreciation rights, performance shares and units, dividend equivalent rights and reload options. A total of 2,500,000 shares of the Company's common stock were originally reserved for issuance under this plan. The vesting requirements for issuance under this plan vary.

In 2001, the Board of Directors approved the 2001 SIP to facilitate the retention and continued motivation of key employees, consultants and directors, and to align more closely their interests with those of the Company and its stockholders. Awards under the 2001 SIP may be in the form of incentive stock options, non-qualified stock options, stock grants, stock units, restricted stock, stock appreciation rights, performance shares and units, dividend equivalent rights and reload options. A total of 9,580,000 shares of the Company's common stock were originally reserved for issuance under this plan. The vesting requirements for issuance under this plan vary.

In 2001, the Board of Directors approved a proposal to grant truncated options to employees and board members having previous stock options with exercise prices more than 33% higher than the market price of the Company's stock at \$10.20 per share. The truncated options to purchase stock of the Company pursuant to the Company's 2001 SIP, have the following terms: (a) one fourth of each option shall be exercisable immediately and an additional one fourth shall become exercisable or vest on each anniversary of this grant; (b) each option shall be exercisable in full after the closing price of the stock has been at or above the target price as determined by the agreement for twenty consecutive trading days (the "Accelerated Vesting Date"); (c) each option shall

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

expire on the earliest of (i) the tenth anniversary of grant, (ii) six months and one day from the accelerated vesting date, (iii) the occurrence of an earlier expiration event as provided in the terms of the options granted by 2000 stock option plans. No compensation was recorded in relation to these options.

In connection with the Company's reorganization on August 3, 2001, the Company froze additional grants under other prior plans, which were the 2000 Stock Incentive Plan ("2000 SIP"), the 2000 Mid-Level Stock Option Plan ("MIP"), the 1997 Stock Incentive Plan ("SIP"), the 1993 Employee Stock Incentive Plan ("ESIP"), the Director Stock Option Plan ("DSOP"), and the TSX Long-Term Incentive Plan ("LTIP"). All options granted under the previous plans are still exercisable. The Board of Directors approved the prior plans to facilitate the retention and continued motivation of key employees, consultants and directors, and to align more closely their interests with those of the Company and its stockholders. Awards under these plans were in the form of incentive stock options, non-qualified stock options, stock grants, stock units, restricted stock, stock appreciation rights, performance shares and units, dividend equivalent rights and reload options. A total of 2,500,000 shares of the Company's common stock were originally reserved for issuance under this plan. Options granted under this plan vest in fourths on the anniversary date of the grant beginning with the first anniversary and terminate ten years from the date of grant. Vesting requirements for issuance under the prior plans varied, as did the related date of termination.

Stock Options

ARRIS grants stock options to certain employees. Upon stock option exercise the Company issues new shares. Stock options generally vest over three or four years of service and have either seven or ten year contractual terms. The exercise price of an option is equal to the fair market value of ARRIS' stock on the date of grant. ARRIS uses the Black-Scholes model and engages an independent third party to assist the Company in determining the Black-Scholes valuation of its equity awards. The volatility factors are based upon a combination of historical volatility over a period of time and estimates of implied volatility based on traded option contracts on ARRIS common stock. The expected term of the awards granted are based upon a weighted average life of exercise activity of the grantee population. The risk-free interest rate is based upon the U.S. treasury strip yield at the grant date, using a remaining term equal to the expected life. The expected dividend yield is 0%, as the Company has not paid cash dividends on its common stock since its inception. In calculating the stock compensation expense, ARRIS applies an estimated pre-vesting forfeiture rate based upon historical rates. The stock compensation expense is amortized over the vesting period using the straight-line method.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

A summary of activity of ARRIS' options granted under its stock incentive plans is presented below:

	Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Beginning balance, January 1, 2011	6,954,282	\$ 9.76		
Grants	—	—		
Exercised	(2,376,297)	8.51		
Forfeited	(502)	10.41		
Expired	(110,724)	11.49		
Ending balance, December 31, 2011	<u>4,466,759</u>	10.38	1.93	\$ 7,726
Exercisable at December 31, 2011	<u>4,443,009</u>	10.39	1.92	\$ 7,681

There were no new options granted in 2010 and 2011. The weighted average assumptions used in this model to value ARRIS' stock options during 2009 were as follows: risk-free interest rates of 1.5%; a dividend yield of 0%; volatility factor of the expected market price of ARRIS' common stock of 0.53; and a weighted average expected life of 4.0 years. The weighted average grant-date fair value of options granted during 2009 was \$5.95. The total intrinsic value of options exercised during 2011, 2010 and 2009 was approximately \$9.6 million, \$3.2 million and \$8.6 million, respectively.

