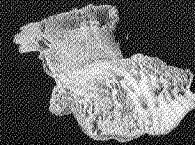


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**IXIA<sup>®</sup>**

**2009 Annual Report**



Received SEC

APR 27 2010

Washington, DC 20549

Ixia is a leading, global provider of IP performance test and emulation systems that measure the performance, capability, and conformance of converged networks and the devices attached to them, as well as the applications that run over them.

## Annual Report Financial Highlights

(in thousands, except per share and employee data)	2009	2008	2007
Total revenues	\$177,994	\$175,867	\$174,121
Net (loss) income	(44,203)	(15,895)	7,006
Diluted (loss) earnings per share	(0.70)	(0.24)	0.10
Diluted weighted average shares outstanding	62,710	65,087	69,386
Non-GAAP net income*	\$8,010	\$14,886	\$22,205
Non-GAAP diluted earnings per share*	0.13	0.23	0.32
Cash, cash equivalents and investments	\$79,980	\$206,298	\$248,500
Total assets	309,088	328,426	369,440
Total shareholders' equity	236,665	273,196	316,500
Net cash from operating activities	(4,725)	24,335	45,769
Employees at year end	1,073	769	756

\* Excludes the effects of stock-based compensation, acquisition-related costs, the amortization and impairment of intangible assets, restructuring expenses, certain inventory adjustments, impairment charges related to certain investments, and the related income tax effects of these items and any income tax charges related to valuation allowances recorded against our U.S. deferred tax assets. See reconciliation of GAAP to Non-GAAP net (loss) income and diluted (loss) earnings per share below.

## Reconciliation of Non-GAAP to GAAP Net (Loss) Income and Diluted (Loss) Earnings per Share

(in thousands, except per share data)	2009	2008	2007
Non-GAAP net income	\$8,010	\$14,886	\$22,205
Amortization and impairment of intangible assets	(11,391)	(5,664)	(10,371)
Stock-based compensation	(10,535)	(10,645)	(13,034)
Restructuring, acquisition related and other	(12,601)	-	-
Other-than-temporary impairment on investments	(2,761)	(20,243)	-
Income tax effect	(14,925)	5,771	8,206
GAAP net (loss) income	<u>\$(44,203)</u>	<u>\$15,895</u>	<u>\$7,006</u>
Non-GAAP diluted earnings per share	\$0.13	\$0.23	\$0.32
Amortization and impairment of intangible assets	(0.18)	(0.09)	(0.15)
Stock-based compensation	(0.17)	(0.16)	(0.19)
Restructuring, acquisition related and other	(0.20)	-	-
Other-than-temporary impairment on investments	(0.04)	(0.31)	-
Income tax effect	(0.24)	0.09	0.12
GAAP diluted (loss) earnings per share	<u>\$(0.70)</u>	<u>\$(0.24)</u>	<u>\$0.10</u>



Dear Fellow Shareholders,

2009 was a transformative year for Ixia, as we emerged from a globally challenging period as a much stronger company with significantly improved opportunities for growth. Like many companies, we recognized the importance of aligning ourselves with the emerging needs of our customers and taking advantage of broader market opportunities in order to position ourselves to capitalize on any rebound in capital spending.

With this in mind, we acted decisively to enhance our business by making two key acquisitions:

the wireless testing and simulation company Catapult Communications in June 2009 and our competitor Agilent's N2X IP performance testing business in October 2009.

Through both organic development and these

two strategic acquisitions, we have successfully positioned Ixia to take advantage of an improving economic climate and key technology trends occurring in our core customer base and newly expanded addressable market.

Ixia is now both the technology and market leader in our core IP performance testing business, and we have expanded our product reach and customer base through our Catapult acquisition to become a leader in 3G/4G testing. While we remain cautiously optimistic about the pace and strength of economic recovery, the Company has significantly improved its position in the market to capitalize on any increase in demand for high performance testing. There is no doubt that this is a very exciting time in Ixia's history, and we are focused on taking advantage of the opportunities ahead of us.



*Customer event at iSimCity – Santa Clara, California 2010*

Beyond expanding our markets, we view these changes to our business as an opportunity to derive more leverage from our business model. Our goal is to enhance our business model by improving our market position, diversifying our customer base, and controlling our expenses. We are pleased with the results we have seen to date. Revenue for 2009 was \$178.0 million, with strong momentum exiting the year as we reported fourth quarter 2009 revenue at a record \$56.1 million. We recently



*Mobile World Congress - Barcelona, Spain 2010*

implemented cost reduction plans that should result in \$22 million in cost savings on an annualized basis, and we expect to see a strong positive bottom line impact beginning in our fiscal second quarter 2010. It is our goal to exhibit improved operating

leverage throughout 2010 through a combination of top-line growth and prudent expense management, and we believe we are well on our way.

Our momentum exiting 2009 is indicative of two things: first, toward the end of 2009 we believe we saw strengthening in the overall market for test equipment and second, we believe Ixia has the right products to capitalize on this resurgence in demand, especially for converged IP networks – both wired and wireless. On the wired side, Ethernet and IP remains a strategic investment as the demand for higher speed Ethernet networks continues to be driven by the rapid growth of enterprise and consumer broadband applications for media-rich data, voice, and video traffic. The strong fourth quarter performance of our core business and the acquisition of Agilent's N2X product line reinforced our position as a market share and technology leader. Our FUSION program, designed to protect N2X customer investments, is underway and will seamlessly capitalize on this positioning to better service our new and existing customers. As part of this program,

Ixia will develop additional products to further integrate the best of both product lines - without having to support redundant hardware platforms. In fact, in the second quarter of 2010, Ixia intends to introduce a version of its high density 10 Gigabit Ethernet card that will run both N2X and Ixia software. Existing N2X customers will have the option of running the card in N2X mode, finally giving them a high density solution with the familiar N2X user interface. Or they can choose to boot up in Ixia mode to run Ixia's full gamut of Layer 2-7 software. Customer response to the FUSION strategy has been overwhelmingly positive.

Looking ahead, we believe that the increasing need for IP network bandwidth due to the rise of video and other media-rich traffic will drive demand in 2010 and beyond. As carriers continue to upgrade and broaden their networks and services to meet this need, and network equipment manufacturers sell larger volumes of their products to support the carriers, we expect to see an inflection point in incremental demand for our 10 Gigabit, 40 Gigabit and 100 Gigabit Ethernet testing products. While the timing of this inflection point is debatable, it is clearly on the horizon given the swell in IP traffic and intensifying demands on existing network infrastructures. During the fourth quarter of 2009, sales continued to grow for our higher speed Ethernet 40 Gigabit, 100 Gigabit, and new dual speed 40GE/100GE layer 1-7 higher speed Ethernet test systems. We also introduced Yukon-NP, the industry's highest density 10 Gigabit application layer throughput solution. Together, the Acceleron-NP and Yukon-NP provides the most complete layer 4-7 performance test solution in the market today. Globally, every leading network equipment manufacturer and service provider account has migrated to the new Acceleron-NP and Yukon-NP hardware load modules to validate its next generation platforms, and we expect the momentum around these products to continue. These two load modules establish Ixia as the leader in performance layer 4-7 testing.

At the layer 2-3 level, we have a strong product roadmap with the release of IxNetwork 5.40, which is specifically designed to test network infrastructure, capacity, scalability, and convergence using our new

ViperCore technology. IxNetwork provides rapid isolation of network issues, service modeling at Internet scales, carrier class scaling, and accurate convergence measurement. 2009 was also the year that we saw growing acceptance of the converged data center, which uses a single Ethernet based switch fabric that can serve an enterprise's networking, server and storage needs. During the year, we introduced IxVM - the first solution of its kind that enables data center managers to assess virtual infrastructure performance and capacity, by testing both layer 2-3 virtual network resources and layer 4-7 virtual applications.

On the wireless side, Ixia established its leadership position through the acquisition of Catapult, and we are excited about the level of activity we are seeing in this space. The explosion of wireless data devices and the rapid projected growth of the mobile Internet is another trend on which we are well positioned to capitalize on. Cisco's Visual Networking Index Forecast, which tracks and forecasts the impact of visual traffic on the Internet, projects a 39-fold increase in annual global mobile data traffic from 2009 to 2014 - a compound annual traffic growth rate of 108 percent that will drive demand for new infrastructures by pushing today's wireless networks past the breaking point. As a leader in 3G and 4G wireless test and simulation, Ixia is prepared to meet the needs of equipment makers and carriers as they work to find new solutions for the massive proliferation in traffic. During 2009, we continued to win new business tied to improving existing 3G networks and also to the roll-out of 4G/LTE, which will offer speeds of up to 100Mbps on the downlink and 50 Mbps on the uplink. Many operators are already in the midst of augmenting data capacity by overlaying LTE on their 3G networks. We saw continued buying from key equipment manufacturers, as well as carriers beginning to engage in end-to-end LTE trials. One key driver for LTE is the promise of open and media-rich networking. While this provides customers and service providers with greater choice and flexibility, it also means that there are significant test challenges in ensuring that everyone plays well together from an interoperability and conformance perspective, which is very encouraging for our wireless business.



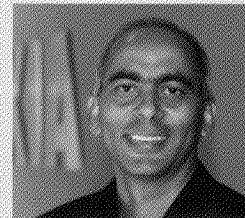
In summary, both the wireline and wireless worlds are undergoing dramatic and fundamental changes. Virtualization and applications in the cloud are leading to fundamentally new architectures in local area networks and the data center. The rising demand for wireless data and the convergence between the wired and wireless worlds is leading to similar shifts in the mobile world. The introduction of 4G technologies and Higher Speed Ethernet will only hasten these changes. Ixia is at the forefront in developing testing solutions for this new world and we believe we are poised to benefit from the roll-out of advanced technologies for many years to come.

While 2009 was a challenging year in many regards, Ixia has proven that it is capable of making key strategic decisions quickly and decisively in order to capitalize on the most compelling opportunities to grow the company. We look forward to meeting our customers' needs as we continue to expand our testing and simulation solutions and maintain our momentum exiting 2009. With our improved positioning and recent acquisitions, our focus remains on execution, and we believe we are on our way to becoming a stronger, more profitable business in 2010. With the continued support of our employees, customers, and investors, we look forward to the challenges and opportunities of the coming year as we strive to capitalize on the growth potential of the new Ixia.

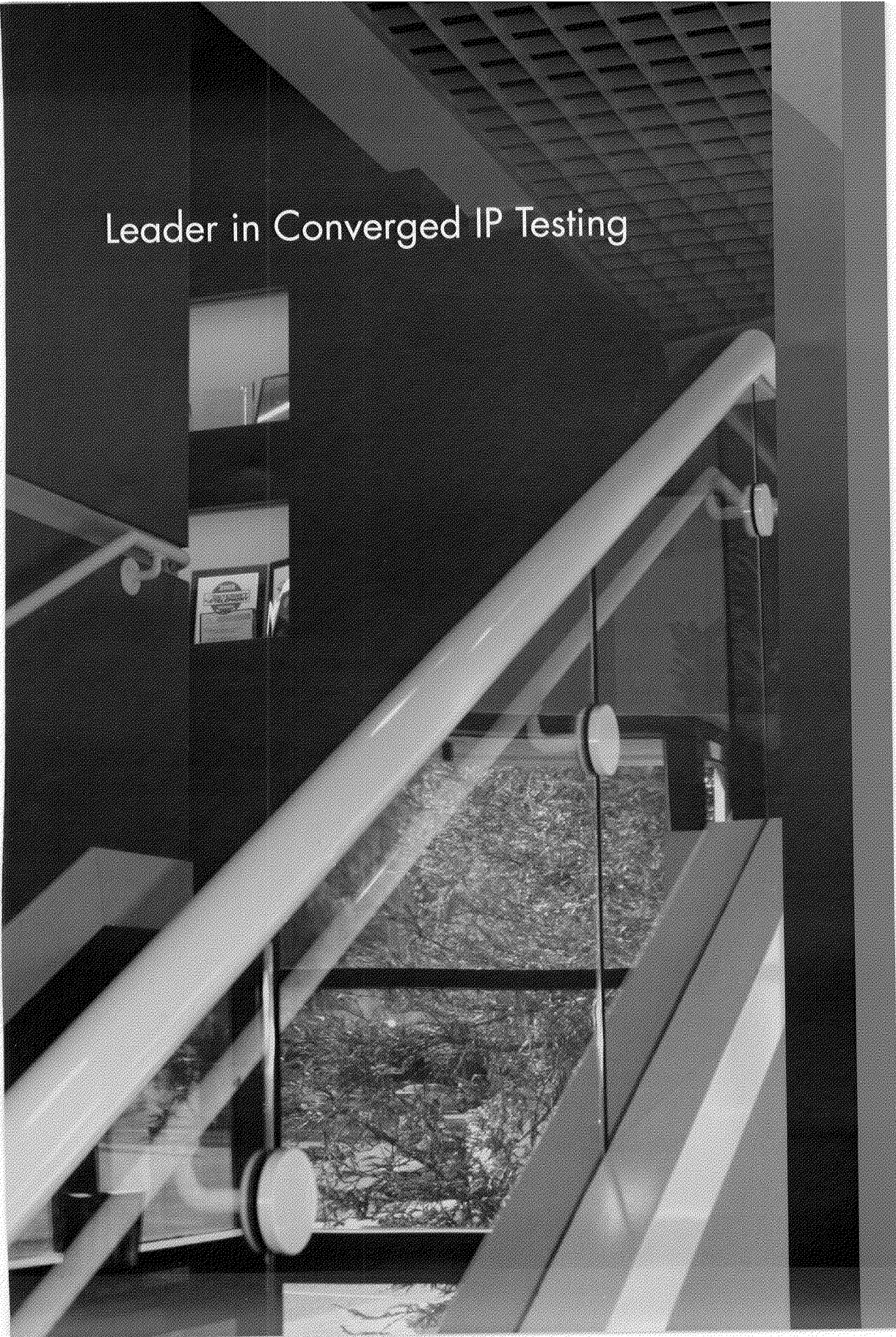
Sincerely,



**Atul Bhatnagar**  
President and  
Chief Executive Officer



Leader in Converged IP Testing



IXIA FORM 10-K

SEC Mail Processing  
Section  
UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
Washington, DC 20549

FORM 10-K

APR 27 2010

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the Fiscal Year Ended December 31, 2009

Washington, DC  
110

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_  
Commission File Number 000-31523

**IXIA**

(Exact name of Registrant as specified in its charter)

**California**

(State or other jurisdiction of incorporation or organization)

**95-4635982**

(I.R.S. Employer Identification No.)

**26601 West Agoura Road, Calabasas, CA 91302**

(Address of principal executive offices, including zip code)

Registrant's telephone number, including area code: (818) 871-1800

**The Nasdaq Stock Market LLC**

(Name of Exchange on which Registered)

Securities registered pursuant to Section 12(b) of the Act: Common Stock, without par value

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

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

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

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

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

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

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definition of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

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

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

The aggregate market value of the shares of the Registrant's Common Stock held by nonaffiliates of the Registrant as of June 30, 2009, computed by reference to the closing sales price on the Nasdaq Global Select Market on that date, was approximately \$210,970,681.

As of March 2, 2010, the number of shares of the Registrant's Common Stock outstanding was 63,630,343.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's Proxy Statement delivered to shareholders in connection with the Annual Meeting of Shareholders to be held on May 27, 2010 are incorporated by reference into Part III of this Annual Report.

IXIA  
FORM 10-K  
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## PART I

### Item 1. Business

#### Overview

We are a leading provider of converged test systems and services for wireless and wired infrastructures and services. Our hardware and software allow our customers to test and measure the performance, functionality, service quality and conformance of wireless and wired Internet Protocol (IP) equipment and networks, and the applications that run over them. Our solutions generate, capture, characterize and analyze high volumes of realistic network and application traffic, identifying problems, assessing performance, ensuring functionality and interoperability, and verifying conformance to industry specifications. We offer hardware platforms with interchangeable media interfaces, utilizing a common set of applications, Application Programming Interfaces (APIs) and automation tools that allow our customers to create integrated, easy-to-use automated test environments. The networks that our systems analyze primarily include Ethernet networks operating at speeds of up to 100 gigabits per second and wireless networks that carry data traffic over optical fiber, electrical cable and airwaves. We also offer hardware platforms and equipment that test wireless equipment, especially those associated with 3G (third generation), 4G (fourth generation) and Long-Term Evolution (LTE) networks. Customers also use our suite of software applications to test and verify web, Internet, security and business applications.

During the year ended December 31, 2009, we received orders from approximately 825 new and existing customers. Based on product shipments for the year ended December 31, 2009, our significant customers by category included:

- Leading network equipment manufacturers such as Cisco Systems, Juniper Networks, and Alcatel-Lucent;
- Semiconductor manufacturers such as Broadcom, LSI Corporation, and Intel;
- Telecommunications equipment manufacturers such as Motorola, Ericsson, and ZTE Corporation;
- Voice, broadband and/or wireless service providers such as AT&T, NTT, and Bell Canada;
- Cable operators such as Comcast Cable, Time Warner, and Charter Communications;
- Enterprises such as the New York Stock Exchange, JP Morgan, and Wells Fargo; and
- Government contractors, departments and agencies such as the U.S. Navy, General Dynamics and Northrop Grumman.