The following table summarizes ARRIS' options outstanding as of December 31, 2011:

Range of Exercise Prices	Options Outstanding			Options Exercisable	
	Number Outstanding	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
\$ 1.31 to \$ 2.99	119,751	0.95 years	\$ 2.43	119,751	\$ 2.43
\$ 3.00 to \$ 4.99	296,178	2.13 years	\$ 4.84	296,178	\$ 4.84
\$5.00 to \$ 6.99	763,564	0.94 years	\$ 3.81	756,064	\$ 3.78
\$7.00 to \$8.99	323,193	1.28 years	\$ 14.38	323,193	\$ 14.38
\$9.00 to \$10.99	490,667	2.39 years	\$ 9.28	474,417	\$ 9.27
\$ 11.00 to \$13.99	<u>2,473,406</u>	2.24 years	\$ 13.15	<u>2,473,406</u>	\$ 13.15
\$1.31 to \$13.99	<u>4,466,759</u>	1.93 years	\$ 10.38	<u>4,443,009</u>	\$ 10.39

Restricted Stock (Non-Performance) and Stock Units

ARRIS grants restricted stock and stock units to certain employees and its non-employee directors. The Company records a fixed compensation expense equal to the fair market value of the shares of restricted stock granted on a straight-line basis over the requisite services period for the restricted shares. The Company applies an estimated post-vesting forfeiture rate based upon historical rates.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The following table summarizes ARRIS' unvested restricted stock (excluding performance-related) and stock unit transactions during the year ending December 31, 2011:

	Shares	Weighted Average Grant Date Fair Value
Unvested at January 1, 2011	5,015,525	\$ 8.98
Granted	1,845,175	12.64
Converted restricted shares of BigBand	277,901	10.24
Vested	(1,910,828)	8.73
Forfeited	(253,157)	9.85
Unvested at December 31, 2011	<u>4,974,616</u>	10.46

Restricted Shares – Subject to Performance Targets

ARRIS grants to certain employees restricted shares, in which the number of shares is dependent upon performance targets. The number of shares which could potentially be issued ranges from zero to 150% of the target award. Compensation expense is recognized using the graded method and is based upon the fair market value of the shares estimated to be earned. The fair value of the restricted shares is estimated on the date of grant using the same valuation model as that used for stock options and other restricted shares.

The following table summarizes ARRIS' unvested performance-related restricted stock transactions during the year ending December 31, 2011:

	Shares	Weighted Average Grant Date Fair Value
Unvested at January 1, 2011	151,008	\$ 7.98
Granted	—	—
Vested	(98,032)	9.24
Forfeited	—	—
Unvested at December 31, 2011	<u>52,976</u>	5.65

Restricted Shares – Subject to Comparative Market Performance

ARRIS grants to certain employees restricted shares, in which the number of shares is dependent upon the Company's total shareholder return as compared to the shareholder return of the NASDAQ composite over a three year period. The number of shares which could potentially be issued ranges from zero to 200% of the target award. For the shares granted in 2009, the three-year measurement period ended on December 31, 2011. This resulted in an achievement of 25% of the target award, or 70,417 shares. The remaining grants outstanding that are subject to market performance 444,057 shares at target; at 200% performance 888,113 would be issued. Compensation expense is recognized on a straight-line basis over three year measurement period and is based upon the fair market value of the shares estimated to be earned. The fair value of the restricted shares is estimated on the date of grant using a lattice model.

The total intrinsic value of restricted shares, including both non-performance and performance-related shares, vested and issued during 2011, 2010 and 2009 was \$24.1 million, \$18.8 million and \$6.4 million, respectively.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Employee Stock Purchase Plan (“ESPP”)

ARRIS offers an ESPP to certain employees. The plan complies with Section 423 of the U.S. Internal Revenue Code, which provides that employees will not be immediately taxed on the difference between the market price of the stock and a discounted purchase price if it meets certain requirements. Participants can request that up to 10% of their base compensation be applied toward the purchase of ARRIS common stock under ARRIS' ESPP. Purchases by any one participant are limited to \$25,000 (based upon the fair market value) in any one year. The exercise price is the lower of 85% of the fair market value of the ARRIS common stock on either the first day of the purchase period or the last day of the purchase period. A plan provision which allows for the more favorable of two exercise prices is commonly referred to as a “look-back” feature. Any discount offered in excess of five percent generally will be considered compensatory and appropriately is recognized as compensation expense. Additionally, any ESPP offering a look-back feature is considered compensatory. ARRIS uses the Black-Scholes option valuation model to value shares issued under the ESPP. The valuation is comprised of two components; the 15% discount of a share of common stock and 85% of a six month option held (related to the look-back feature). The weighted average assumptions used to estimate the fair value of purchase rights granted under the ESPP for 2011, 2010 and 2009, were as follows: risk-free interest rates of 0.1%, 0.2% and 0.2%, respectively; a dividend yield of 0%; volatility factor of the expected market price of ARRIS' common stock of 0.41, 0.36, and 0.41, respectively; and a weighted average expected life of 0.5 year for each. The Company recorded stock compensation expense related to the ESPP of approximately \$0.8 million, \$0.7 million and \$0.8 million for the years ended December 31, 2011, 2010 and 2009, respectively.