Communications and entertainment delivery is rapidly moving to an all IP infrastructure. To achieve “utility grade” quality, this infrastructure must be thoroughly tested under realistic conditions prior to deployment. Our vision is to accelerate the convergence of all networks to IP by providing the most comprehensive, easy-to-use and automated test systems in the industry. Key growth drivers include the development and deployment of 10 to 100 Gigabit Ethernet network equipment, video over IP, voice over IP, security devices and applications, converged wireline and wireless networks, Metro, Carrier and Data Center Ethernet, and converged IP services such as voice, video and data (multiplay) to the home and wireless devices. We intend to maintain our focus on technology leadership, expand and further penetrate our customer base, leverage our strengths into adjacent areas, acquire key technology, businesses and assets, and expand our international presence.

On June 23, 2009, we acquired Catapult Communications Corporation (“Catapult”) and have integrated its products into Ixia’s product line. These products add in-depth testing of wireless network components. In particular, these products include test hardware and software that address next-generation LTE network edge and core components.

On October 30, 2009, we completed our acquisition from Agilent Technologies, Inc. (“Agilent”) of its N2X Data Network Testing Product Line business (“N2X Business”). In addition to broadband and carrier access protocol expertise, the IxN2X product line is known in the industry for its intuitive and powerful user interface and excellent quality. Existing IxN2X customers will be able to take immediate advantage of Ixia’s scalability, higher speed Ethernet support, and layer 4-7 application testing through the Company’s Fusion initiative.

### **The Increasing Need for Network and Application Testing and Measurement**

The measurement and analysis of performance, functionality, service quality and conformance of networks, applications, and communication devices is important to the following groups:

- *Communications Chip Manufacturers.* At the early stages of development of new components, communications chip manufacturers use our test systems to evaluate and analyze the conformance, interoperability, and performance of their components. This occurs during the design and development phase – typically prior to integration by network equipment manufacturers.
- *Network/Telecommunications Equipment Manufacturers (NEMs/TEMs).* NEMs and TEMs provide voice, video, and data service infrastructure equipment to customer network operators, service providers, and network users, who specify high standards of functionality, performance and reliability. To meet these higher standards, NEMs and TEMs must ensure the quality of their products during development and manufacturing and prior to shipping. Failure to ensure the consistent functionality and performance of their products may result in the loss of customers, increased research and development costs, increased support costs and losses resulting from the return of products. NEMs use our test systems to run large-scale subscriber and service emulations, generating extreme traffic loads to verify the performance and capacity of their wired and wireless devices prior to deployment in production networks. Our systems are also used by NEMs and TEMs in the sales and acceptance process to demonstrate to their customers (e.g., service providers and enterprises) how their products will operate under real-world conditions. Our conformance test suites are used by NEMs and TEMs to ensure that their devices conform to published standards – ensuring that they will be interoperable with other equipment.
- *Network Operators and Service Providers (Service Providers).* Service Providers seek to provide their customers with a growing variety of high quality, advanced network services. Failure to provide satisfactory service can be costly and may result in high subscriber churn rates and reduced Average Revenue per User (ARPU). To ensure desired service levels and overall quality of experience are acceptable, Service Provider R&D and network engineering groups must verify the performance and functionality of staged networks during the equipment selection and network design process prior to deployment. Service Providers use our test systems to emulate millions of subscribers to realistically predict end user quality of experience delivered by their wired and wireless infrastructure and services. Increasingly, Service Provider operations groups use Ixia’s products to diagnose issues in their production networks by executing in-service tests similar to those conducted prior to deployment.

- *Enterprises and Government.* These large Service Provider customers spend significant amounts on networks and network services. They deploy LANs and WANs that rival some Service Provider networks in size and complexity. These customers use Ixia's solutions in much the same way as Service Providers, verifying the performance and functionality of network equipment and making sure that new networks, services and applications will perform as expected. They also use our products to test the performance and scalability of their internal applications, often based on proprietary protocols.

## Characteristics Demanded of Network and Application Test and Measurement Equipment

As networks and network devices become more intelligent and service-aware, performance, functionality, interoperability, and conformance testing solutions must reproduce subscriber traffic with increasing fidelity. Network testing solutions must also be highly scalable and capable of generating and analyzing large amounts of data at high speeds over increasingly complex configurations. Comprehensive, integrated testing must occur throughout network design, development, production, deployment, and operation stages. Because this testing and verification must take place across multiple layers of the network infrastructure and for all network protocols, network testing solutions are also required to be highly flexible, extensible and modular. This rapid evolution of complex network technologies and protocols, including leading-edge technologies such as 40 and 100 Gigabit Ethernet, Metro Ethernet, Carrier Ethernet, and Data Center Ethernet, voice over IP, video over IP, and LTE wireless networks, has resulted in the need for an integrated platform solution that is easy to use with minimal training and set-up.

## The Ixia Solution

We are a leading provider of converged test systems and services for wireless and wired infrastructures and services. Our hardware and software allow our customers to test and measure the performance, functionality, service quality and conformance of wireless and wired Internet Protocol (IP) equipment and networks, and the applications that run over them. Our solutions generate, capture, characterize and analyze high volumes of realistic network and application traffic, identifying problems, assessing performance, ensuring functionality and interoperability, and verifying conformance to industry specifications. We offer hardware platforms with interchangeable media interfaces, utilizing a common set of applications, Application Programming Interfaces (APIs) and automation tools that allow our customers to create integrated, easy-to-use automated test environments. The networks that our systems analyze primarily include Ethernet networks operating at speeds of up to 100 gigabits per second and wireless networks that carry data traffic over optical fiber, electrical cable and airwaves. We also offer hardware platforms and equipment that test wireless equipment, especially those associated with 3G (third generation), 4G (fourth generation) and Long-Term Evolution (LTE) networks. Customers also use our suite of software applications to test and verify web, Internet, security and business applications.

Our test systems provide the following key benefits to our customers:

*Versatile High Performance.* Our test systems generate and receive data traffic at full line rate, which is the maximum rate that data traffic can be transmitted over a network medium. Our systems provide accurate analysis across multiple layers of the overall network and of individual network components in real time. Our systems can be configured to either generate programmed packets of data or conduct complete sessions.

Our systems analyze each discrete packet of information, thereby allowing our customers to precisely measure the performance of their networks and individual network components. This precision allows customers to accurately measure critical quality of service parameters such as throughput, latency, loss, and jitter and to



check data integrity, packet sequencing throughout the network, and quality of service (QoS) as well as to locate various network problems.

When used for meaningful application sessions, or conversations between network endpoints, our systems emulate highly complex and specialized applications such as those used to transfer electronic mail, browse the Internet, convey voice and video information, manage databases, and establish wireless calls. This emulation allows our customers to accurately measure critical characteristics of their networks such as session setup rate, session tear down rate, and session capacity. By analyzing the content of these sessions, our customers can also accurately measure QoS and media quality.

*Highly Scalable.* Each of our interface cards provides one or more ports through which our systems generate and receive data traffic. Each physical port contains its own dedicated logic circuits, with no shared resources. Our customers can easily scale the size of their test bed or the amount of data traffic generated by inserting additional interface cards. By connecting multiple chassis and synchronizing hundred of ports to operate simultaneously, our customers can simulate extremely large-scale networks. Our GPS-based components even allow our chassis to be distributed throughout the world, while maintaining the close time synchronization necessary for precision tests. We believe that our systems can offer our customers one of the highest port density and scalable space efficient systems available. In addition, our client-server architecture allows multiple users in the same or different geographic locations to simultaneously access and operate different ports contained in the same chassis to run independent tests.

*Hardware Platform.* We offer hardware platforms with interchangeable interfaces, utilizing a common set of applications and Application Programming Interfaces (APIs). Our architectures enable the emulation of millions of network users on scalable platforms, with a mixture of both network and application layer traffic. These architectures offer our customers an integrated test environment that might otherwise require multiple products to cover the same test scenarios. We believe that our hardware platform solutions decrease the overall cost while increasing productivity and scalability, and reducing training requirements for our customers.

*Highly Modular.* Our hardware products consist of stackable and portable chassis, which, depending on the chassis model, can be configured with any mix of interface cards. This modular design allows our customers to quickly and easily create realistic, customized test configurations. Our open architecture accelerates integration of additional network technologies into existing systems through the addition of new interface cards and distributed software.

*Flexible.* Our customers can easily expand the use of our systems to address changing technologies, protocols and applications without changing system hardware or replacing interface cards. This protects and optimizes the customers' investment by eliminating the need for "forklift upgrades" or the purchase of additional niche products.

*Open Architecture.* Our open architecture allows our customers to quickly customize, automate and extend our platform. Our customers use our APIs and applications to centrally manage, protect, automate, and extend their ever-expanding testing environments.

*Ease of Automation.* Our systems make it easy to create automated tests that can run unattended. We offer our customers a growing library of automated tests that simplify and streamline the test process. These tests are repeatable and the results are presented in a structured format for easy analysis. Ixia's Tool Command Language (Tcl) Application Programming Interface (API) is a comprehensive programming interface to our hardware, as well as to our software applications. The Tcl API enables libraries of automated tests to be quickly built with specificity to a customer's environment. We also offer a utility that exports configurations created in our graphical user interface (GUI) as Tcl scripts.

*Ease of Use.* We have designed our systems so that users can install and operate them with minimal training and setup. Our systems are easy to use and offer our customers a wide range of readily accessible pre-designed test configurations. These tests include industry standard and use case-specific tests. Users can easily configure and operate our systems to generate and analyze data traffic over any combination of interface cards or ports through our graphical user interface that features a familiar Microsoft™ Windows™ point-and-click environment. Once tests are designed in our GUIs, they can be saved for reuse or in Tcl script form for customization and even greater levels of automation.

## Strategy

Our objective is to be the industry leader in providing performance, functionality, service quality, interoperability, and conformance testing solutions for wireless and wired IP networks and IP-based services. This includes being at the forefront of emerging and next generation technologies such as 40/100 Gigabit Ethernet and LTE, growing our portfolio of products and addressable markets through acquisitions of technologies, businesses and assets, expanding our international presence and customer base, and continuing to deliver high quality products and support to our customers. Key elements of our strategy to achieve this objective include the following:

*Continue to Expand our Addressable Markets.* We plan to further expand our addressable markets into areas of growth for wireless and wired IP-based products and services, such as content-aware routing and switching, networks that carry voice, video and data over IP (commonly referred to in the aggregate as multiplay), wireless devices, application security, and next-generation networking technologies. We also plan to continue to apply our knowledge of these advanced communication technologies to develop tools for monitoring traffic in live networks. We believe that we can leverage our core competencies in high-speed transmission protocols into leadership positions, in both our historic pre-deployment market as well as the market for monitoring IP services in converged networks, as more networks and delivery of services migrate to IP.

*Maintain Focus on Technology Leadership.* We intend to continue to focus on research and development in order to maintain our technology leadership position and to offer test systems that address new and evolving network technologies. We intend to maintain an active role in industry standards committees such as IEEE and the Internet Engineering Task Force, and to continue our active involvement in industry forums and alliances, such as the Metro Ethernet Forum, TestA Alliance (Test Lab Automation), Multi Service Forum, IMS Forum, WiFi Alliance, WiMAX Forum and 3GPP. We also plan to continue to work closely with our customers who are developing emerging network technologies, including Cisco Systems, Hewlett Packard, NTT, and Alcatel-Lucent, as well as leading edge start-up companies, to enhance the performance and functionality of our existing systems and to design future products that specifically address our customers' needs as they evolve.

*Expand and Further Penetrate Customer Base.* We plan to strengthen and further penetrate our existing customer relationships, particularly those with network/telecommunications equipment manufacturers, network operators and service providers, and to pursue sales to new customers. We plan to strengthen our customer relationships and to expand our customer base by:

- Continuing to develop and offer new and innovative systems that meet our existing and potential customers' needs,
- Expanding our sales and marketing efforts to increase penetration in under-represented vertical and geographic market segments, and
- Building upon and further strengthening our reputation and brand name recognition.

We also plan to continue our focus on customer support by maintaining and expanding the capabilities of our highly qualified and specialized internal personnel.

*License and Acquire Key Technologies.* We plan to continue our strategy of acquiring key technologies that expand our product offerings, address customer needs, and enhance the breadth of our evolving product portfolio. Any such acquisitions may be made in the form of partnering with industry leaders, acquiring or licensing technology assets associated with product lines, or acquiring other companies.

*Expand International Market Presence.* We plan to further pursue sales in key international markets, including the Europe, Middle East and Africa regions (EMEA), and the Asia Pacific region. In order to pursue sales in these markets, we intend to develop and expand our relationships with key customers and distributors, as well as expand our direct sales and marketing presence within these markets.

## **Products**

Our test systems consist of hardware and software products that allow our customers to test and measure the performance, functionality, interoperability, service quality, and conformance of their wireless and wired IP equipment and networks, and the applications that run over them. Our hardware platform consists largely of interchangeable interface cards which fit into multi-slot chassis. Our chassis are metal cases that incorporate a computer, a power supply, and a backplane which connects the interface cards to the chassis. The interface cards generate, receive and analyze a wide variety of traffic types at multiple network layers. Our software applications and APIs allow our customers to create and manage integrated, easy-to-use automated test environments.

Our customers can utilize our systems either in test labs or within networks. Our systems are operated through standard computer peripheral devices, including a monitor, keyboard, and mouse. The operator of our systems establishes test parameters for the performance analysis by inputting data using the keyboard and mouse. The operator observes the results of the performance analysis using the monitor and may log results to files for post-analysis or archival. All operations that can be done interactively may also be automated through a variety of scripting interfaces and automation tools.

Our customers configure our systems based on the specific interfaces of the equipment being tested. For example, if our customer wants to analyze the performance of a router with Ethernet interfaces, the customer would insert Ethernet interface cards into our system.

## **Chassis**

Our primary chassis, the 12-slot XM12, provides a high density, highly flexible test platform. Operating in conjunction with our test applications, the XM12 provides the foundation for a complete, high performance test environment. A wide array of interface modules are available for the XM12. The chassis supports up to 192 Gigabit Ethernet ports, 96 10 Gigabit Ethernet ports, 12 40 Gigabit Ethernet ports and 6 100 Gigabit Ethernet ports, and 24 Packet over SONET (POS) or Asynchronous Transfer Mode (ATM) ports. These modules provide the network interfaces and distributed processing resources needed for executing a broad range of data, signaling, voice, video, and application testing from layers 2-7 of the network stack. Each chassis supports an integrated test controller that manages all system and testing resources. Resource ownership down to a per-port level, coupled with hot-swappable interface modules ensures a highly flexible, multi-user testing environment. Backward compatibility is maintained with key existing Ixia interface modules and test applications to provide seamless migration from and integration with existing Ixia test installations.

The IxN2X product line offers a four-slot chassis or portable two-slot chassis. Interfaces are available for 10 Mbps through 10 Gbps Ethernet, SONET/SDH, POS, ATM, and Frame Relay.

The IxCatapult product line utilizes three different chassis types. The m500 chassis offers 16 slots for testing 2G, 3G and LTE network components. The t600 chassis holds specialized cards used for LTE sector testing. The optional r10 radio head can be used to generate radio frequency (RF) signals for LTE eNode B testing.

### ***Interface Cards***

We offer a number of optical and electrical interface cards. Each one of our interface cards contains from one to 16 independent traffic generation and analysis ports. These ports operate at wire speed, the maximum rate that data traffic can be transmitted over a network medium. Each port on each interface card has a unique transmit stream engine that is used to generate packets of information and a real-time receive analysis engine capable of analyzing the packets as they are received. The transmit stream engine generates millions of IP data packets or continuous test sequences at wire speed that are transmitted through the network and received by the analysis engine. When data packets have been generated, the analysis engine then measures throughput, latency, loss and jitter, and checks data integrity and packet sequence on a packet-by-packet basis. In addition, our systems measure the effectiveness of networks in prioritizing different types of traffic. Each of our current generation interface cards also includes a microprocessor per port to generate and analyze sophisticated routing protocols, such as BGP and MPLS, as well as application traffic such as TCP/IP, HTTP and SSL.

Interface cards used with IxCatapult are specialized processors that handle wireless signaling and user data. Small numbers of test ports are typically used for wireless node testing. The t600 chassis holds specialized cards used for LTE 'sector' testing; six card sets are used to test each wireless sector.

### ***System Management Software***

Our systems are managed through graphical user interfaces that allow users to configure our chassis and interface cards to generate and analyze traffic. Each port can be independently configured to meet specific testing requirements, and results can be viewed using both tables and graphs. We also allow users to create custom and automated test applications tailored to meet their specific requirements with the commonly used Tcl programming environment.

### ***Application Specific Test Suites***

We have a comprehensive suite of software applications to address specific technologies. These applications measure and analyze the performance, functionality, interoperability, service quality, and conformance of networks, network equipment and applications that run on these networks. These measurements enable network and telephony equipment manufacturers, enterprises, network operators and service providers, and governments to evaluate the performance of their equipment and networks during the design, manufacture, and pre-deployment stages, as well as after the equipment are deployed in a network. Our technology-specific test suites are targeted at a wide range of popular testing requirements:

### *Video Testing*

Ixia's IxLoad tests the performance of video servers, multicast routers, and the IP video delivery network. This is accomplished by emulating video servers and millions of video subscribers in video on demand and multicast video scenarios. Protocols supported include MPEG, IGMP, RTP, and RTSP.

IxChariot tests the video transport network. This is accomplished by emulating video traffic, and measuring end-to-end video quality. Measurements include throughput, latency, loss, jitter, and media delivery index (MDI).

### *Voice Testing*

IxLoad tests the functionality of VoIP and PSTN devices and services by emulating end devices and servers. Testing areas supported include SIP, SCCP (Skinny), H.323, MGCP, H.248 (MEGACO), as well as TDM and analog telephony services. Performance testing of SIP devices and infrastructure is accomplished by emulating thousands of SIP callers and callees in performance testing scenarios.