Unrecognized Compensation Cost

As of December 31, 2011, there was approximately \$36.8 million of total unrecognized compensation cost related to unvested share-based awards granted under the Company's incentive plans. This compensation cost is expected to be recognized over a weighted-average period of 3.3 years.

Treasury Stock

In 2011, ARRIS repurchased 10.0 million shares of the Company's common stock at an average price of \$10.95 per share for an aggregate consideration of approximately \$109.1 million.

In 2010, ARRIS repurchased 6.8 million shares of the Company's common stock at an average price of \$10.24 per share for an aggregate consideration of approximately \$69.3 million.

The repurchased shares are held as treasury stock on the Consolidated Balance Sheet as of December 31, 2011.

Note 19. Employee Benefit Plans

The Company sponsors a qualified and a non-qualified non-contributory defined benefit pension plan that cover certain U.S. employees. As of January 1, 2000, the Company froze the qualified defined pension plan benefits for its participants. These participants elected to enroll in ARRIS' enhanced 401(k) plan. Due to the cessation of plan accruals for such a large group of participants, a curtailment was considered to have occurred.

The U.S. pension plan benefit formulas generally provide for payments to retired employees based upon their length of service and compensation as defined in the plans. ARRIS' investment policy is to fund the qualified plan as required by the Employee Retirement Income Security Act of 1974 (“ERISA”) and to the extent that such contributions are tax deductible.

The investment strategies of the plans place a high priority on benefit security. The plans invest conservatively so as not to expose assets to depreciation in adverse markets. The plans' strategy also places a high priority on earning a rate of return greater than the annual inflation rate along with maintaining average market results. The plan has targeted asset diversification across different asset classes and markets to take advantage of

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

economic environments and to also act as a risk minimizer by dampening the portfolio's volatility. The following table summarizes the weighted average pension asset allocations as December 31, 2011 and 2010:

	Weighted Average Allocation		
	Target	Actual	
	2011	2011	2010
Equity securities	45%	43%	48%
Debt securities	50%	54%	49%
Cash and cash equivalents	5%	3%	3%
	100%	100%	100%

The following table summarizes the Company's pension plan assets by category and by level (as described in Note 5 of the Notes to the Consolidated Financial Statements) as of December 31, 2011 (in thousands):

	Level 1	Level 2	Level 3	Total
Cash and cash equivalents(1)	\$ 599	\$ —	\$ —	\$ 599
Equity securities(2):				
U.S. large cap	—	5,225	—	5,225
U.S. mid cap	—	1,654	—	1,654
U.S. small cap	—	1,184	—	1,184
International	—	1,137	—	1,137
Fixed income securities:				
U.S. government bonds(3)	—	11,692	—	11,692
Total	\$ 599	\$20,892	\$ —	\$21,491

- (1) Cash and cash equivalents, which are used to pay benefits and administrative expenses, are held in a money market fund.
- (2) Equity securities consist of common and preferred stock, mutual funds, and common trust funds. Investments in common and preferred stocks are valued using quoted market prices multiplied by the number of shares owned. Investments in mutual funds and common trust funds are valued at the net asset value per share multiplied by the number of shares held.
- (3) Fixed income securities consist of U.S. government securities in mutual funds, and are valued at the net asset value per share multiplied by the number of shares held.