IxChariot tests the voice transport network. This is accomplished by emulating voice traffic and measuring end-to-end voice quality. Measurements include throughput, latency, loss, jitter, and mean opinion score (MOS).

### *Intelligent Network Testing*

IxLoad tests the performance of content-aware networks and devices including server load balancers (SLB), firewalls, web servers, and mail servers. This is accomplished by emulating millions of clients and a variety of servers in realistic performance testing scenarios. Protocols supported include TCP, HTTP, SSL, FTP, SMTP, POP3, IMAP, RTP, RTSP, Telnet, DNS, LDAP, DHCP, SIP, MPEG, and IGMP.

### *Conformance Testing*

IxANVL provides automated network/protocol validation. Developers and manufacturers of networking equipment and Internet devices can use IxANVL to validate protocol compliance and interoperability. IxANVL supports all industry standard test interfaces including 10Mbps/100Mbps/1Gbps/10Gbps Ethernet, ATM, Serial, Async, T1/E1 and POS. It provides conformance, negative, and regression testing on a large selection of protocols including bridging, routing, PPP, TCP/IP, IPv6, IP storage, RMON, VPN, MPLS, voice over IP, Metro Ethernet and multicast.

### *Security Testing*

IxLoad tests the performance of stateful and deep packet inspection security devices, including firewalls, SSL gateways, virus scanners, spam filters, and intrusion detection systems (IDS). This is accomplished by emulating clients and servers, as well as through the use of distributed denial of service (DDoS) attacks. Key capabilities include the ability to mix valid user traffic with malicious traffic and to attach viruses to emails.

IxDefend tests the vulnerability, robustness, and security of network devices and systems by exercising their underlying protocols. IxDefend suites are available for 40 standard Internet protocols, such as TCP/IP, ICMP, HTTP and FTP. IxDefend looks for vulnerabilities associated with software errors that can manifest as a device or service crashes.

### *Application Testing*

IxLoad tests the performance of enterprise applications. This is accomplished by emulating a large number of real users accessing applications. Technologies supported include JavaScript, XML, Java, Document Object Model (DOM), and databases (e.g., Oracle, SQL, Access).

### *Router Testing*

IxNetwork and IxN2X tests core/edge/customer routers and layer 3 switches. This is accomplished by emulating entire network infrastructures and generating high traffic loads across these emulated topologies to verify performance. Protocols supported include IGP (OSPF, IS-IS, RIP), BGP, MPLS (including layer 2 and 3 VPNs), and IP multicast.

IxAutomate is an automated test harness that can run turnkey tests using Ixia's underlying APIs. Multiple turnkey test suites are available to execute control and data plane performance and functionality testing. Tests include route capacity, route convergence, session scalability, tunnel scalability, and data plane performance.

### *Layer 2-3 Security Testing*

IxVPN tests IPSec VPN gateways and systems. This is accomplished by establishing and authenticating IPSec tunnels, and then generating traffic load over the tunnels to verify performance. Site-to-site and remote access VPN testing is supported, as well as DES, 3DES, and AES encryption.

IxNetwork, IxLoad and IxN2X test devices supporting 802.1x authentication. This is accomplished by high scalable emulation of 802.1x clients (supplicants). Authentication modes supported include MD5, TLS, TTLS, and PEAP.

### *Switch Testing*

IxNetwork and IxN2X test layer 2-3 switches and forwarding devices. This is accomplished by generating traffic load across a mesh of interfaces, and then measuring results down to a per flow basis. Protocols supported include spanning tree, multicast, and IP routing.

IxAutomate tests layer 2-3 switches in an automated fashion. A set of predefined test suites is used to execute performance and functionality tests. Tests include data plane performance, QoS functionality, address cache tests, error filtering, and VLAN functionality.

IxExplorer tests layer 2-3 switches and forwarding devices. This is accomplished by generating traffic load with very granular control of packet parameters and detailed results analysis. Measurements include throughput, latency, inter-arrival time, data integrity, and sequence checking.

### *Wireless Testing*

IxCatapult tests legacy and wireless network protocols associated with 2G, 3G and LTE wireless networks. This is accomplished through emulation of each network component. These emulations are used in combinations to isolate and test each component or group of components. IxLoad is used in conjunction with IxCatapult to provide scalable real-world data traffic during IxCatapult tests.

IxChariot tests the wireless transport network. This is accomplished by emulating application traffic - whether data, voice, or video - and measuring end-to-end performance and quality. Measurements include throughput, latency, jitter, mean opinion score (MOS), and media delivery index (MDI).

#### *Broadband Testing*

IxNetwork, IxLoad and IxN2X test broadband aggregation devices including B-RAS, DSLAMs, CMTSs, and edge routers. This is accomplished by emulating millions of broadband clients and generating traffic load over those connections. Protocol support includes PPPoE, PPPoA, L2TPv2, and L2TPv3.

IxChariot tests the broadband access transport network. This is accomplished by emulating application traffic - whether data, voice, or video - and measuring end-to-end performance and quality. Measurements include throughput, latency, jitter, mean opinion score (MOS), and media delivery index (MDI).

#### *Automated Testing*

IxAutomate provides a complete automation environment for testing layer 2-3 routers, switches, and similar devices. A set of predefined test suites is used to execute performance and functionality tests. Multiple tests, whether predefined or custom developed, can be scheduled for execution together with configuration of the device under test.

Test Conductor is a comprehensive, highly scalable regression harness that is compatible with some of our other key network testing tools. Test Conductor imports tests, associates them with a named regression test sequences, and allows detailed scheduling. Tests can be scheduled in series or in parallel based on a Windows Outlook™-like calendar tool. At-a-glance logs and summary reports display color-coded pass/fail results, as well as the progress of the tests within each regression. Automated device under test (DUT) configuration scripts can be scheduled to run in synchronization with the individual tests or with complete regression runs.

Our Tcl automation environment provides a comprehensive set of tools and APIs for automating testing with our hardware and software applications. Custom test libraries covering all of a customer's layer 2-7 testing requirements can be created in a single automation environment.

Most test applications contain a "ScriptGen" feature that automatically generates Tcl script code from test configurations. This accelerates the development of automation code and helps train new users in the Ixia Tcl API.

#### *Converged Monitoring Testing*

As carriers deploy additional multiplex services over advanced Ethernet networks, their existing support systems are less capable of diagnosing application layer problems. Ixia's IxRave (Remote Access Verification Engine) solution allows carriers and service providers to execute active network tests using Ixia's applications from a web-based control system that can be integrated into their existing infrastructure. IxRave Voice is a specialized version of IxRave that performs monitoring and active testing of voice over IP networks through a probeless, web-based system and features graphical display of network status.

### *Products in Development*

We continue to develop our IP testing capabilities, and throughout 2010 we intend to remain focused on improving our position in performance, functional, interoperability, service quality, and conformance testing in the following technology areas:

- 10, 40 and 100 Gigabit Ethernet
- Carrier, Metro and Data Center Ethernet
- MPLS
- Multicast
- IPv6
- Voice and Video over IP
- IPSec
- Data Center Ethernet
- Test Automation
- Security
- LTE
- IMS
- Energy efficiency

We may delay or cancel the introduction of new products to the market as a result of a number of factors, some of which are beyond our control. For more information regarding these factors, see “Business – Research and Development” on page 16 and “Risk Factors – If we are unable to successfully introduce new products to keep pace with the rapid technological changes that characterize our market, our results of operations will be significantly harmed” starting on page 21.

### **Technology**

The design of all of our systems requires a combination of sophisticated technical competencies, including design of field programmable gate arrays, or FPGAs, which are integrated circuits that can be repeatedly reprogrammed to perform different sets of functions as required. The design of all of our systems also requires high-speed digital hardware design, software engineering and optical and mechanical engineering. We have built an organization of professional staff with skills in all of these areas. The integration of these technical competencies enables us to design and manufacture test systems which are highly scalable to meet the needs of our customers.

*Complex Logic Design.* Our systems use FPGAs that are programmed by the host computer and therefore can be reconfigured for different applications. Our newest products have clock frequencies, which are the timing signals that synchronize all components within our system, and logic densities, which are the number of individual switching components, or gates, of more than four million gates per chip. Our customers may obtain updates and enhancements from our website, thereby allowing rapid updates of the system. Almost all of our logic chips are designed in the VHDL hardware description language, a unique programming language tailored to the development of logic chips. This language enables the easy migration of the hardware design to application specific integrated circuits as volumes warrant. We develop VHDL code in a modular fashion for reuse in logic design, which comprises a critical portion of our intellectual property. This reusable technology allows us to reduce the time-to-market for our new and enhanced products.



*Software Technology.* We devote substantial engineering resources to the development of software technology for use in our product lines. We have developed software to control our systems, analyze data collected by our systems, and monitor, maintain and self-test our hardware and field programmable gate array subsystems. A majority of our software technology and expertise is focused on the use of object-oriented development techniques to design software subsystems that can be reused across multiple product lines. These objects are client and server independent allowing for distributed network applications. This software architecture allows all of the software tools developed for our existing products to be utilized in all of our new products with very little modification. Another important component of our software technology is our graphical user interface design. Customer experience with our test products has enabled us to design a simple yet effective method to display complex configurations in clear and concise graphical user interfaces for intuitive use by engineers.

## Customers

Since our incorporation in May 1997 through December 31, 2009, we have shipped our systems to over 2,180 customers. No customer other than Cisco Systems accounted for more than 10% of our total revenues in 2009, 2008 or 2007. Cisco Systems accounted for 15.6% of our total revenues in 2009, 21.0% of our total revenues in 2008 and 23.9% of our total revenues in 2007.

We do not have long-term or volume purchase contracts with our customers, and they may reduce or discontinue their purchases from us at any time.

## Competition

The market for network performance measurement and analysis systems for use in the high-speed data communications industry is highly competitive, and we expect this competition to continue in the future. We currently compete with test equipment manufacturers such as Spirent Communications, JDS Uniphase Corporation, NetHawk Oyj and Anritsu. We also compete with a number of small companies which are focused on network performance measurement, wireless and IMS, high speed Ethernet and converged monitoring test. Additionally, some of our significant customers have developed, or may develop, in-house performance analysis products for their own use or for sale to others.

We believe that the principal competitive factors in our market include:

- Breadth of product offerings and features on a single platform,
- Timeliness of new product introductions,
- Product quality, reliability and performance,
- Price and overall cost of product ownership,
- Ease of installation, integration and use,
- Customer service and technical support, and
- Company reputation and size.

We believe that we compete favorably in the key competitive factors that impact our markets. We intend to remain competitive through ongoing research and development efforts that enhance existing systems and to develop new systems. We will also seek to expand our market presence through marketing and sales efforts. However, our market is still evolving and we may not be able to compete successfully against current or future competitors.

We expect competition to increase significantly from existing providers of network performance measurement and analysis products and from companies that may enter our existing or future markets. And, as we move into new market segments within the broader testing arena, we will be challenged by new competitors. These companies may develop similar or substitute solutions that may be more cost-effective or provide better performance or functionality than our systems. Also, as we broaden our product offerings, we may move into new markets in which we will have to compete against companies already established in those markets. Some of our existing and potential competitors have longer operating histories, substantially greater financial, product development, marketing, service, support, technical and other resources, significantly greater name recognition, and a larger installed base of customers than we do. In addition, many of our competitors have well established relationships with our current and potential customers and have extensive knowledge of our industry. It is possible that new competitors or alliances among competitors will emerge and rapidly acquire market share. Moreover, our competitors may consolidate with each other, or with other companies, giving them even greater capabilities with which to compete against us.

To be successful, we must continue to respond promptly and effectively to the challenges of changing customer requirements, technological advances and competitors' innovations. Accordingly, we cannot predict what our relative competitive position will be as the market evolves for network performance measurement and analysis systems.

### **Sales, Marketing and Technical Support**

*Sales.* We use our global direct sales force to market and sell our systems. In addition, we use distributors to complement our direct sales and marketing efforts in certain international markets. Our direct sales force maintains close contact with our customers and supports our distributors.

*Marketing.* We have a number of programs to support the sale and distribution of our systems and to inform existing and potential customers and distributors about the capabilities and benefits of our systems. Our marketing efforts also include promoting our business in the following ways:

- Sponsoring technical seminars and webinars that highlight our solutions,
- Participating in industry trade shows and technical conferences,
- Writing and distribution of various forms of collateral, including brochures, white papers, and application notes,
- Demonstrating the performance and scalability of our products at our iSimCity proof-of-concept labs,
- Communicating through our corporate website, and
- Advertising in trade journals.

*Technical Support.* We maintain a technically knowledgeable and responsive customer service and support staff that is critical to our development of long-term customer relationships. Our staff can:

- Offer solutions for performance validation needs,
- Develop custom applications,
- Deploy to customer sites on short notice, and
- Provide guidance to optimally utilize our systems.

## **Manufacturing**

Our manufacturing operations consist primarily of materials planning and procurement, quality control, logistics, final assembly and testing, and distribution. We outsource the manufacture, assembly and testing of printed circuit board assemblies, certain interface cards and certain chassis to third party contract manufacturers, the most significant of which are located in Malaysia, and assembly companies. This manufacturing process enables us to operate without substantial space and personnel dedicated to manufacturing operations. As a result, we can conserve a significant portion of the working capital and capital expenditures that may be required for other operating needs.

We are dependent upon sole or limited source suppliers for key components and parts used in our systems, including field programmable gate arrays, chips, oscillators and optical modules. We and our contract manufacturers purchase components through purchase orders, and we have no guaranteed or long-term supply arrangements with our respective suppliers. In addition, the availability of many components is dependent in part on our ability and the ability of our contract manufacturers and assembly companies to provide suppliers with accurate forecasts of future requirements. Any extended interruption in the supply of any of the key components currently obtained from a sole or limited source or delay in transitioning to a replacement supplier's product or replacement component into our systems could disrupt our operations and significantly harm our business in any given period.

Lead times for materials and components ordered by us and by our contract manufacturers vary and depend on factors such as the specific supplier, purchase terms and demand for a component at a given time. We and our contract manufacturers acquire materials, complete standard subassemblies and assemble fully-configured systems based on sales forecasts and historical purchasing patterns. If orders do not match forecasts or substantially deviate from historical patterns, we and our contract manufacturers and assembly companies may have excess or inadequate inventory of materials and components.

## **Research and Development**

We believe that research and development is critical to our business. Our development efforts include anticipating and addressing the performance analysis needs of network equipment manufacturers, network operators and service providers, communications chip manufacturers and network users, large enterprises and government customers, and focusing on emerging high growth network technologies.

Our future success depends on our ability to continue to enhance our existing products and to develop new products that address the test and measurement needs of our customers. We closely monitor changing customer

needs by communicating and working directly with our customers and distributors. We also receive input from our active participation in industry groups responsible for establishing technical standards.

Development schedules for technology products are inherently difficult to predict, and there can be no assurance that we will introduce any proposed new products in a timely fashion. Also, we cannot be certain that our product development efforts will result in commercially successful products or that our products will not contain software errors or other performance problems or be rendered obsolete by changing technology or new product announcements by other companies.

We plan to continue to make significant investments in research and development, such as our investments in our overseas development facilities, including those in India and Romania. Our research and development expenses were \$54.0 million in 2009, \$49.2 million in 2008, and \$47.4 million in 2007. These costs included stock-based compensation expense of \$4.5 million in 2009, \$4.2 million in 2008, and \$5.2 million in 2007.

### Intellectual Property and Proprietary Rights

Our success and ability to compete are dependent in part upon our ability to protect and maintain our proprietary rights to our intellectual property. We currently rely on a combination of patent, trademark, trade secret and copyright laws and restrictions on disclosure and use to establish and protect our intellectual property. We have patent applications and existing patents in the United States and in other jurisdictions. We cannot be certain that these applications will result in the issuance of any patents, or that any such patents, if they are issued, or our existing patents, will be upheld. We also cannot be certain that such patents, if issued, or our existing patents, will be effective in protecting our proprietary technology. We have registered the Ixia name, the Ixia logo and certain other trademarks in the United States, the European Union and other jurisdictions, and have filed for registration of additional trademarks.

We generally enter into confidentiality agreements with our officers, employees, consultants, and vendors, and in many instances, our customers. We also generally limit access to and distribution of our source code and further limit the disclosure and use of other proprietary information. However, these measures provide only limited protection of our intellectual property rights. In addition, we may not have signed agreements containing adequate protective provisions in every case, and the contractual provisions that are in place may not provide us with adequate protection in all circumstances.

Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy or otherwise obtain or use technology or information such as trade secrets that we regard as proprietary. We cannot be certain that the steps taken by us to protect our proprietary rights will be adequate to prevent misappropriation of our technology or that our competitors will not independently develop technologies that are similar or superior to our technology. In addition, the laws of some foreign countries do not protect our proprietary rights to the same extent as do the laws of the United States. Any infringement of our proprietary rights could result in significant litigation costs, and any failure to adequately protect our proprietary rights could result in our competitors' offering similar products, potentially resulting in loss of competitive advantage, loss of market share and decreased revenues. Litigation may be necessary to enforce our intellectual property rights or to determine the validity and scope of the proprietary rights of others. Litigation of this type could result in substantial costs and diversion of resources and could significantly harm our business.

The telecommunication and data communications industries are characterized by the existence of a large number of patents and frequent litigation based on allegations of patent infringement. From time to time, third parties may assert patent, copyright, trademark and other intellectual property rights to technologies or

proprietary rights that are important to our business. We have not conducted a search to determine whether the technology we have in our products infringes or misappropriates intellectual property held by third parties. Any claims asserting that our systems infringe or may infringe proprietary rights of third parties, if determined adversely to us, could significantly harm our business. See Part I, Item 3 of this Form 10-K for additional information.

### **Employees**

As of December 31, 2009, we had approximately 1,073 full-time employees. We also from time to time hire temporary and part-time employees and independent contractors. Our future performance depends, to a significant degree, on our continued ability to attract and retain highly skilled and qualified technical, sales and marketing, and senior management personnel. Our employees are not represented by any labor unions. We consider our relations with our employees to be good.

### **Available Information**

Our website address is [www.ixiacom.com](http://www.ixiacom.com). We make available free of charge through a link provided at such website our Forms 10-K, 10-Q and 8-K as well as any amendments thereto. Such reports are available as soon as reasonably practicable after they are filed with the Securities and Exchange Commission.

## Item 1A. Risk Factors

The statements that are not historical facts contained in this Form 10-K are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements reflect the current belief, expectations or intent of our management and are subject to and involve certain risks and uncertainties. Many of these risks and uncertainties are outside of our control and are difficult for us to forecast or mitigate. In addition to the risks described elsewhere in this Form 10-K and in certain of our other Securities and Exchange Act Commission filings, the following important factors, among others, could cause our actual results to differ materially from those expressed or implied by us in any forward-looking statements contained herein or made elsewhere by or on behalf of us.

### **Our business may be adversely affected by unfavorable general economic and market conditions**

Our business is subject to the effects of general economic conditions in the United States and globally and, in particular, market conditions in the communications and networking industries. In the past, our operating results were adversely affected as a result of unfavorable economic conditions and reduced or deferred capital spending in the United States, Europe and Asia. The current global financial crisis has included, among other things, significant reductions in available capital and liquidity from banks and other credit providers, substantial reductions and/or fluctuations in equity and currency values worldwide, and concerns that the worldwide economy may be in a prolonged recessionary period. Unfavorable changes in economic and market conditions such as these would likely result in lower capital spending by our customers on test and measurement solutions, and therefore demand for our products would decline, adversely impacting our revenue. Challenging economic and market conditions may also impair the ability of our customers to pay for the products and services they have purchased. As a result, our reserves for doubtful accounts and write-offs of accounts receivable may increase.

In addition, prolonged unfavorable economic conditions and market turbulence may also negatively impact our contract manufacturers' and suppliers' capability to timely supply and manufacture our products, thereby impairing our ability to meet our contractual obligations to our customers. These potential effects, as well as any other currently unforeseeable effects, of the current global financial crisis are difficult to forecast and mitigate. As a result, we may experience material adverse impacts on our business, operating results and financial condition.

### **Acquisitions undertaken and any that we may undertake could be difficult to integrate, disrupt our business, dilute shareholder value and significantly harm our operating results**

Acquisitions are inherently risky and no assurance can be given that our previous or future acquisitions will be successful or will not materially and adversely affect our business, operating results or financial condition. We expect to continue to review opportunities to acquire other businesses or technologies that would add to our existing product line, complement and enhance our current products, expand the breadth of our markets, enhance our technical capabilities or otherwise offer growth opportunities. While we are not currently a party to any pending acquisition agreements, we may acquire additional businesses, products or technologies in the future. If we make any further acquisitions, we could issue stock that would dilute existing shareholders' percentage ownership, and we could incur substantial debt or assume liabilities. We have limited experience in acquiring and integrating other businesses and technologies, and as a result, we may not fully realize the expected benefits of an acquisition. During 2009, we completed the acquisition of Catapult Communications Corporation ("Catapult") and the acquisition of substantially all of the assets of N2X Data Network Testing Product Line ("N2X Business") from Agilent Technologies, Inc. (See Note 2 to the Consolidated Financial Statements). Acquisitions involve numerous risks, including the following:

- problems or delays in assimilating or transitioning (from a larger organization) the acquired operations, systems, processes, controls, technologies, products, or personnel;
- loss of acquired customer accounts;
- unanticipated costs associated with the acquisition;
- multiple and overlapping product lines as a result of our acquisitions that are offered, priced and supported differently, which could cause customer confusion and delays;
- higher than anticipated costs in continuing support and development of acquired products;
- diversion of management's attention from our core business and the challenges of managing larger and more widespread operations resulting from acquisitions;
- adverse effects on existing business relationships with suppliers, licensors, contract manufacturers, customers and industry experts;
- we may incur significant impairment, exit and/or restructuring charges if the products or technologies acquired in an acquisition do not meet our sales expectations or are unsuccessful;
- insufficient revenue to offset increased expenses associated with acquisitions;
- risks associated with entering markets in which we have no or limited prior experience; and
- potential loss of the acquired organization's or our own key employees.

Mergers and acquisitions are inherently risky and subject to many factors outside of our control, and we cannot be certain that we would be successful in overcoming problems in connection with our past or future acquisitions, and our inability to do so could significantly harm our assets acquired in such acquisitions, revenues and results of operations.

**Because we depend on a limited number of customers for a majority of our revenues, any cancellation, reduction or delay in purchases by one of these customers could significantly harm our revenues and results of operations**

Historically, a small number of customers has accounted for a significant portion of our total revenues. Specifically, sales to our largest customer, Cisco Systems, accounted for 15.6% of our total revenues in 2009, 21.0% of our total revenues in 2008 and 23.9% of our total revenues in 2007. We expect that significant customer concentration will continue for the foreseeable future and that our operating results will continue to depend to a significant extent upon revenues from a small number of customers.

Our dependence on large orders from a limited number of customers makes our relationships with these customers critical to the success of our business. We cannot be certain that we will be able to retain our largest customers, that we will be able to increase our sales to our other existing customers or that we will be able to attract additional customers. From time to time, we have experienced delays and reductions in orders from some

of our major customers. In addition, our customers have sought price reductions or other concessions from us and will likely continue to do so. We typically do not have long-term or volume purchase contracts with our customers, and our customers can stop purchasing our products at any time without penalty and are free to purchase products from our competitors. The loss of one or more of our largest customers, any reduction or delay in sales to one of these customers, our inability to successfully develop and maintain relationships with existing and new customers, or requirements that we make price reductions or other concessions could significantly harm our revenues and results of operations.

#### **Competition in our market could significantly harm our results of operations**

The market for our products is highly competitive. We face competition primarily from wireline and wireless test equipment manufacturers such as Spirent Communications, JDS Uniphase Corporation, NetHawk Oyj and Anritsu. We also compete with a number of other small companies which are focused on network performance analysis and measurement, and converged monitoring test. Additionally, some of our significant customers have developed, or may develop, in-house performance analysis products for their own use or for sale to others. For example, Cisco Systems, our largest customer, has used internally developed test products for a number of years. Although Cisco Systems has in the past accounted for a significant portion of our revenues, we cannot be certain that it will continue to do so.

As we broaden our product offerings, we may move into new markets and face additional competition. Moreover, our competitors may have more experience operating in these new markets and be better established with the customers in these new markets.

Some of our competitors and potential competitors have greater brand name recognition and greater financial, technical, marketing, sales and distribution capabilities than we do. Moreover, our competitors may consolidate with each other, or with other companies, giving them even greater capabilities with which to compete against us.

Increased competition in the IP-based wired and wireless network performance analysis and measurement markets could result in increased pressure on us to reduce prices and could result in a reduction in our revenues and/or a decrease in our margins, each of which could significantly harm our results of operations. In addition, increased competition could prevent us from increasing our market share, or cause us to lose our existing market share, either of which would harm our revenues and profitability.

We cannot predict whether our current or future competitors will develop or market technologies and products that offer higher performance or more features, or that are more cost-effective than our current or future products. To remain competitive, we must continue to develop cost-effective products and product enhancements which offer higher performance and more functionality. Our failure to do so will harm our revenues and results of operations.

#### **If we are unable to successfully introduce new products to keep pace with the rapid technological changes that characterize our market, our results of operations will be significantly harmed**

The market for our products is characterized by:

- rapid technological change such as the recent advancements of IP-based networks and wireless technologies (e.g., LTE);



- frequent new product introductions such as higher speed and more complex routers;
- evolving industry standards such as new Internet protocols;
- changing customer needs such as the increase in advanced IP services agreed to between network service providers and their customers; and
- short product life cycles as a result of rapid changes in our customers' products.

Our performance will depend on our successful development, introduction and market acceptance of new and enhanced performance analysis products that address new technologies and changes in customer requirements. If we experience any delay in the development or introduction of new products or enhancements to our existing products, our operating results may suffer. For instance, undetected software or hardware errors, which frequently occur when new products are first introduced, could result in the delay or loss of market acceptance of our products and the loss of credibility with our customers. In addition, if we are not able to develop, or license or acquire from third parties, the underlying core technologies necessary to create new products and enhancements, our existing products are likely to become technologically obsolete over time and our operating results will suffer. If the rate of development of new technologies and transmission protocols by our customers is delayed, the growth of the market for our products and therefore our sales and operating results may be harmed.

Our ability to successfully introduce new products in a timely fashion will depend on multiple factors, including our ability to:

- anticipate technological changes and industry trends;
- properly identify customer needs;
- innovate and develop and license or acquire new technologies and applications;
- hire and retain necessary technical personnel;
- successfully commercialize new technologies in a timely manner;
- timely obtain key components for the manufacture of new products;
- manufacture and deliver our products in sufficient volumes and on time;
- price our products competitively; and
- differentiate our offerings from our competitors' offerings.

The development of new, technologically advanced products is a complex and uncertain process requiring high levels of innovation and highly skilled engineering and development personnel, as well as the accurate anticipation of technology and market trends. We cannot be certain that we will be able to identify, develop, manufacture, market or support new or enhanced products successfully, if at all, or on a timely or cost-effective basis. Further, we cannot be certain that our new products will gain market acceptance or that we will be able to respond effectively to technological changes, emerging industry standards or product announcements by our

competitors. If we fail to respond to technological change and the needs of our markets, we will lose revenues and our competitive position will suffer.

**We depend on sales of a narrow range of products and if customers do not purchase our products, our revenues and results of operations would be significantly harmed**

Our business and products are concentrated in the market for systems that analyze and measure the performance of wired and wireless IP-based network equipment and systems. This market is an evolving market and there is uncertainty regarding its size and scope. Our performance will depend on increased sales of our existing systems and the successful development, introduction and market acceptance of new and enhanced products. We cannot be certain that we will be successful in increasing these sales or in developing and introducing new products. Our failure to do so would significantly harm our revenues and results of operations.

**Our large customers have substantial negotiating leverage, which may require that we agree to terms and conditions that may have an adverse effect on our business**

Large network equipment manufacturers and service providers have substantial purchasing power and leverage in negotiating contractual arrangements with us. These customers may require us to develop additional features, reduce our prices or grant other concessions. As we seek to sell more products to these large network equipment manufacturers, we may be required to agree to such terms and conditions. These terms may affect the amounts and timing of revenue recognition and our margins, which may adversely affect our profitability and financial condition in the affected periods.

**If we do not diversify our customer base, we may not be able to grow our business or increase our profitability**

To date, the majority of our total revenues have been generated from sales to network equipment manufacturers. Our growth depends, in part, on our ability to diversify our customer base by increasing sales to enterprises, government departments and agencies, network operators and service providers, and communications chip manufacturers. To effectively compete for the business of these customers, we must develop new products and enhancements to existing products and expand our sales, marketing and customer service capabilities, which will result in increases in operating costs. If we cannot offset these increases in costs with an increase in our revenues, our operating results may be adversely affected. Some of our existing and potential competitors have existing relationships with many enterprises, government departments and agencies, network operators and service providers, and communications chip manufacturers. We cannot be certain that we will be successful in increasing our sales presence in these markets. Any failure by us to increase sales in these markets would adversely affect our growth.

**Our quarterly and annual operating results may fluctuate significantly as a result of new product introductions and other factors, which fluctuations could cause our stock price to decline significantly**

Our quarterly and annual operating results have fluctuated and may fluctuate significantly due to a variety of factors, most of which are outside of our control. Some of the factors that could cause our quarterly and annual operating results to fluctuate include the other risks discussed in this "Risk Factors" section.

We may experience a shortfall or delay in generating or recognizing revenues for a number of reasons. Orders on hand at the beginning of a quarter and orders generated in a quarter do not always result in the shipment of products and the recognition of revenues for that quarter. Failure to ship products by the end of the quarter in which they are ordered or our inability to recognize revenue for products shipped in a quarter may adversely affect our operating results for that quarter. Our agreements with customers typically provide that the customer may delay scheduled delivery dates and cancel orders prior to shipment without penalty. Because we incur operating expenses based on anticipated revenues and a high percentage of our expenses are fixed in the short term, any delay in generating or recognizing forecasted revenues could significantly harm our results of operations.

Our operating results may also vary as a result of the timing of our release of new products. The introduction of a new product in any quarter may cause an increase in revenues in that quarter that may not be sustainable in subsequent quarters. Conversely, a delay in introducing a new product in a quarter may result in a decrease in revenues in that quarter and lost sales.

In addition, actual events, circumstances, outcomes, and amounts differing from judgments, assumptions, and estimates used in determining the values of certain assets (including the amounts of related valuation allowances), liabilities, and other items reflected in our consolidated financial statements could significantly harm our results of operations.

The factors described above are difficult to forecast and mitigate. As a consequence, operating results for a particular period are difficult to predict, and therefore, prior results are not necessarily indicative of results to be expected in future periods. Any of the foregoing factors, or any other factors discussed elsewhere herein, could have a material adverse effect on our business, results of operations, and financial condition and could adversely affect our stock price.

#### **The loss of any of our key personnel could significantly harm our results of operations and competitive position**

Our success depends to a significant degree upon the continuing contributions of our key management, technical, marketing and sales employees. There can be no assurance that we will be successful in retaining our key employees or that we can attract or retain additional skilled personnel as required. Competition for highly skilled employees in our industry is intense, and the cost to recruit and train new technical personnel is significant. Moreover, companies in our industry whose employees accept positions with competitors frequently claim that those competitors have engaged in unfair hiring practices. We may be subject to such claims as we seek to retain or hire qualified personnel, some of whom may currently be working for our competitors.

Some of these claims may result in material litigation. We could incur substantial costs in defending ourselves against these claims, regardless of their merits. Such claims could also discourage potential employees who currently work for our competitors from joining us. In addition, volatility or lack of positive performance in our stock price may also adversely affect our ability to attract and retain highly skilled employees who may look to stock-based awards as a key component of their compensation. Many of the stock options held by our employees have an exercise price that is higher (in some cases significantly higher) than the current trading price of our common stock, and these “underwater” options do not serve their purpose as incentives for our employees to remain with Ixia. The loss of the services of any of our key employees, the inability to attract or retain qualified personnel in the future or delays in hiring required personnel could hinder the development and introduction of new and enhanced products and harm our ability to sell our products. As a result, failure to retain or attract key personnel could significantly harm our results of operations and competitive position.

**Continued growth will strain our operations and require us to incur costs to maintain and upgrade our management and operational resources**

We have experienced growth in our operations, including number of employees, products, facility locations and customers. Unless we manage our growth effectively, we may have difficulty in operating our business. As a result, we may inaccurately forecast sales and materials requirements, fail to integrate new personnel or fail to maintain adequate internal controls or systems, which may result in fluctuations in our operating results and cause the price of our stock to decline. We may continue to expand our operations to enhance our product development efforts and broaden our sales reach, which may place a significant strain on our management and operational resources. In order to manage our growth effectively, we must implement and improve our operational systems, procedures and controls on a timely basis. If we cannot manage growth effectively, our profitability could be significantly harmed.

**If we are unable to expand our sales and distribution channels or are unable to successfully manage our expanded sales organization, our revenues and results of operations will be harmed**

Historically, we have relied primarily on a direct sales organization, supported by distributors, to sell our products. Our distribution strategy focuses primarily on developing and expanding our direct sales organization and our network of distributors and other resellers. We may not be able to successfully expand our sales and distribution channels, and the cost of any expansion may exceed the revenues that we generate as a result of the expansion. To the extent that we are successful in expanding our sales and distribution channels, we cannot be certain that we will be able to compete successfully against the significantly larger and better-funded sales and marketing operations of many of our current or potential competitors. In some cases, we have granted exclusive rights to our distributors to market our products in their specified territories. Our distributors may not market our products effectively or devote the resources necessary to provide us with effective sales, marketing and technical support. Our inability to effectively manage the expansion of our sales and support staff, or to maintain existing or establish new relationships with successful distributors, would harm our revenues and results of operations.

**If we are unable to expand our international sales and distribution channels or manage them effectively, our results of operations would be harmed**

Historically, the majority of our sales have been made to customers in the United States. Our sales based on product shipments and services to the United States accounted for 57.1% of our total revenues in 2009, 64.2% of our total revenues in 2008 and 65.0% of our total revenues in 2007. Historically, distributors have generated a significant portion of our international sales. In the past, we have had distributors who entered bankruptcy and were therefore terminated as distributors of our products. Moreover, if we terminate a distribution relationship for performance-related or other reasons, we may be subject to wrongful termination claims which may result in material litigation. We could incur substantial costs in defending ourselves against these claims, regardless of their merits, which could adversely impact our profitability.

Losses of one or more of our international distributors or their failure to sell our products would limit our ability to sustain and grow our revenues in international markets. We intend to expand into additional international markets in the EMEA and Asia Pacific regions by adding distributors and international sales and support personnel. Our failure in these efforts could significantly harm our results of operations and decrease the value of our stock.