The Company has established a rabbi trust to fund the pension obligations of the Chief Executive Officer under his Supplemental Retirement Plan including the benefit under the Company's non-qualified defined benefit plan. In addition, the Company has established a rabbi trust for certain executive officers to fund the Company's pension liability to those officers under the non-qualified plan.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Summary data for the non-contributory defined benefit pension plans is as follows:

	Years Ended December 31,	
	2011	2010
(in thousands)		
Change in Projected Benefit Obligation:		
Projected benefit obligation at beginning of year	\$ 39,441	\$ 37,255
Service cost	312	273
Interest cost	2,142	2,114
Actuarial loss	5,798	587
Benefit payments	(781)	(788)
Projected benefit obligation at end of year	<u>\$ 46,912</u>	<u>\$ 39,441</u>
Change in Plan Assets:		
Fair value of plan assets at beginning of year	\$ 22,067	\$ 20,672
Actual return on plan assets	121	2,079
Company contributions	84	104
Expenses and benefits paid from plan assets	(781)	(788)
Fair value of plan assets at end of year(1)	<u>\$ 21,491</u>	<u>\$ 22,067</u>
Funded Status:		
Funded status of plan	\$(25,421)	\$(17,374)
Unrecognized actuarial loss	13,487	6,474
Unamortized prior service cost	—	—
Net amount recognized	<u>\$(11,934)</u>	<u>\$(10,900)</u>

- (1) In addition to the pension plan assets, ARRIS has established two rabbi trusts to further fund the pension obligations of the Chief Executive Officer and certain other executives. The balance of these assets as of December 31, 2011 and 2010 was approximately \$14.3 million and \$13.3 million respectively, and are included in Investments on the Consolidated Balance Sheets.

Amounts recognized in the statement of financial position consist of:

	Years Ended December 31,	
	2011	2010
(in thousands)		
Current liabilities	\$ (161)	\$ (161)
Noncurrent liabilities	(25,260)	(17,213)
Accumulated other comprehensive income(1)	13,487	6,474
Total	<u>\$(11,934)</u>	<u>\$(10,900)</u>

- (1) The total unfunded pension liability on the Consolidated Balance Sheets as of December 31, 2011 and 2010 included a related income tax effect of \$3,257 thousand and \$662 thousand, respectively.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Other changes in plan assets and benefit obligations recognized in other comprehensive income (loss) are as follows:

	Years Ended	
	December 31,	
	2011	2010
	(in thousands)	
Net loss	\$7,301	\$ 29
Amortization of net loss	(288)	(280)
Amortization of prior service cost	—	(260)
Total recognized in other comprehensive income (loss)	<u>\$7,013</u>	<u>\$(511)</u>

The following table summarizes the amounts in other comprehensive income (loss) expected to be amortized and recognized as a component of net periodic benefit cost in 2012 (in thousands):

Amortization of net loss	\$ 840
--------------------------	--------

Information for defined benefit plans with accumulated benefit obligations in excess of plan assets is as follows:

	December 31,	
	2011	2010
	(in thousands)	
Accumulated benefit obligation	\$45,709	\$38,458
Projected benefit obligation	\$46,912	\$39,441
Plan assets	\$21,491	\$22,067

Net periodic pension cost for 2011, 2010 and 2009 for pension and supplemental benefit plans includes the following components (in thousands):

	2011	2010	2009
Service cost	\$ 312	\$ 273	\$ 981
Interest cost	2,142	2,114	2,119
Return on assets (expected)	(1,624)	(1,520)	(1,126)
Amortization of net actuarial loss	288	280	477
Amortization of prior service cost(1)	—	260	462
Net periodic pension cost	<u>\$ 1,118</u>	<u>\$ 1,407</u>	<u>\$ 2,913</u>

- (1) Prior service cost is amortized on a straight-line basis over the average remaining service period of employees expected to receive benefits under the plan.

The weighted-average actuarial assumptions used to determine the benefit obligations for the three years presented are set forth below:

	2011	2010	2009
Assumed discount rate for non-qualified plan participants	4.50%	5.50%	5.75%
Assumed discount rate for qualified plan participants	4.50%	5.50%	5.75%
Rate of compensation increase	3.75%	3.75%	3.75%

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The weighted-average actuarial assumptions used to determine the net periodic benefit costs are set forth below:

	2011	2010	2009
Assumed discount rate for non-qualified plan participants	5.50%	5.75%	6.25%
Assumed discount rate for qualified plan participants	5.50%	5.75%	6.25%
Rate of compensation increase	3.75%	3.75%	3.75%
Expected long-term rate of return on plan assets	7.50%	7.50%	7.50%

The expected long-term rate of return on assets is derived using the building block approach which includes assumptions for the long term inflation rate, real return, and equity risk premiums.

No minimum funding contributions are required in 2012 for the plan; however, the Company may make a voluntary contribution.

As of December 31, 2011, the expected benefit payments related to the Company's defined benefit pension plans during the next ten years are as follows (in thousands):

2012	\$ 1,171
2013	12,532
2014	1,502
2015	1,528
2016	1,613
2017 - 2021	9,530

Other Benefit Plans

ARRIS has established defined contribution plans pursuant to the Internal Revenue Code Section 401(k) that cover all eligible U.S. employees. ARRIS contributes to these plans based upon the dollar amount of each participant's contribution. ARRIS made matching contributions to these plans of approximately \$5.0 million, \$4.9 million and \$4.4 million in 2011, 2010 and 2009, respectively.