### **Changes in industry and market conditions could lead to charges related to discontinuances of certain of our products and asset impairments**

In response to changes in industry and market conditions, we may be required to strategically realign our resources by restructuring our operations and/or our product offerings. Any decision to limit investment in or dispose of a product offering may result in the recording of special charges to earnings, such as inventory, fixed asset and technology-related write-offs and charges relating to consolidation of excess facilities, which could adversely impact our business, results of operations and financial position.

### **Our workforce restructurings can be disruptive**

We have in the past restructured or made other adjustments to our workforce in response to the economic environment, performance issues, recent acquisitions and other internal and external considerations. During 2009, we substantially completed two restructurings, and in January 2010, we announced another restructuring primarily related to the acquisition of the N2X Business (See Note 3 to the Consolidated Financial Statements). Restructurings, among other things, can result in a temporary lack of focus and reduced productivity. These effects could recur in connection with future acquisitions and other restructurings and our operating results and financial condition could be negatively affected.

### **Some key components in our products come from sole or limited sources of supply, which exposes us to potential supply shortages that could disrupt the manufacture and sale of our products**

We and our contract manufacturers currently purchase a number of key components used to manufacture our products from sole or limited sources of supply for which alternative sources may not be available. From time to time, we have experienced shortages of key components, including chips, oscillators and optical modules. We and our contract manufacturers have no guaranteed or long-term supply arrangements for these or other components, including field programmable gate arrays, or FPGAs, which are integrated circuits that can be repeatedly reprogrammed to perform different sets of functions as required. Financial or other difficulties faced by our suppliers or significant changes in market demand for necessary components could limit the availability to us and our contract manufacturers of these components. Any interruption or delay in the supply of any of these components could significantly harm our ability to meet scheduled product deliveries to our customers and cause us to lose sales.

In addition, the purchase of these components on a sole or limited source basis subjects us to risks of price increases and potential quality assurance problems. Consolidation involving suppliers could further reduce the number of alternatives available to us and affect the availability and cost of components. An increase in the cost of components could make our products less competitive and result in lower gross margins.

There are limited substitute supplies available for many of these components, including field programmable gate arrays. All of these components are critical to the production of our products, and competition exists with other manufacturers for these key components. In the event that we can no longer obtain materials from a sole source supplier, we might not be able to qualify or identify alternative suppliers in a timely fashion, or at all.

### **Our reported financial results could suffer if there is an impairment of goodwill**

We are required to test annually, and review when circumstances warrant, our goodwill associated with past acquisitions and any future acquisitions, to determine if impairment has occurred. If such assets are deemed impaired, an impairment loss equal to the amount by which the carrying amount exceeds the implied fair value of the goodwill would be recognized. This would result in an incremental charge for that quarter which would adversely impact our earnings for the period in which the impairment was determined to have occurred. For example, such impairment could occur if the market value of our common stock falls below the carrying value of our net assets for a sustained period.

Recently, the turmoil in credit markets and the broader economy has contributed to extreme price and volume fluctuations in global stock markets that have reduced the market price of many technology company stocks, including ours. Further declines in our stock price or the failure of our stock price to recover from previous declines, as well as any marked decline in our level of revenues or margins, increase the risk that goodwill may become impaired in future periods. We cannot accurately predict the amount and timing of any impairment of assets.

### **International activity may increase our cost of doing business or disrupt our business**

We plan to continue to maintain or expand our international operations and sales activities. Operating internationally involves inherent risks that we may not be able to control, including:

- difficulties in recruiting, hiring, training and retaining international personnel;
- increased complexity and costs of managing international operations;
- growing demand for and cost of technical personnel;
- increased exposure to foreign currency exchange rate fluctuations;
- commercial laws and business practices that favor local competition;
- differing labor and employment laws;
- changing governmental laws and regulations, including those related to income taxes;
- supporting multiple languages;
- reduced or limited protections of intellectual property rights;
- more complicated logistical and distribution arrangements;
- political and economic instability; and
- difficulties in collecting receivables.

The above risks associated with our international operations and sales activities can restrict or adversely affect our ability to sell in international markets, disrupt our business and subject us to additional costs of doing business.

#### **Adverse Resolution of Litigation May Harm Our Results of Operations or Financial Condition**

We are a party to lawsuits in the normal course of our business (See Note 9 to the Consolidated Financial Statements). Litigation can be expensive, lengthy, and disruptive to normal business operations. Moreover, the results of complex legal proceedings are difficult to predict. We cannot provide assurance that we will not be a party to additional lawsuits in the future or that we will be able to favorably resolve our current lawsuits. To the extent lawsuits extend for lengthy time periods or are adversely resolved, our results of operations and financial position could be significantly harmed. For additional information regarding certain of the matters in which we are involved, see Item 3, "Legal Proceedings," contained in Part I of this report.

#### **Claims that we infringe third-party intellectual property rights could result in significant expenses or restrictions on our ability to sell our products**

From time to time, other parties may assert patent, copyright, trademark and other intellectual property rights to technologies that are important to our business. We cannot provide assurance that others will not claim that we are infringing their intellectual property rights or that we do not in fact infringe those intellectual property rights. We have not conducted a search to determine whether the technology we have in our products infringes or misappropriates intellectual property held by third parties.

Any claims asserting that our products infringe or may infringe proprietary rights of third parties, if determined adversely to us, could significantly harm our results of operations. Any claims, with or without merit, could:

- be time-consuming;
- result in costly litigation;
- divert the efforts of our technical and management personnel;
- require us to modify the infringing products or to develop alternative technology, thereby causing product shipment delays and the loss or deferral of revenues;
- require us to cease selling the products containing the intellectual property at issue;
- require us to pay substantial damage awards;
- expose us to indemnity claims from our customers;
- damage our reputation; or
- require us to enter into royalty or licensing agreements which, if required, may not be available on terms acceptable to us, if at all.

In the event a claim against us were successful and we could not obtain a license to the relevant technology on acceptable terms or license a substitute technology or redesign our products to avoid infringement, our revenues, results of operations and competitive position could be harmed. See Part I, Item 3 of this Form 10-K for additional information.

**If we fail to accurately forecast our manufacturing requirements, we could incur additional costs and experience manufacturing delays**

We provide our contract manufacturers with rolling forecasts based on anticipated product orders to determine our manufacturing requirements. Some of the components used in our products have significant lead times or lead times which may unexpectedly increase depending on factors such as the specific supplier, contract terms and the demand for components at a given time. Because of these long lead times, we are often required to forecast and order products before we know what our specific manufacturing requirements will be. If we overestimate our product orders, our contract manufacturers may have excess inventory of completed products which we would be obligated to purchase. This will lead to increased costs and the risk of obsolescence. If we underestimate our product orders, our contract manufacturers may have inadequate inventory, which could result in delays in shipments, the loss or deferral of revenues and higher costs of sales. Costs are also added to our products when we are required to expedite delivery of our products to customers or of components with long lead times to our contract manufacturers. We cannot be certain that we will be able to accurately forecast our product orders and may in the future carry excess or obsolete inventory, be unable to fulfill customer demand, or both, thereby harming our revenues, results of operations and customer relationships.

**Failure by our contract manufacturers to provide us with adequate supplies of high quality products could harm our revenues, results of operations, competitive position and reputation**

We currently rely on a limited number of contract manufacturers to manufacture and assemble our products. We may experience delays in receiving product shipments from contract manufacturers or other problems, such as inferior quality and insufficient quantity of product. We cannot be certain that we will be able to effectively manage our contract manufacturers or that these manufacturers will meet our future requirements for timely delivery of products of sufficient quality and quantity. We intend to introduce new products and product enhancements, which will require that we rapidly achieve adequate production volumes by effectively coordinating with our suppliers and contract manufacturers. The inability of our contract manufacturers to provide us with adequate supplies of high-quality products or the loss of any of our contract manufacturers would cause a delay in our ability to fulfill customer orders while we obtain a replacement manufacturer and would harm our revenues, results of operations, competitive position and reputation.

We may not be able to expand our contract manufacturing capacity or our internal testing or quality assurance functions as required to keep up with demand for our products. Any such failure would in turn hinder our growth. If we do not expand these capacities and functions effectively or in a timely manner, we may experience disruptions in product flow which could limit our revenues, adversely affect our competitive position and reputation and result in additional cost, cancellation of orders or both.

**To the extent that our customers consolidate, they may reduce purchases of our products and demand more favorable terms and conditions from us, which would harm our revenues and profitability**

Consolidation of our customers could reduce the number of customers to whom our products could be sold. These merged customers could obtain products from a source other than us or demand more favorable terms and



conditions from us, which would harm our revenues and profitability. In addition, our significant customers may merge with or acquire our competitors and discontinue their relationships with us.

**Our products may contain defects which may cause us to incur significant costs, divert our attention from product development efforts and result in a loss of customers**

Our existing products and any new or enhanced products we introduce may contain undetected software or hardware defects when they are first introduced or as new versions are released. These problems may cause us to incur significant damages or warranty and repair costs, divert the attention of our engineering personnel from our product development efforts and cause significant customer relation problems or loss of customers and reputation, all of which would harm our results of operations. A successful claim against us for an amount exceeding the limit on our product liability insurance policy would force us to use our own resources, to the extent available, to pay the claim, which could result in an increase in our expenses and a reduction of our working capital available for other uses, thereby harming our profitability and capital resources.

**Our failure to protect our intellectual property may significantly harm our results of operations and reputation**

Our success and ability to compete is dependent in part on our ability to protect and maintain our proprietary rights to our intellectual property. We currently rely on a combination of patent, trade secret, trademark and copyright laws to establish and protect our intellectual property. To date, we have relied primarily on trade secret laws to protect our proprietary processes and know-how. We have patent applications and existing patents in the United States and other jurisdictions. We cannot be certain that any of these applications will be approved or that any such patents, if issued, or our existing patents, will be upheld. We also cannot be certain that our existing patents and any such additional patents, if issued, will be effective in protecting our proprietary technology.

We generally enter into assignment of rights and confidentiality agreements with our officers, employees and consultants. We also generally limit access to and distribution of our source code and further limit the disclosure and use of our other proprietary information. However, these measures provide only limited protection of our intellectual property rights. In addition, we may not have signed agreements containing adequate protective provisions in every case, and the contractual provisions that are in place may not provide us with adequate protection in all circumstances. Any infringement of our proprietary rights could result in significant litigation costs, and any failure to adequately protect our proprietary rights could result in our competitors' offering similar products, potentially resulting in loss of one or more competitive advantages, loss of market share and decreased revenues.

Despite our efforts to protect our proprietary rights, existing trade secret, copyright, patent and trademark laws afford us only limited protection. In addition, the laws of some foreign countries do not protect our proprietary rights to the same extent as do the laws of the United States. Accordingly, we may not be able to prevent misappropriation of our technologies or to deter others from developing similar technologies. Others may attempt to copy or reverse engineer aspects of our products or to obtain and use information that we regard as proprietary. Further, monitoring the unauthorized use of our products and our proprietary rights is difficult. Litigation may be necessary to enforce our intellectual property rights or to determine the validity and scope of the proprietary rights of others. Litigation of this type could result in substantial costs and diversion of resources and could significantly harm our results of operations and reputation.

**The inability to successfully defend claims from taxing authorities or the adoption of new tax legislation could adversely affect our operating results and financial position**

We conduct business in many countries, which requires us to interpret the income tax laws and rulings in each of those jurisdictions. Due to the complexity of tax laws in those jurisdictions as well as the subjectivity of factual interpretations, our estimates of income tax liabilities may differ from actual payments or assessments. Claims from tax authorities related to these differences could have an adverse impact on our results of operations, financial condition and cash flows. In addition, legislative bodies in the various countries in which we do business may from time to time adopt new tax legislation that could have a material adverse affect on our results of operations, financial condition and cash flows.

**Our investment portfolio may become impaired by further deterioration of the financial markets**

We follow an established investment policy and set of objectives designed to preserve principal and liquidity, to generate a market return given the policy's guidelines and to avoid certain investment concentrations. The policy also sets forth credit quality standards and limits our exposure to any one non-government issuer. Our cash equivalent and short- and long-term investment portfolio as of December 31, 2009 consisted of money market funds, U.S. government and government agency debt securities, corporate debt securities and auction rate securities. Due to the adverse global economic conditions that continue to impact the financial markets and the specific impacts on our underlying investments, in 2008, we recorded an other-than-temporary impairment charge to earnings of \$20.2 million related to our investments in illiquid auction rate securities ("ARS") and our investment in bonds issued by Lehman Brothers Holdings, Inc., which filed for bankruptcy in September 2008. For the year ended December 31, 2009, we recorded an additional other-than-temporary impairment charge to earnings of \$2.8 million (pre-tax) related to our illiquid ARS. As of December 31, 2009, the estimated fair values of our illiquid ARS approximated \$5.7 million.

Although the remainder of our investment portfolio's carrying value approximated fair value as of December 31, 2009, we cannot predict future market conditions or market liquidity, or the future value of our investments. As a result, we can provide no assurance that our investment portfolio will not be further impaired in the future and that any such impairment will not materially and adversely impact our financial condition, results of operations and cash flows.

**Changes in laws, regulations and financial accounting standards may affect our reported results of operations**

Changes in accounting regulations and standards, such as increased use of fair value measures and the potential requirement that U.S. registrants prepare financial statements in accordance with International Financial Reporting Standards ("IFRS"), can have a significant effect on our results. New pronouncements and varying interpretations of pronouncements have occurred in the past and are likely to occur in the future as a result of recent Congressional and regulatory actions. New laws, regulations and accounting standards, as well as the questioning of, or changes to, currently accepted accounting practices in the technology industry may adversely affect our financial results, which could have an adverse effect on our stock price.

**Our business is subject to changing regulation of corporate governance and public disclosure that has resulted in increased costs and may continue to result in additional costs in the future**

We are subject to rules and regulations of federal and state regulatory authorities, including The Nasdaq Stock Market LLC (“Nasdaq”) and financial market entities charged with the protection of investors and the oversight of companies whose securities are publicly traded. During the past few years, these entities, including the Public Company Accounting Oversight Board, the SEC and Nasdaq, have issued new requirements and regulations and continue to develop additional regulations and requirements partly in response to laws enacted by Congress, most notably the Sarbanes-Oxley Act of 2002 (“SOX”). Our efforts to comply with these requirements and regulations have resulted in, and are likely to continue to result in, increased general and administrative expenses and a diversion of substantial management time and attention from revenue-generating activities to compliance activities.

In particular, our efforts to comply with Section 404 of SOX and the related regulations regarding our required assessment of our internal control over financial reporting and our external auditors' audit of the effectiveness of our internal control over financial reporting, has required, and continues to require, the commitment of significant financial and managerial resources. Moreover, because these laws, regulations and standards are subject to varying interpretations, their application in practice may evolve over time as new guidance becomes available. This evolution may result in continuing uncertainty regarding compliance matters and additional costs necessitated by ongoing revisions to our disclosure and governance practices.

**If we fail to maintain our relationships with industry experts, our products may lose industry and market recognition and sales could decline**

Our relationships with industry experts in the field of performance analysis and measurement of networks and network equipment are critical for maintaining our industry credibility and for developing new products and testing methodologies in a timely fashion. These experts have established standard testing methodologies that evaluate new network equipment products and technologies. We provide these experts and their testing labs with our products and engineering assistance to perform tests on these new network equipment products and technologies. These industry experts refer to our products in their publications which has given our products industry recognition. In addition, these labs offer us the opportunity to test our products on the newest network equipment and technologies, thereby assisting us in developing new products that are designed to meet evolving technological needs. We cannot be certain that we will be able to maintain our relationships with industry experts or that our competitors will not maintain similar or superior relationships with industry experts. If we are unable to maintain our relationships with industry experts or if competitors have superior relationships with them, our products may lose industry and market recognition which could harm our reputation and competitive position and cause our sales to decline.

**Our headquarters, many of our customers and some of our contract manufacturers and suppliers are located in California where natural disasters have occurred and may occur in the future**

Currently, our corporate headquarters, many of our customers and some of our contract manufacturers and suppliers are located in California. California historically has been vulnerable to natural disasters and other risks, such as earthquakes, fires and floods, which at times have disrupted the local economy and posed physical risks to our property. We and some of our customers, contract manufacturers and suppliers may not have adequate redundant, multiple site capacity. In the event of a natural disaster, our ability to conduct business could be significantly disrupted, thereby harming our results of operations.

**Man-made problems such as computer viruses or terrorism may disrupt our operations and harm our operating results**

Despite our implementation of network security measures, our network may be vulnerable to computer viruses, break-ins and similar disruptions from unauthorized tampering with our computer systems. Any such event could have a material adverse effect on our business, operating results and financial condition. In addition, the effects of war or acts of terrorism could have a material adverse effect on our business, operating results and financial condition. The continued threat of terrorism and heightened security and military action in response to this threat, or any future acts of terrorism, may cause further disruption to the economy and create further uncertainties in the economy. Energy shortages, such as gas or electricity shortages, could have similar negative impacts. To the extent that such disruptions or uncertainties result in delays or cancellations of customer orders, or the manufacture or shipment of our products, our business, operating results and financial condition could be materially and adversely affected.

**Provisions of our articles of incorporation and bylaws may make it difficult for a third party to acquire us, despite the possible benefits to our shareholders**

Our Board of Directors has the authority to issue up to one million shares of preferred stock and to determine the price, rights, preferences, privileges and restrictions, including voting rights, of those shares without any further vote or action by the shareholders. The rights of the holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of any preferred stock that we may issue. The issuance of preferred stock could have the effect of making it more difficult for a third party to acquire a majority of our outstanding voting stock. Furthermore, some provisions of our articles of incorporation and bylaws could delay or make more difficult a merger, tender offer or proxy contest involving us.

These provisions of our articles of incorporation and bylaws may have the effect of delaying, deferring or preventing a change in our control despite possible benefits to our shareholders, may discourage bids at a premium over the market price of our common stock and may harm the market price of our common stock and the voting and other rights of our shareholders.

**Item 1B. Unresolved Staff Comments**

Not applicable.

**Item 2. Properties**

Our corporate headquarters are located in Calabasas, California, where we currently lease approximately 84,100 square feet of space which houses our research and development, sales and marketing, finance and administration and manufacturing operations. This lease terminates on May 31, 2013, and we have an option to extend the term of the lease for an additional five-year period. We also lease office space for our sales and support offices in the United Kingdom, Germany, France, Canada, South Korea, Japan, China, Singapore, India and in various states throughout the United States. Additionally, we have leased research and development facilities in Romania, India, Australia, the United Kingdom and Canada. We believe that our current facilities will be adequate to meet our needs for the next 12 months, or that we will be able to obtain additional space when and as needed on acceptable terms.

### Item 3. Legal Proceedings

*Ixia v. Charles Bettinelli and IneoQuest Technologies, Inc.* In October 2005, Ixia filed a complaint against its former employee, Charles Bettinelli, and his then-employer, IneoQuest Technologies, Inc. (“IneoQuest”) in Los Angeles County Superior Court. Ixia’s complaint alleged breach of contract, misappropriation of trade secrets, intentional interference with contract and prospective business advantage, unfair competition, fraud, and violation of California Penal Code Section 502 (computer data access and fraud act). IneoQuest filed a motion for summary judgment in June 2008. In October 2008, IneoQuest’s motion for summary judgment was denied in its entirety, and the matter went to trial in September 2009. Ixia sought monetary damages in excess of \$10 million in addition to equitable relief. After a three-week trial, the jury returned a verdict in mid-October 2009 finding that (i) Mr. Bettinelli breached his non-disclosure agreement with Ixia; and (ii) both IneoQuest and Mr. Bettinelli misappropriated Ixia’s trade secrets and used Ixia’s trade secret customer contact information. Notwithstanding the jury’s finding of wrongdoing by IneoQuest and Mr. Bettinelli, the jury did not award damages to Ixia. Judgment was therefore entered by the Court on November 24, 2009. IneoQuest, Mr. Bettinelli and Ixia each filed motions for attorneys’ fees after entry of the judgment. On February 25, 2010, IneoQuest was awarded costs in the amount of approximately \$278,000. IneoQuest and Ixia’s motions for attorneys’ fees were both denied, and Mr. Bettinelli’s motion for attorneys’ fees was continued for hearing on March 24, 2010. Ixia filed its Notice of Appeal from the judgment in favor of Mr. Bettinelli only on February 18, 2010. Pursuant to an agreement between Ixia and Mr. Bettinelli, Ixia dismissed the appeal on March 4, 2010 in exchange for Mr. Bettinelli’s withdrawal of his motion for attorneys’ fees and mutual releases.

In a related proceeding based on the same facts, Mr. Bettinelli was criminally charged with felony violation of Penal Code Section 502 for his unauthorized use of Ixia’s computer data; he pleaded no contest to the felony charge in September 2008, which was reduced to a misdemeanor at sentencing upon his payment of \$75,000 to Ixia as restitution.

*IneoQuest Technologies, Inc. vs. Ixia.* In November 2008, IneoQuest filed a complaint against Ixia in the United States District Court for the Central District of California. The complaint alleges that Ixia makes and sells products that infringe a patent owned by IneoQuest, and that Ixia misappropriated IneoQuest’s trade secrets, in addition to numerous other related claims. The patent at issue allegedly relates to a system and method for analyzing the performance of multiple transportation streams of streaming media in packet-based networks. IneoQuest seeks a permanent injunction enjoining Ixia from infringing the patent at issue and from using IneoQuest’s trade secrets and confidential information, unspecified general and exemplary damages, and attorneys’ fees and costs.

In January 2009, Ixia filed an answer and counterclaim to IneoQuest’s complaint denying IneoQuest’s claims and raising several affirmative defenses. Ixia has also asserted a counterclaim against IneoQuest seeking declaratory relief that Ixia has not infringed the IneoQuest patent and that such patent is invalid. In April 2009, Ixia filed an amended answer and counterclaim to IneoQuest’s complaint in which Ixia asserted that IneoQuest has infringed four patents owned by Ixia. Although the Company cannot predict the outcome of this matter, Ixia believes that it has strong defenses to IneoQuest’s claims and is defending the action vigorously. The parties commenced discovery in this matter in the 2009 second quarter. The parties filed a Joint Claim Construction brief on November 30, 2009, and are awaiting a claim construction ruling from the Court.

*Tucana Telecom NV vs. Catapult.* On May 22, 2007, the Antwerp Court of Appeal heard an appeal by Tucana Telecom NV, a Belgian company, of the previous dismissal by the Antwerp Commercial Court of an action by Tucana against Catapult. Tucana had sought damages of 12,461,000 Euros (approximately \$17.9 million as of December 31, 2009) for the alleged improper termination in 2002 by Catapult of Tucana’s distribution agreement with Catapult. On June 19, 2007, the Antwerp Court of Appeal confirmed the Commercial Court’s dismissal of Tucana’s action and assessed the costs of the appeal against Tucana. On

July 22, 2008, Catapult was notified by its Belgian counsel that Tucana has appealed the judgment of the Antwerp Court of Appeal to the Belgian Supreme Court. In a decision dated January 14, 2010, the Belgium Supreme Court set aside the decision of the Antwerp Court of Appeal and remanded the matter for trial to the Gent Court of Appeal. The matter has not yet been set for trial.

Catapult believes that it properly terminated any contract it had with Tucana and that Tucana is not entitled to any damages in this matter. Catapult has defended the action vigorously to date and will continue to do so. Catapult may be able to seek indemnification from Tekelec for any damages assessed against Catapult in this matter under the terms of the Asset Purchase Agreement that Catapult entered into with Tekelec, although there is no assurance that such indemnification would be available. It is not possible to determine the amount of any loss that might be incurred in this matter.

We are not aware of any other pending legal proceedings than the matters mentioned above that, individually or in the aggregate, would have a material adverse effect on our business, results of operations or financial position. We may in the future be party to litigation arising in the ordinary course of business, including claims that we allegedly infringe upon third party trademarks or other intellectual property rights. Such claims, even if without merit, could result in the expenditure of significant financial and managerial resources.

**Item 4. Reserved**

PART II

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

(a) Market Price, Dividends and Related Matters

Ixia's Common Stock is traded on the Nasdaq Global Select Market under the symbol "XXIA." The following table sets forth the high and low closing sales prices of our Common Stock as reported on the Nasdaq Global Select Market for the following time periods.

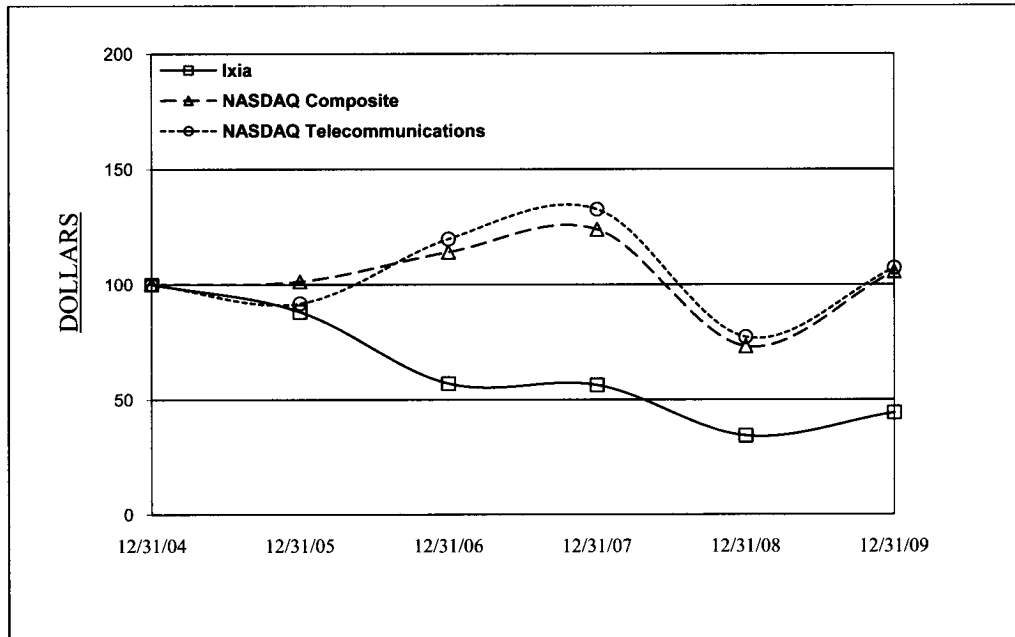
	<u>High</u>	<u>Low</u>
<u>2009</u>		
First quarter	\$ 6.00	\$ 4.36
Second quarter	7.03	4.98
Third quarter	7.70	6.08
Fourth quarter	8.22	6.33
<u>2008</u>		
First quarter	\$ 9.52	\$ 6.82
Second quarter	8.36	6.30
Third quarter	9.09	6.75
Fourth quarter	7.40	4.73

On February 19, 2010, the closing sales price reported for our Common Stock was \$8.10 per share, and as of that date there were approximately 27 shareholders of record.

We have never declared or paid cash dividends on our Common Stock and do not anticipate paying any dividends in the foreseeable future.

The following graph compares the cumulative total return on the Company's Common Stock with the cumulative total return of the Nasdaq Composite Index and the Nasdaq Telecommunications Index for the five-year period commencing January 1, 2005. Ixia is one of the companies that makes up the Nasdaq Telecommunications Index. The stock price performance shown on the graph below is not necessarily indicative of future price performance.

Comparison of Five-Year Cumulative Total Return\*  
among Ixia, the Nasdaq Composite Index  
and the Nasdaq Telecommunications Index



	12/31/04	12/31/05	12/31/06	12/31/07	12/31/08	12/31/09
Ixia	\$ 100	\$ 88.04	\$ 57.11	\$ 56.40	\$ 34.38	\$ 44.32
Nasdaq Composite Index	100	101.33	114.01	123.71	73.11	105.61
Nasdaq Telecommunications Index	100	91.66	119.67	132.55	77.09	107.17

\* Assumes (i) \$100 invested on December 31, 2004 in Ixia Common Stock, the Nasdaq Composite Index and the Nasdaq Telecommunications Index and (ii) immediate reinvestment of all dividends.

(b) Use of Proceeds

None.

(c) Issuer Repurchases of Equity Securities

None.



## Item 6. Selected Financial Data

The following selected consolidated financial data should be read in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and the notes to those consolidated financial statements. The consolidated statement of operations data set forth below for the years ended December 31, 2009, 2008 and 2007 and the consolidated balance sheet data as of December 31, 2009 and 2008 are derived from, and are qualified in their entirety by reference to, the Company’s audited consolidated financial statements included elsewhere in this Form 10-K. The consolidated statements of operations data set forth below for the years ended December 31, 2006 and 2005 and the consolidated balance sheet data as of December 31, 2007, 2006 and 2005 are derived from the audited consolidated financial statements not included herein, but which were previously filed with the SEC.

	<u>2009<sup>(2)</sup></u>	<u>2008<sup>(2)</sup></u>	<u>2007<sup>(3)</sup></u>	<u>2006<sup>(4)</sup></u>	<u>2005</u>
<b>Consolidated Statement of Operations Data</b>					
<b>(in thousands, except per share data):</b>					
Revenues:					
Products	\$ 142,871	\$ 146,802	\$ 148,226	\$ 155,388	\$ 130,045
Services	<u>35,123</u>	<u>29,065</u>	<u>25,895</u>	<u>24,744</u>	<u>20,808</u>
Total revenues	<u>177,994</u>	<u>175,867</u>	<u>174,121</u>	<u>180,132</u>	<u>150,853</u>
Costs and operating expenses: <sup>(1)</sup>					
Cost of revenues - products	36,722	32,411	32,724	29,437	24,239
Cost of revenues - services	3,859	4,475	3,870	2,681	2,216
Research and development	53,977	49,167	47,407	43,450	32,404
Sales and marketing	60,374	59,374	57,420	59,020	39,359
General and administrative	28,061	25,502	24,927	23,800	16,438
Amortization of intangible assets	11,391	5,664	7,108	6,450	5,169
Acquisition related <sup>(5)</sup>	6,179	1,479	—	—	—
Restructuring	4,637	—	—	—	—
Impairment of purchased technology and intangible assets	—	—	<u>3,263</u>	—	—
Total costs and operating expenses	<u>205,200</u>	<u>178,072</u>	<u>176,719</u>	<u>164,838</u>	<u>119,825</u>
(Loss) income from operations	(27,206)	(2,205)	(2,598)	15,294	31,028
Interest and other income, net	2,160	6,574	11,723	9,409	5,055
Other-than-temporary impairment on investments	<u>(2,761)</u>	<u>(20,243)</u>	—	—	—
(Loss) income before income taxes	(27,807)	(15,874)	9,125	24,703	36,083
Income tax expense	<u>16,396</u>	<u>21</u>	<u>2,119</u>	<u>11,222</u>	<u>7,593</u>
Net (loss) income	<u>\$ (44,203)</u>	<u>\$ (15,895)</u>	<u>\$ 7,006</u>	<u>\$ 13,481</u>	<u>\$ 28,490</u>
[Loss] earnings per share:					
Basic	\$ (0.70)	\$ (0.24)	\$ 0.10	\$ 0.20	\$ 0.44
Diluted	\$ (0.70)	\$ (0.24)	\$ 0.10	\$ 0.20	\$ 0.41

Weighted average number of common and common equivalent shares outstanding:					
Basic	62,710	65,087	67,936	67,005	65,168
Diluted	62,710	65,087	69,386	68,792	69,227

<sup>(1)</sup>Stock-based compensation included in:

Cost of revenues - products	\$ 478	\$ 513	\$ 519	\$ 590	\$ —
Cost of revenues - services	182	195	197	224	—
Research and development	4,491	4,166	5,243	6,481	—
Sales and marketing	2,989	3,411	4,416	7,838	—
General and administrative	2,395	2,360	2,659	2,890	—

<sup>(2)</sup>Our 2009 and 2008 results include a pre-tax other-than-temporary impairment charge of \$2.8 million and \$15.8 million, respectively, to earnings related to our investments in auction rate securities. Our 2008 results also include a pre-tax other-than-temporary impairment charge of \$4.4 million to earnings related to our investments in bonds issued by Lehman Brothers Holdings, Inc. In 2009, our income tax expense includes a \$28.1 million charge related primarily to the establishment of a valuation allowance against our remaining net U.S. deferred tax assets. In 2008, our income tax expense includes a \$7.9 million charge related primarily to the establishment of a valuation allowance against our deferred tax assets associated with the unrealized impairment (capital) losses as discussed above.

<sup>(3)</sup>Our 2007 results include a pre-tax impairment charge of \$3.3 million, which consists of the impairment of purchased technology of \$1.5 million and the impairment of certain intangible assets of \$1.8 million related to the acquisition of Communication Machinery Corporation in July 2005 and to the acquisition of the mobile video test product line from Dilithium Networks in January 2006.

<sup>(4)</sup>Effective January 1, 2006, our results of operations for 2009, 2008, 2007 and 2006 include \$10.5 million, \$10.6 million, \$13.0 million and \$18.0 million, respectively, of pre-tax stock-based compensation expense.

<sup>(5)</sup>In 2009, we adopted new accounting guidance for business combinations. As a result, transactions costs related to our acquisitions of Catapult and the N2X Business were expensed as incurred rather than treated as part of the purchase price.

	<u>2009</u>	<u>2008</u>	<u>2007</u>	<u>2006</u>	<u>2005</u>
<b>Consolidated Balance Sheet Data (in thousands):</b>					
Cash and cash equivalents	\$ 15,061	\$ 192,791	\$ 188,892	\$ 64,644	\$ 51,837
Short-term investments in marketable securities	10,337	9,850	4,999	152,703	124,456
Working capital	46,937	217,882	206,059	235,168	191,176
Long-term investments in marketable securities	53,582	3,657	54,609	4,354	25,392
Total assets	309,088	328,426	369,440	349,059	322,216
Total shareholders' equity	236,665	273,196	316,500	300,789	263,480

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

The following discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of many factors. The consolidated results of operations for the years ended December 31, 2009, 2008 and 2007 are not necessarily indicative of the results that may be expected for any future period. The following discussion should be read in conjunction with the consolidated financial statements and the notes thereto included in Part IV, Item 15 of this Form 10-K and in conjunction with the "Risk Factors" included in Part I, Item 1A of this Form 10-K.

### Business Overview

We are a leading provider of converged test systems and services for wireless and wired infrastructures and services. Our hardware and software allow our customers to test and measure the performance, functionality, service quality and conformance of wireless and wired Internet Protocol (IP) equipment and networks, and the applications that run over them. Our solutions generate, capture, characterize and analyze high volumes of realistic network and application traffic, identifying problems, assessing performance, ensuring functionality and interoperability, and verifying conformance to industry specifications. We offer hardware platforms with interchangeable media interfaces, utilizing a common set of applications, Application Programming Interfaces (APIs) and automation tools that allow our customers to create integrated, easy-to-use automated test environments. The networks that our systems analyze primarily include Ethernet networks operating at speeds of up to 100 gigabits per second and wireless networks that carry data traffic over optical fiber, electrical cable and airwaves. We also offer hardware platforms and equipment that test wireless equipment, especially those associated with 3G (third generation), 4G (fourth generation) and Long-Term Evolution (LTE) networks. Customers also use our suite of software applications to test and verify web, Internet, security and business applications.