The Company has a deferred compensation plan that does not qualify under Section 401(k) of the Internal Revenue Code, which was available to certain current and former officers and key executives of C-COR. During 2008, this plan was merged into a new non-qualified deferred compensation plan which is also available to key executives of the Company. Employee compensation deferrals and matching contributions are held in a rabbi trust. The total of net employee deferrals and matching contributions, which is reflected in other long-term liabilities, was \$2.6 million and \$2.3 million at December 31, 2011 and 2010, respectively. Total expenses included in continuing operations for the matching contributions were approximately \$0.2 million in 2011 and \$0.3 million in 2010.

The Company previously offered a deferred compensation arrangement, which allowed certain employees to defer a portion of their earnings and defer the related income taxes. As of December 31, 2004, the plan was frozen and no further contributions are allowed. The deferred earnings are invested in a rabbi trust. The total of net employee deferral and matching contributions, which is reflected in other long-term liabilities, was \$2.6 million and \$2.8 million at December 31, 2011 and 2010, respectively.

The Company also has a deferred retirement salary plan, which was limited to certain current or former officers of C-COR. The present value of the estimated future retirement benefit payments is being accrued over the estimated service period from the date of signed agreements with the employees. The accrued balance of this plan, the majority of which is included in other long-term liabilities, was \$2.2 million and \$2.1 million at December 31, 2011 and 2010, respectively. Total expenses included in continuing operations for the deferred retirement salary plan were approximately \$0.2 million and \$(0.2) million for 2011 and 2010, respectively.

[Table of Contents](#)**Note 20. Repurchases of ARRIS Common Stock**

During the first quarter of 2009, ARRIS' Board of Directors authorized a plan (the "2009 Plan") for the Company to purchase up to \$100 million of the Company's common stock. The Company did not purchase any shares under the 2009 Plan during 2009.

In 2010, ARRIS repurchased 6.8 million shares of the Company's common stock at an average price of \$10.24 per share for an aggregate consideration of approximately \$69.3 million.

In May 2011, the share repurchase authorization amount under the 2009 plan was exhausted. In the second quarter of 2011, the Board authorized a new plan for the Company to purchase up to \$150 million of the Company's common stock. During the second quarter of 2011, ARRIS repurchased approximately 5.1 million shares of the Company's common stock at an average price of \$11.37 per share for an aggregate consideration of approximately \$57.6 million. During the third quarter of 2011, ARRIS repurchased approximately 1.6 million shares of the Company's common stock at an average price of \$10.50 per share for an aggregate consideration of approximately \$17.1 million. During the fourth quarter of 2011, ARRIS repurchased approximately 3.3 million shares of the Company's common stock at an average price of \$10.51 per share for an aggregate consideration of approximately \$34.4 million. As of December 31, 2011, approximately \$2.9 million of shares repurchased had been traded but not yet settled in cash. These transactions are included in other accrued liabilities on the Consolidated Balance Sheets.

As of December 31, 2011, the remaining authorized amount for future repurchases was \$71.6 million.

Note 21. Summary Quarterly Consolidated Financial Information (unaudited)

The following table summarizes ARRIS' quarterly consolidated financial information (in thousands, except per share data):

	Quarters in 2011 Ended			
	March 31,	June 30,	September 30,	December 31,
Net sales	\$267,436	\$265,799	\$ 274,374	\$ 281,076
Gross margin	96,946	106,898	100,124	106,545
Operating income (loss)	15,124	25,457	18,451	(73,640)
Net income (loss)	\$ 11,564	\$ 16,690	\$ 13,713	\$ (59,629)
Net income per basic share	\$ 0.09	\$ 0.14	\$ 0.11	\$ (0.51)
Net income per diluted share	\$ 0.09	\$ 0.13	\$ 0.11	\$ (0.51)

	Quarters in 2010 Ended			
	March 31,	June 30,	September 30,	December 31,
Net sales	\$266,697	\$280,355	\$ 274,286	\$ 266,168
Gross margin	112,511	113,278	101,987	96,313
Operating income	33,955	34,239	23,966	17,745
Net income	\$ 18,991	\$ 19,774	\$ 14,042	\$ 11,321
Net income per basic share	\$ 0.15	\$ 0.16	\$ 0.11	\$ 0.09
Net income per diluted share	\$ 0.15	\$ 0.15	\$ 0.11	\$ 0.09

PART III

Item 10. *Directors, Executive Officers, and Corporate Governance*

Information relating to directors and officers of ARRIS, the Audit Committee of the board of directors and stockholder nominations for directors is set forth under the captions entitled "Election of Directors," "Section 16(a) Beneficial Ownership Reporting Compliance," and "Committees of the Board of Directors and Meeting Attendance" in the Company's Proxy Statement for the Annual Meeting of Stockholders to be held in 2012 (the "Proxy Statement") and is incorporated herein by reference. Certain information concerning the executive officers of the Company is set forth in Part I of this document under the caption entitled "Executive Officers of the Company".