*Acquisition of Catapult Communications Corporation.* On June 23, 2009, we completed our acquisition of all of the outstanding shares of common stock of Catapult Communications Corporation ("Catapult"). Catapult provides advanced wireless test systems to network equipment manufacturers and service providers worldwide. Catapult's 3G and 4G wireless networking test solutions complement our IP performance test systems and service verification platforms. With this acquisition, we will be able to broaden our product portfolio and provide a single source solution for testing converged multiplay IP services over wireless and wireline networks to new and existing customers. The purchase price for Catapult totaled \$106.6 million, or \$65.4 million net of Catapult's existing cash and investment balances at the time of the acquisition. The Catapult acquisition was funded from our existing cash and cash equivalents. The results of operations of Catapult have been included in the consolidated statements of operations and cash flows since the date of the acquisition.

*Acquisition of Agilent Technologies' N2X Data Network Testing Product Line.* On October 30, 2009, we completed our acquisition from Agilent Technologies, Inc. ("Agilent") of its N2X Data Network Testing Product Line business ("N2X Business") for \$43.5 million in cash and the assumption of certain liabilities of the N2X Business. In return for the consideration paid, we acquired certain assets and liabilities of Agilent's N2X Business, including inventory, accounts receivables, fixed assets, accounts payable, customer relationships, certain intellectual property rights, and other assets required to run the business. The N2X Business provides network equipment manufacturers and service providers with solutions to validate the performance and scalability characteristics of next-generation network equipment for voice, video and data (multiplay) services. The acquisition was funded from our existing cash and investments. The results of operations of the N2X Business have been included in the consolidated statements of operations and cash flows since the date of the acquisition.

*Revenues.* Our revenues are principally derived from the sale and support of our test systems. Product revenues primarily consist of sales of our hardware and software products. Our service revenues primarily consist

of the provision of post contract customer support and maintenance (“PCS”) related to the initial period provided with the product purchase (generally for 90-day or 12-month periods) and separately purchased extended PCS contracts, and to our implied PCS obligations. Service revenues also include separately purchased extended hardware warranty support for certain of our products, training and other professional services. PCS on our software products includes unspecified when and if available software upgrades and customer technical support services. Our hardware products primarily consist of chassis and interface cards, and during the three years ended December 31, 2009, our Ethernet interface cards have represented the majority of our product revenues. In general, our Ethernet interface cards are used to test equipment and advanced IP services in the core and at the edge of the Internet and in enterprise applications. Looking forward, we expect that the sale of our Ethernet interface cards will continue to represent a significant portion of our revenues. Excluding the impact of our recent acquisitions, we experienced a significant year-over-year decline in our revenues from 2008 to 2009, due in part to the global recession and our customers’ constraints in their capital expenditure and operating budgets. While we did see some positive signs with respect to the stabilization of our business in the fourth quarter of 2009, we remain uncertain about the extent and length of any economic recovery and about our customers’ willingness to significantly increase spending levels in 2010. These factors, among others, limit our ability to accurately forecast the future demand and revenue trends for our products and services.

Sales to our largest customer accounted for \$27.8 million, or 15.6%, of our total revenues in 2009, \$36.9 million, or 21.0%, of our total revenues in 2008 and \$41.7 million, or 23.9%, of our total revenues in 2007. To date, we have generated the majority of our revenues from network equipment manufacturers. While we expect that we will continue to have some customer concentration for the foreseeable future, we continue to sell our products to a wider variety and increasing number of customers. To the extent that we develop a broader and more diverse customer base, our reliance on any one customer or customer type should diminish. From a geographic perspective, we generate a majority of our revenues from sales to customer locations within the United States. We generated revenues from product shipments and services to international locations of \$76.3 million, or 42.9% of our total revenues, in 2009, \$63.0 million, or 35.8% of our total revenues, in 2008, and \$60.9 million, or 35.0% of our total revenues, in 2007. We intend to continue increasing our sales efforts internationally with specific focus on Europe and the Asia Pacific region. Looking forward, and given the recent acquisitions of Catapult and the N2X Business, we expect our international revenues to continue to grow on an annualized basis as a percentage of our total revenues.

In some instances our software products may be installed and operated independently from our hardware products. At other times, our software products are installed on and work with our hardware products to enhance the functionality of the overall test system. As our software is generally more than incidental to the sale of our test systems, we recognize revenue by applying software revenue recognition guidance.

Our test systems are generally fully functional at the time of shipment and do not require us to perform any significant production, modification, customization or installation after shipment. As such, revenue from hardware and software product sales to customers, including distributors, is recognized upon shipment provided that (i) evidence of an arrangement exists, which is typically in the form of a customer purchase order; (ii) delivery has occurred (i.e., risks and rewards of ownership have passed to the customer); (iii) the sales price is fixed or determinable; and (iv) collection is deemed probable.

When sales arrangements involve multiple elements, or multiple products, and we have vendor-specific objective evidence (“VSOE”) of fair value for each element in the arrangement, we recognize revenue based on the relative fair value of all elements within the arrangement. We determine VSOE based on sales prices charged to customers when the same element is sold separately or based upon stated substantive PCS renewal rates for certain arrangements. Many of our products, such as our software products, typically include an initial period (generally 90-day or 12-month periods) of free PCS, which is not sold separately. Accordingly, we are unable to establish VSOE for these products.

In cases where VSOE only exists for the undelivered elements such as PCS, we apply the residual method to recognize revenue. Under the residual method, the total arrangement fee is allocated first to the undelivered elements, typically PCS, based on their VSOE, and the residual portion of the fee is allocated to the delivered elements, typically our hardware and software products, and is recognized as revenue assuming all other revenue recognition criteria as described above have been met.

If VSOE cannot be determined for all undelivered elements of an arrangement, we defer revenue until the earlier of (i) the delivery of all elements or (ii) the establishment of VSOE for all undelivered elements, provided that if the only undelivered element is PCS or a service, the total arrangement fee is recognized as revenue over the PCS or service term.

Services revenues from our initial and separately purchased extended PCS arrangements (generally offered for 12-month periods) are recognized ratably over the contractual coverage period. In addition, for implied PCS obligations we defer revenues from product sales and allocate these amounts to PCS revenues to account for the circumstances in which we provide PCS after the expiration of the customer's contractual PCS period. Deferred revenues for these implied PCS obligations are recognized ratably over the implied PCS period, which is typically based on the expected economic life of our software products of four years. To the extent we determine that implied PCS is no longer being provided after the expiration of the customer's contractual PCS period, the remaining deferred revenue balance related to the implied PCS obligation is reversed and recognized as revenue in the period of cessation of the implied PCS obligation. The implied PCS obligation for our software products ceases upon (i) the license management of our software upgrades and (ii) our determination not to provide PCS after the expiration of the contractual PCS period. Our license management system locks a software license to a specific computer or Ixia hardware chassis on which our software resides. The system then manages and controls the provision of software upgrades to ensure that the upgrades are only provided to customers that are entitled to receive such upgrades during an initial or extended PCS period. For software products that are not controlled under a license management system and for certain customers where we provide implied PCS outside of the contractual PCS period, we allocate and defer revenue for these implied PCS obligations and recognize this revenue ratably over the implied PCS periods as described above. For the years ended December 31, 2009, 2008 and 2007, services revenues related to our implied PCS obligations approximated \$3.9 million, \$4.2 million and \$3.4 million, respectively. For the years ended December 31, 2009, 2008 and 2007, \$575,000, \$0 and \$0, respectively, of deferred revenue relating to implied PCS was reversed and recognized as product revenues as a result of the license management of certain products and our determination not to provide PCS after the expiration of the contractual PCS period. Future reversals of implied PCS deferred revenue may occur over the next 12 months as a result of the future license management of additional products and our determination not to provide PCS to certain customers after the expiration of the contractual PCS period.

Revenues from our separately purchased extended hardware warranty arrangements are recognized ratably over the contractual coverage period. We recognize revenues from training and other professional services at the time the services are provided or completed, as applicable.

We use distributors to complement our direct sales and marketing efforts in certain international markets. Due to the broad range of features and options available with our hardware and software products, distributors generally do not stock our products and typically place orders with us after receiving an order from an end customer. These distributors receive business terms of sale generally similar to those received by our other customers.

*Stock-Based Compensation.* Share-based payments, including grants of stock options, restricted stock units and employee stock purchase rights, are required to be recognized in the financial statements based on the estimated fair values for accounting purposes on the grant date. We use the Black-Scholes option pricing model

to estimate the fair value for accounting purposes of our share-based awards. The determination of the fair value for accounting purposes of share-based awards using the Black-Scholes model is affected by our stock price and a number of assumptions, including expected volatility, expected life and risk-free interest rate. The expected life and expected volatility are estimated based on historical and other data trended into the future. The risk-free interest rate assumption is based on observed interest rates appropriate for the terms of our share-based awards. Stock-based compensation expense recognized in our consolidated financial statements is based on awards that are ultimately expected to vest. The amount of stock-based compensation expense is reduced for estimated forfeitures based on historical experience as well as future expectations. Forfeitures are required to be estimated at the time of grant and revised, if necessary, in subsequent periods if estimated and actual forfeitures differ from these initial estimates. We evaluate the assumptions used to value share-based awards on a periodic basis. If factors change and we employ different assumptions, stock-based compensation expense may differ significantly from what we have recorded in the past. If there are any modifications or cancellations of the underlying unvested securities, we may be required to accelerate, increase or cancel any remaining unearned stock-based compensation expense. Consistent with our past practice, we attribute the value of stock-based compensation to expense based on the graded, or accelerated multiple-option, approach.

For the years ended December 31, 2009, 2008 and 2007, stock-based compensation expense was \$10.5 million, \$10.6 million and \$13.0 million, respectively. Our stock-based compensation expense declined for the year ended December 31, 2008 as compared to the comparable prior period in 2007 due in part to (i) an increase in estimated and actual forfeitures and (ii) the decline in the price of our common stock and weighted grant date fair values for new awards resulting in lower total stock-based compensation cost. The aggregate balance of gross unrecognized stock-based compensation to be expensed in the years 2010 and through 2013 related to unvested share-based awards as of December 31, 2009 was approximately \$15.4 million. To the extent that we grant additional share-based awards, future expense may increase by the additional unearned compensation resulting from those grants. We anticipate that we will continue to grant additional share-based awards in the future as part of our long-term incentive compensation programs. The impact of future grants cannot be estimated at this time because it will depend on a number of factors, including the amount of share-based awards granted and the then current fair values of such awards for accounting purposes.

*Cost of Revenues.* Our cost of revenues related to the sale of our hardware and software products includes materials, payments to third party contract manufacturers, royalties, and salaries and other expenses related to our manufacturing, operations, technical support and professional service personnel. We outsource the majority of our manufacturing operations, and we conduct supply chain management, quality assurance, documentation control, shipping and some final assembly at our facility in Calabasas, California. Accordingly, a significant portion of our cost of revenues related to our products consists of payments to our contract manufacturers. Cost of revenues related to the provision of services includes salaries and other expenses associated with customer and technical support services, professional services and the warranty cost of hardware that is replaced or repaired during the warranty coverage period. Cost of revenues does not include an allocation of the amortization of intangible assets related to our acquisitions of certain businesses, product lines and technologies, which are discussed below and included on a separate line item within our consolidated statements of operations.

Our cost of revenues as a percentage of total revenues is primarily affected by the following factors:

- our pricing policies and those of our competitors;
- the pricing we are able to obtain from our component suppliers and contract manufacturers;
- the mix of customers and sales channels through which our products are sold;

- the mix of our products sold, such as the mix of software versus hardware product sales;
- new product introductions by us and by our competitors;
- demand for our products; and
- production volume.

In the near term, although we anticipate that our cost of revenues as a percentage of total revenues will remain relatively flat, we expect to continue to experience pricing pressure on larger transactions and from larger customers as a result of competition and the current global business environment.

*Operating Expenses.* Our operating expenses are generally recognized when incurred and consist of research and development, sales and marketing, general and administrative, amortization of intangible assets, acquisition related costs and restructuring expenses. In dollar terms, we expect total operating expenses, excluding stock-based compensation expenses discussed above and amortization of intangible assets, acquisition related costs and restructuring expenses discussed below, to increase significantly in 2010 when compared to 2009 due to our acquisitions of Catapult and the N2X Business (See Note 2 to the Consolidated Financial Statements). Due to the ongoing uncertainty with respect to the global business environment, it is difficult to accurately forecast our revenue, and therefore we are unable to accurately project our expected operating expense trends as a percentage of total revenues.

Research and development expenses consist primarily of salaries and other personnel costs related to the design, development, testing and enhancement of our products. We expense our research and development costs as they are incurred. We also capitalize and depreciate over a five-year period costs of our products used for internal purposes.

Sales and marketing expenses consist primarily of compensation and related costs for personnel engaged in direct sales, sales support and marketing functions, as well as promotional and advertising expenditures. We also capitalize and depreciate over a two-year period costs of our products used for sales and marketing activities, including product demonstrations for potential customers.

General and administrative expenses consist primarily of salaries and related expenses for executive, finance, legal, human resources, information technology and administrative personnel, as well as professional fees (e.g., legal and accounting), facility costs related to our corporate headquarters, insurance costs and other general corporate expenses.

Amortization of intangible assets consists of the amortization of the purchase price of the various intangible assets over their estimated useful lives. Periodically we review goodwill and other intangible assets for impairment. An impairment charge would be recorded to the extent that the carrying value exceeds its estimated fair value in the period that the impairment circumstances occurred. The future amortization of acquired intangible assets depends on a number of factors, including the extent to which we acquire additional businesses, technologies or product lines or are required to record impairment charges related to our acquired intangible assets. See Notes to the Consolidated Financial Statements for additional information.

Acquisition related costs are expensed as incurred and consist primarily of transaction and integration related costs such as success-based banking fees, professional fees for legal, accounting, tax, due diligence, valuation and other related services, change in control payments, consulting fees, required regulatory costs and other related expenses. We expect our acquisition related expenses to fluctuate over time based on the timing of our acquisitions and related integration activities.

Restructuring expenses consist primarily of employee severance costs and related charges, as well as facility-related charges to consolidate operations. We expect to incur additional restructuring expenses over the near term as we complete the integrations of our recent acquisitions. In January 2010, we announced a company-wide restructuring initiative in light of our acquisition of the N2X Business in the fourth quarter of 2009. We expect to record restructuring charges for severance and other related costs of approximately \$3 million to \$4 million on a pre-tax basis to reflect the impact of this restructuring. Approximately 80 positions have been or will be eliminated. For additional information, please see Note 3 to the Consolidated Financial Statements included in this Form 10-K.

*Interest and Other Income, Net.* Interest and other income, net represents interest on cash and a variety of securities, including money market funds, U.S. government and government agency debt securities, corporate debt securities and auction rate securities, and certain foreign currency gains and losses.

*Income Tax.* Income tax is determined based on the amount of earnings and enacted federal, state and foreign tax rates, adjusted for allowable credits and deductions and for the effects of equity compensation plans. Our income tax provision may also be affected by changes to our estimates of uncertain tax positions and the recording of valuation allowances against certain deferred tax assets and changes to these valuation allowances in future periods.

### Critical Accounting Policies and Estimates

Management's discussion and analysis of financial condition and results of operations is based upon our consolidated financial statements which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates and judgments, including those related to revenue recognition, allowance for doubtful accounts, write-downs for obsolete inventory, income taxes, acquisition purchase price allocation, impairments of long-lived assets and marketable securities, stock-based compensation, and contingencies and litigation. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances. Actual results may differ materially from these estimates.

We apply the following critical accounting policies in the preparation of our consolidated financial statements:

- *Revenue Recognition Policy.* We recognize revenue as discussed in "Revenues" in the "Business Overview" section of Item 7.
- *Acquisition Purchase Price Allocation.* When we acquire a business, product line or rights to a product or technology, we allocate the purchase price to the various tangible and intangible assets acquired and the liabilities assumed, based on their estimated fair values. Determining the fair value of certain assets and liabilities acquired is subjective in nature and often involves the use of significant estimates and assumptions, some of which may be based in part on historical experience and information obtained from the management of the acquired business, and are inherently uncertain. Many of the estimates and assumptions used to determine fair values, such as those for purchased technologies and customer relationships, are made based on forecasted information and discount rates. To assist in the purchase price allocation process, as well as the determination of estimated useful lives of acquired intangible assets, we may obtain appraisals from valuation



specialists. Unanticipated events and circumstances may occur which may affect the accuracy or validity of such estimates and assumptions.