ARRIS' code of ethics and financial code of ethics (applicable to our CEO, senior financial officers, and all finance, accounting, and legal managers) are available on our website at www.arrisi.com under Investor Relations, Corporate Governance. The website also will disclose whether there have been any amendments or waivers to the Code of Ethics and Financial Code of Ethics. ARRIS will provide copies of these documents in electronic or paper form upon request to Investor Relations, free of charge.

ARRIS' board of directors has identified Matthew Kearney and John Petty, both members of the Audit Committee, as our audit committee financial experts, as defined by the SEC.

Item 11. *Executive Compensation*

Information regarding compensation of officers and directors of ARRIS is set forth under the captions entitled "Executive Compensation," "Compensation of Directors," "Employment Contracts and Termination of Employment and Change-In-Control Arrangements," "Committees of the Board of Directors and Meeting Attendance – Compensation Committee," and "Compensation Committee Report" in the Proxy Statement and is incorporated herein by reference.

Item 12. *Security Ownership of Certain Beneficial Owners, Management and Related Stockholders Matters*

Information regarding ownership of ARRIS common stock is set forth under the captions entitled "Equity Compensation Plan Information," "Security Ownership of Management" and "Security Ownership of Principal Stockholders" in the Proxy Statement and is incorporated herein by reference.

Item 13. *Certain Relationships, Related Transactions, and Director Independence*

Information regarding certain relationships, related transactions with ARRIS, and director independence is set forth under the captions entitled "Compensation of Directors," "Certain Relationships and Related Party Transactions," and "Election of Directors" in the Proxy Statement and is incorporated herein by reference.

Item 14. *Principal Accountant Fees and Services*

Information regarding principal accountant fees and services is set forth under the caption "Relationship with Independent Registered Public Accounting Firm" in the Proxy Statement and is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) (1) Financial Statements

The following Consolidated Financial Statements of ARRIS Group, Inc. and Report of Ernst & Young LLP, Independent Registered Public Accounting Firm are filed as part of this Report.

	<u>Page</u>
Report of Independent Registered Public Accounting Firm	72
Consolidated Balance Sheets at December 31, 2011 and 2010	73
Consolidated Statements of Operations for the years ended December 31, 2011, 2010 and 2009	74
Consolidated Statements of Cash Flows for the years ended December 31, 2011, 2010 and 2009	75
Consolidated Statements of Stockholders' Equity for the years ended December 31, 2011, 2010 and 2009	77
Notes to the Consolidated Financial Statements	78

[Table of Contents](#)

(a) (2) Financial Statement Schedules

The following consolidated financial statement schedule of ARRIS is included in this item pursuant to paragraph (b) of Item 15:

Schedule II — Valuation and Qualifying Accounts

All other schedules for which provision is made in the applicable accounting regulation of the Securities and Exchange Commission are not required under the related instructions or are not applicable, and therefore have been omitted.

SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS

<u>Description</u>	<u>Balance at Beginning of Period</u>	<u>Charge to Expenses(1)</u>	<u>Deductions(2)</u>	<u>Balance at End of Period</u>
(in thousands)				
YEAR ENDED DECEMBER 31, 2011				
Reserves and allowance deducted from asset accounts:				
Allowance for doubtful accounts	\$ 1,649	\$ (196)	\$ 10	\$ 1,443
Income tax valuation allowance(3)	\$ 16,926	\$ 31,914(4)	\$ 6,801	\$ 42,039
YEAR ENDED DECEMBER 31, 2010				
Reserves and allowance deducted from asset accounts:				
Allowance for doubtful accounts	\$ 2,168	\$ (173)	\$ 346	\$ 1,649
Income tax valuation allowance(3)	\$ 16,979	\$ 310	\$ 363	\$ 16,926
YEAR ENDED DECEMBER 31, 2009				
Reserves and allowance deducted from asset accounts:				
Allowance for doubtful accounts	\$ 3,988	\$ (1,836)	\$ (16)	\$ 2,168
Income tax valuation allowance(3)	\$ 15,718	\$ 7,178	\$ 5,917	\$ 16,979

- (1) The charge to expense for the allowance for doubtful accounts primarily represents an adjustment for a change in estimate related to uncollectible accounts.
- (2) Represents: a) Uncollectible accounts written off, net of recoveries and write-offs, b) Net change in the sales return and allowance account, and c) Release of valuation allowances.
- (3) The income tax valuation allowance is included in current and noncurrent deferred income tax assets.
- (4) A significant portion of the increase in valuation allowances, approximately \$30.8 million, is attributable to deferred tax assets arising from our acquisition of BigBand. These amounts did not impact the income statement.

[Table of Contents](#)

(a) (3) Exhibit List

Each management contract or compensation plan required to be filed as an exhibit is identified by an asterisk (*).

<u>Exhibit Number</u>	<u>Description of Exhibit</u>	<u>The filings referenced for incorporation by reference are ARRIS (formerly known as Broadband Parent, Inc.) filings unless otherwise noted</u>
3.1	Amended and Restated Certificate of Incorporation	Registration Statement #333-61524, Exhibit 3.1
3.2	Certificate of Amendment to Amended and Restated Certificate of Incorporation	August 3, 2001 Form 8-A, Exhibit 3.2
3.3	By-laws	April 15, 2009 Form 8-K, Exhibit 3.1
4.1	Form of Certificate for Common Stock	Registration Statement #333-61524, Exhibit 4.1
4.2	Rights Agreement dated October 3, 2002	October 3, 2002 Form 8-K, Exhibit 4.1
4.3	Indenture dated November 13, 2006	November 16, 2006 Form 8-K, Exhibit 4.5
10.1(a)*	Amended and Restated Employment Agreement with Robert J. Stanzione, dated August 6, 2001	September 30, 2001 Form 10-Q, Exhibit 10.10(c)
10.1(b)*	Supplemental Executive Retirement Plan for Robert J. Stanzione, effective August 6, 2001	September 30, 2001 Form 10-Q, Exhibit 10.10(d)
10.1(c)*	Amendment to Employment Agreement with Robert J. Stanzione, dated December 8, 2006	December 12, 2006 Form 8-K, Exhibit 10.7
10.1(d)*	Second Amendment to Amended and Restated Employment Agreement with Robert J. Stanzione, dated November 26, 2008	November 28, 2008 Form 8-K, Exhibit 10.8
10.1(e)*	First Amendment to the Robert Stanzione Supplemental Executive Retirement Plan, dated November 26, 2008	November 28, 2008 Form 8-K, Exhibit 10.9
10.2(a)*	Amended and Restated Employment Agreement with Lawrence A. Margolis, dated April 29, 1999	June 30, 1999 Form 10-Q, Exhibit 10.33, filed by ANTEC Corp
10.2(b)*	Amendment to Employment Agreement with Lawrence Margolis, dated December 8, 2006	December 12, 2006 Form 8-K, Exhibit 10.6
10.2(c)*	Second Amendment to Amended and Restated Employment Agreement with Lawrence Margolis, dated November 26, 2008	November 28, 2008 Form 8-K, Exhibit 10.7
10.3(a)*	Employment Agreement with David B. Potts dated December 8, 2006	December 12, 2006 Form 8-K, Exhibit 10.4
10.3(b)*	First Amendment to Employment Agreement with David B. Potts, dated November 26, 2008	November 28, 2008 Form 8-K, Exhibit 10.6

[Table of Contents](#)

<u>Exhibit Number</u>	<u>Description of Exhibit</u>	<u>The filings referenced for incorporation by reference are ARRIS (formerly known as Broadband Parent, Inc.) filings unless otherwise noted</u>
10.4(a)*	Employment Agreement with Ronald M. Coppock, dated December 8, 2006	December 12, 2006 Form 8-K, Exhibit 10.1
10.4(b)*	First Amendment to Employment Agreement with Ronald M. Coppock, dated November 26, 2008	November 28, 2008 Form 8-K, Exhibit 10.3
10.5(a)*	Employment Agreement with James D. Lakin, dated December 8, 2006	December 12, 2006 Form 8-K, Exhibit 10.2
10.5(b)*	First Amendment to Employment Agreement with James D. Lakin, dated November 26, 2008	November 28, 2008 Form 8-K, Exhibit 10.5
10.6(a)*	Employment Agreement with Bryant K. Isaacs, dated December 8, 2006	December 12, 2006 Form 8-K, Exhibit 10.3
10.6(b)*	First Amendment to Employment Agreement with Bryant K. Isaacs, dated November 26, 2008	November 28, 2008 Form 8-K, Exhibit 10.4
10.7*	Employment Agreement with Bruce McClelland, dated November 26, 2008	November 28, 2008 Form 8-K, Exhibit 10.2
10.8*	Employment Agreement with John Caezza, dated November 26, 2008	November 28, 2008 Form 8-K, Exhibit 10.1
10.9*	Management Incentive Plan	July 2, 2001 Appendix IV of Proxy Statement filed as part of Registration Statement #333-61524, filed by Broadband Parent Corporation
10.10*	2001 Stock Incentive Plan	July 2, 2001 Appendix III of Proxy Statement filed as part of Registration Statement #333-61524, files by Broadband Parent Corporation
10.11*	2004 Stock Incentive Plan	Appendix B of Proxy Statement filed on April 20, 2004
10.12*	2007 Stock Incentive Plan	June 30, 2007, Form 10-Q Exhibit 10.15
10.13*	2008 Stock Incentive Plan	June 30, 2008, Form 10-Q Exhibit 10.15
10.14*	Form of Stock Options Grant under 2001 and 2004 Stock Incentive Plans	March 31, 2005 Form 10-Q, Exhibit 10.20
10.15*	Form of Restricted Stock Grant under 2001 and 2004 Stock Incentive Plans	March 31, 2005 Form 10-Q, Exhibit 10.21
10.16*	Form of Incentive Stock Option Agreement	September 30, 2007, Form 10-Q Exhibit 10.1
10.17*	Form of Nonqualified Stock Option Agreement	September 30, 2007, Form 10-Q Exhibit 10.2
10.18*	Form of Restricted Stock Award Agreement	September 30, 2007, Form 10-Q Exhibit 10.3

[Table of Contents](#)

<u>Exhibit Number</u>	<u>Description of Exhibit</u>	<u>The filings referenced for incorporation by reference are ARRIS (formerly known as Broadband Parent, Inc.) filings unless otherwise noted</u>
10.19*	Form of Nonqualified Stock Options Agreement	April 11, 2008, Form 8-K Exhibit 10.1
10.20*	Form of Restricted Stock Grant	April 11, 2008, Form 8-K Exhibit 10.2
10.21*	Form of Restricted Stock Unit Grant	April 11, 2008, Form 8-K Exhibit 10.3
10.22*	Form of Restricted Stock Agreement	March 31, 2009, Form 10-Q, Exhibit 10.24
10.23*	Form of Restricted Stock Unit	March 31, 2009, Form 10-Q, Exhibit 10.24
21	Subsidiaries of the Registrant	Filed herewith.
23	Consent of Independent Registered Public Accounting Firm	Filed herewith.
24	Powers of Attorney	Filed herewith.
31.1	Section 302 Certification of the Chief Executive Officer	Filed herewith.
31.2	Section 302 Certification of the Chief Financial Officer	Filed herewith.
32.1	Section 906 Certification of the Chief Executive Officer	Filed herewith.
32.2	Section 906 Certification of the Chief Financial Officer	Filed herewith.

SIGNATURES

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

ARRIS GROUP, INC.

/s/ DAVID B. POTTS

David B. Potts
*Executive Vice President,
Chief Financial Officer and
Chief Accounting Officer*

Dated: February 29, 2012

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

<u>/s/ R J STANZIONE</u> Robert J. Stanzione	Chief Executive Officer and Chairman of the Board of Directors	February 29, 2012
<u>/s/ DAVID B. POTTS</u> David B. Potts	Executive Vice President, Chief Financial Officer and Chief Accounting Officer	February 29, 2012
<u>/s/ ALEX B. BEST*</u> Alex B. Best	Director	February 29, 2012
<u>/s/ HARRY L. BOSCO*</u> Harry L. Bosco	Director	February 29, 2012
<u>/s/ JOHN A. CRAIG*</u> John A. Craig	Director	February 29, 2012
<u>/s/ ANDREW T. HELLER*</u> Andrew T. Heller	Director	February 29, 2012
<u>/s/ MATTHEW B. KEARNEY*</u> Matthew B. Kearney	Director	February 29, 2012
<u>/s/ WILLIAM H. LAMBERT*</u> William H. Lambert	Director	February 29, 2012
<u>/s/ JOHN PETTY*</u> John R. Petty	Director	February 29, 2012
<u>/s/ DEBORA J. WILSON*</u> Debora J. Wilson	Director	February 29, 2012
<u>/s/ DAVID A. WOODLE*</u> David A. Woodle	Director	February 29, 2012
<u>/s/ JAMES A. CHIDDIX*</u> James A. Chiddix	Director	February 29, 2012

*By: /s/ LAWRENCE A. MARGOLIS
Lawrence A. Margolis
*(as attorney in fact for each
person indicated)*