- *Allowance for Doubtful Accounts.* Trade accounts receivable are recorded at the invoiced amount and do not bear interest. The allowance for doubtful accounts is based on our best estimate of the amount of probable credit losses in existing accounts receivable. The allowance for doubtful accounts is determined based on historical write-off experience, our assessment of current customer information and other relevant data. We review the allowance for doubtful accounts monthly. Past due balances of 60 days and over are reviewed individually for collectibility. In light of the recent turmoil in the domestic and global economies that has affected many companies, our estimates and judgments with respect to the collectibility of our receivables have become subject to greater uncertainty than in more stable periods. If our estimate of uncollectible accounts is too low, cost and expenses may increase in future periods. Account balances are charged off against the allowance when we believe it is probable the receivable will not be recovered. We do not have any off-balance-sheet credit exposure related to our customers.
- *Write-Down of Obsolete Inventory.* We write down inventory for estimated obsolescence, excessive quantities or unmarketable inventory equal to the difference between the cost of inventory and the estimated market value based upon assumptions about future demand and market conditions. If actual future demand is less favorable than our initial estimate, additional inventory write-downs may be required.
- *Income Taxes.* We operate in numerous states and countries through our various subsidiaries, and must allocate our income, expenses, and earnings under the various laws and regulations of each of these taxing jurisdictions. Accordingly, our provision for income taxes represents our total estimate of the liability that we have incurred in doing business each year in all of our locations. Deferred income tax balances reflect the effects of temporary differences between the carrying amounts of assets and liabilities and their tax bases and are stated at enacted tax rates expected to be in effect when taxes are actually paid or recovered. In determining whether we need to record a valuation allowance against our deferred tax assets, management must make a number of estimates, assumptions and judgments, including estimates of future earnings and taxable income. We establish a valuation allowance to reduce deferred tax assets to the amount we believe is more likely than not to be realized.

Annually, we file tax returns that represent our filing positions with each jurisdiction and settle our return liabilities. Each jurisdiction has the right to audit those returns and may take different positions with respect to income and expense allocations and taxable earnings determinations. Effective January 1, 2007, we adopted changes issued by the Financial Accounting Standards Board ("FASB") to accounting for uncertainty in income taxes. Under the accounting guidance, we may provide for estimated liabilities in our consolidated financial statements associated with uncertain tax return filing positions that are subject to audit by various tax authorities. Because the determinations of our annual provisions are subject to assumptions, judgments and estimates, it is likely that actual results may vary from those recognized in our consolidated financial statements. As a result, additions to, or reductions of, income tax expense will occur each year for prior reporting periods as our estimates or judgments change, or as actual tax returns and tax audits are settled. We recognize any such prior year adjustment in the discrete quarterly period in which it is determined.

- *Impairment of Long-Lived Assets.* We evaluate our identifiable definite life intangible assets and other long-lived assets for impairment, when events or changes in circumstances indicate that a potential impairment may exist. We first estimate the undiscounted cash flows to be generated from the use and ultimate disposition of the applicable asset. To the extent that the estimated undiscounted cash flows fall below the carrying value of the related intangible or other long lived asset, we write-down the asset to its estimated fair value. Fair value is generally determined based on discounted cash flows. Determining the fair value based on discounted cash flows is subjective in nature and often involves the use of significant estimates and assumptions about future results and discount rates. We evaluate the recoverability of our goodwill on an annual basis or if events or changes in circumstances indicate that an impairment in the value of goodwill recorded on our balance sheet may exist. Impairment losses are recorded to the extent that the carrying value of the goodwill exceeds its estimated fair value. We completed our annual goodwill impairment test of our single reporting unit in the fourth quarter of 2009 and determined that there was no impairment.
- *Stock-Based Compensation.* We record stock-based compensation as discussed in “Stock-based Compensation” in the “Business Overview” section of Item 7.
- *Impairment of Marketable Securities.* We periodically review our marketable securities for impairment. If we conclude that any of our investments are impaired, we determine whether such impairment is “other-than-temporary.” Factors we consider to make such a determination include, among others, the severity of the impairment, the reason for the decline in value and the potential recovery period. If any impairment is considered “other-than-temporary,” we write down the asset to its fair value and take a charge to earnings for the portion of the write-down related to credit losses with the balance, if any, recorded to other comprehensive income.
- *Contingencies and Litigation.* We evaluate contingent liabilities, including threatened or pending litigation, and record accruals when the loss is deemed probable and the liability can reasonably be estimated. We make these assessments based on the facts and circumstances of each situation and in some instances based in part on the advice of outside legal counsel.

## Results of Operations

The following table sets forth certain statement of operations data as a percentage of total revenues for the periods indicated:

	<u>2009</u>	<u>2008</u>	<u>2007</u>
Revenues:			
Products	80.3%	83.5%	85.1%
Services	<u>19.7</u>	<u>16.5</u>	<u>14.9</u>
Total revenues	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Costs and operating expenses: <sup>(1)</sup>			
Cost of revenues - products	20.6	18.4	18.8
Cost of revenues - services	2.2	2.5	2.2
Research and development	30.3	28.0	27.2
Sales and marketing	33.9	33.8	33.0
General and administrative	15.7	14.6	14.3
Amortization of intangible assets	6.4	3.2	4.1
Acquisition related	3.5	0.8	—
Restructuring	2.6	—	—
Impairment of purchased technology and intangible assets	<u>—</u>	<u>—</u>	<u>1.9</u>
Total costs and operating expenses	<u>115.2</u>	<u>101.3</u>	<u>101.5</u>
Loss from operations	(15.2)	(1.3)	(1.5)
Interest and other income, net	1.2	3.7	6.7
Other-than-temporary impairment on investments	<u>(1.6)</u>	<u>(11.4)</u>	<u>—</u>
(Loss) income before income taxes	(15.6)	(9.0)	5.2
Income tax expense	<u>9.2</u>	<u>—</u>	<u>1.2</u>
Net (loss) income	<u>(24.8)%</u>	<u>(9.0)%</u>	<u>4.0%</u>
<sup>(1)</sup> Stock-based compensation included in:			
Cost of revenues - products	0.3%	0.3%	0.3%
Cost of revenues - services	0.1	0.1	0.1
Research and development	2.5	2.4	3.0
Sales and marketing	1.7	1.9	2.5
General and administrative	1.3	1.3	1.5

## Comparison of the Years Ended December 31, 2009 and 2008

As a result of our acquisitions of Catapult Communications Corporation (“Catapult”) on June 23, 2009 and Agilent Technologies, Inc. (“Agilent”) N2X Data Network Testing Product Line business (“N2X Business”) on October 30, 2009, our 2009 consolidated results of operations include the results of these operations from the respective acquisition dates. The integration of Catapult and its processes were substantially completed as of December 31, 2009, while the integration activities were ongoing as of December 31, 2009 with respect to the N2X Business. To assist the readers of our financial statements in reviewing our year over year consolidated operating results, we have estimated the impacts of these acquisitions in the related Statement of Operations sections below.

*Revenues.* In 2009, total revenues increased 1.2% to \$178.0 million from \$175.9 million in 2008. As a result of our acquisitions of Catapult in June 2009 and the N2X Business in October 2009 (“2009 Acquisitions”), revenues for 2009 included \$24.1 million of revenue related to the 2009 Acquisitions. Revenues from products decreased to \$142.9 million in 2009 from \$146.8 million in 2008. Excluding the product revenues from our 2009 Acquisitions of approximately \$19.2 million, the decrease in product revenue was primarily due to a \$20.1 million decrease in shipments of our hardware products (primarily our Ethernet interface cards) in 2009 over 2008 and by a \$2.3 million decrease in shipments of our software products (primarily our IxLoad and IxChariot software products) in 2009 over 2008. Excluding the service revenues from our 2009 Acquisitions of approximately \$4.9 million, service revenues increased \$1.2 million in 2009 compared to 2008 primarily due to a net increase in the ratable recognition of our PCS arrangements and extended warranty contracts. In 2009, total revenues from Cisco Systems, our largest account, decreased to \$27.8 million, or 15.6% of our total revenue, from \$36.9 million, or 21.0% of our total revenue, in 2008.

*Cost of Revenues.* As a percentage of total revenues, our total cost of revenues increased to 22.8% in 2009 from 20.9% in 2008. Our 2009 cost of goods sold included approximately \$5.3 million of cost of goods sold attributable to our 2009 Acquisitions. Excluding the cost of product revenues of approximately \$4.4 million related to our 2009 Acquisitions, our cost of product revenues decreased to \$32.3 million in 2009 from \$32.4 million in 2008 primarily due to the decrease in the costs of product shipped of approximately \$2.2 million due to the decline in product revenues, partially offset by higher royalty payments of \$1.4 million and higher inventory related charges for slow moving and excess inventory. Excluding the cost of service revenues of approximately \$844,000 related to our 2009 Acquisitions, our cost of service revenues decreased to \$3.0 million in 2009 from \$4.5 million in 2008 primarily due to a decline in technical support costs, including warranty expenses, of approximately \$1.1 million.

*Research and Development Expenses.* In 2009, research and development expenses increased 9.8% to \$54.0 million from \$49.2 million in 2008. As a result of our 2009 Acquisitions, our research and development expenditures in 2009 included approximately \$8.5 million related to the research and development activities of the acquired operations. Excluding the incremental research and development costs related to the 2009 Acquisitions, the decrease in research and development expenses in 2009 as compared to 2008 was primarily due to lower compensation and related employee costs, including travel, of \$4.4 million. The decrease in compensation and related employee costs was primarily due to the elimination of our company-wide bonus plan in 2009, lower compensation due to the Ixia Restructuring announced in the second quarter of 2009 and favorable foreign currency exchange rates, particularly in Romania and India where the local currencies weakened against the U.S. Dollar in 2009 as compared to the same period of 2008. These expense decreases were partially offset by higher consulting costs of \$1.2 million (primarily in India and the United States) in 2009 compared to 2008.

*Sales and Marketing Expenses.* In 2009, sales and marketing expenses increased 1.7% to \$60.4 million from \$59.4 million in 2008. As a result of our 2009 Acquisitions, our sales and marketing costs in 2009 included approximately \$8.6 million related to these acquisitions. Excluding the incremental sales and marketing costs related to the 2009 Acquisitions, the decrease of \$7.6 million was primarily due to lower compensation and related employee costs, including travel, of \$5.0 million, lower facilities and depreciation costs of \$1.3 million and lower training and marketing programs of \$705,000. The decrease in compensation and related employee costs in 2009 as compared to the same period of 2008 was primarily due to lower commissions related to the year over year decline in sales, the Ixia Restructuring announced in the second quarter of 2009 and the elimination of our company-wide bonus plan in 2009.

*General and Administrative Expenses.* In 2009, general and administrative expenses increased 10.0% to \$28.1 million from \$25.5 million in 2008. As a result of our 2009 Acquisitions, our general and administrative costs in 2009 included approximately \$2.9 million related to these acquisitions. Excluding the incremental

general and administrative costs related to the 2009 Acquisitions, the decrease of \$316,000 was primarily due to lower compensation and related employee costs, including travel, of \$986,000, lower recruiting fees of \$559,000 and lower facilities and depreciation costs of \$471,000, partially offset by higher legal fees and expenses of \$1.5 million related primarily to litigation. The decrease in compensation and related employee costs in 2009 as compared to the same period of 2008 was primarily due to the elimination of our company-wide bonus plan in 2009.

*Amortization of Intangible Assets.* In 2009, amortization of intangible assets increased to \$11.4 million from \$5.7 million in 2008. The increase primarily related to the incremental amortization of intangibles related to our 2009 Acquisitions, partially offset by the completion of amortization periods for certain intangible assets.

*Acquisition Related Expenses.* Acquisition related expenses for 2009 and 2008 were \$6.2 million and \$1.5 million, respectively. Acquisition related expenses incurred in 2009 increased over the same periods in 2008 primarily due to our acquisitions of Catapult in June 2009 and the N2X Business in October 2009. As a result of our adoption of the new accounting guidance for business combinations on January 1, 2009, acquisition related costs in 2009 were expensed rather than capitalized and treated as part of the applicable purchase price. Acquisition costs expensed in 2008 related to transactions that were not consummated as of December 31, 2008. For additional information, please see Note 2 to Consolidated Financial Statements.

*Restructuring.* Restructuring expenses for 2009 were \$4.6 million and consisted primarily of employee severance costs related to the Ixia Restructuring initiated during the second quarter of 2009 and the Catapult Restructuring initiated during the third quarter of 2009. There were no restructuring expenses incurred in 2008. The Ixia Restructuring included a net reduction in force of approximately 80 positions, which represented approximately 10% of our worldwide work force, including contractors, prior to the announcement of the restructuring. The Catapult Restructuring included a net reduction in force of approximately 45 positions, which represented approximately 4% of our worldwide work force, including contractors, prior to the announcement of the restructuring.

In January 2010, our management approved, committed to and initiated a plan to restructure our operations in light of our acquisition of the N2X Business in the fourth quarter of 2010 ("N2X Restructuring"). The N2X Restructuring included a net reduction in force of approximately 80 positions, which represented approximately 7% of our worldwide work force, including contractors, at the end of the fourth quarter of 2009. We expect to record restructuring charges for severance and other related costs of approximately \$3 million to \$4 million on a pre-tax basis to reflect the impact of the N2X Restructuring.

We expect that these restructuring initiatives when combined will produce cost savings of approximately \$22.0 million on an annualized basis. For additional information, see Note 3 to Consolidated Financial Statements.

*Interest and Other Income, Net.* Interest and other income, net decreased to \$2.2 million in 2009 from \$6.6 million in 2008. This decrease was primarily due to lower average cash and investment balances in the aggregate and lower effective yields in 2009 compared to the same period in 2008. The lower average cash and investment balance in the aggregate was primarily due to the payments for our 2009 Acquisitions.

*Other-than-temporary Impairment on Investments.* For 2009 and 2008, other-than-temporary impairments on investments were \$2.8 million and \$20.2 million, respectively. When, in the opinion of management, a decline in the fair value of an investment is considered to be other-than-temporary, such investment is written down to its fair value. During 2009, other-than-temporary impairments on investments included impairment charges of \$2.8 million (pre-tax) to earnings related to our illiquid auction rate securities ("ARS"). During 2008, other-than-temporary impairments on investments included impairment charges of \$15.8 million (pre-tax) to earnings related

to our ARS and an impairment charge of \$4.4 million (pre-tax) to earnings related to our investments in bonds issued by Lehman Brothers Holdings, Inc. As of December 31, 2009, the estimated fair values of our ARS approximated \$5.7 million. See Note 5 to Consolidated Financial Statements.

*Income Tax Expense.* Income tax expense increased to \$16.4 million, or an effective rate of -59.0%, in 2009 from \$21,000, or an effective rate of -0.1%, in 2008. The increase in our overall tax expense was primarily due to the detriment associated with recording a full valuation allowance against our net U.S. deferred tax assets.

Our effective tax rate differs from the federal statutory rate due to state taxes, significant permanent differences and the change in our valuation allowance on our net U.S. deferred tax assets. Significant permanent differences arise due to research and development credits and stock based compensation expense that is not expected to generate a tax deduction, such as stock compensation expense on grants to foreign employees, offset by tax benefits in the current period from disqualifying dispositions.

Realization of our deferred tax assets is dependent primarily on the generation of future taxable income. In considering the need for a valuation allowance we consider our historical, as well as future projected taxable income along with other objectively verifiable evidence. During 2009, management evaluated the need for a valuation allowance against our net U.S. deferred tax assets and concluded that a full valuation allowance against our net U.S. deferred tax assets was warranted in the fourth quarter of 2009 due to, among other reasons, (i) the recently realized cumulative accounting losses sustained in the U.S., (ii) the recently completed three-year projections in which we expect to realize additional accounting losses in the U.S., (iii) the determination that we would be in a U.S. taxable loss position in 2009 and (iv) our uncertainty with respect to generating future U.S. taxable income in the near term given our recently completed U.S. projections and a number of inherent uncertainties such as the future level of U.S. tax deductions from our share-based awards. As a result, a non-cash income tax charge of \$28.1 million was recorded to increase our valuation allowance in 2009. During 2008, we recorded an \$8.1 million valuation allowance to fully offset the deferred tax assets primarily related to the unrealized loss recorded as a result of the impairment of certain marketable securities. See Note 8 to Consolidated Financial Statements.

#### Comparison of the Years Ended December 31, 2008 and 2007

*Revenues.* In 2008, total revenues increased 1.0% to \$175.9 million from \$174.1 million in 2007. This overall increase primarily relates to the \$3.2 million increase in service revenues, partially offset by a \$1.4 million decrease in product revenue. Revenues from services increased to \$29.1 million in 2008 from \$25.9 million in 2007 primarily due to an increase in the ratable recognition of revenues under our extended PCS and warranty contracts and our implied PCS arrangements. Revenues from products decreased to \$146.8 million in 2008 from \$148.2 million in 2007 primarily due to a \$5.5 million decrease in shipments of our software products (primarily our Layer 2/3 and IxChariot software products) in 2008. This decrease in shipments of our software products was partially offset by a \$3.3 million increase in shipments of our interface cards (primarily our Ethernet interface cards) in 2008 compared to 2007. In 2008, total revenues from Cisco Systems, our largest account, decreased to \$36.9 million, or 21.0% of our total revenue, from \$41.7 million, or 23.9% of our total revenue, in 2007.

*Cost of Revenues.* As a percentage of total revenues, our total cost of revenues decreased to 20.9% in 2008 from 21.0% in 2007. Our cost of product revenues remained relatively flat at \$32.4 million in 2008 and \$32.7 million in 2007. In 2008, our cost of providing services increased to \$4.5 million from \$3.9 million in 2007 primarily due to costs associated with our technical support team, including warranty costs, partially offset by lower costs related to our professional services business.

*Research and Development Expenses.* In 2008, research and development expenses increased 3.7% to \$49.2 million from \$47.4 million in 2007. This increase was primarily due to higher compensation and related employee costs of approximately \$2.2 million and a non-recurring benefit of approximately \$400,000 from a favorable property tax ruling in 2007. The higher compensation and related employee costs primarily related to annual salary increases. The above increases were partially offset by a reduction in stock-based compensation expense of approximately \$1.1 million in 2008.

*Sales and Marketing Expenses.* In 2008, sales and marketing expenses increased 3.4% to \$59.4 million from \$57.4 million in 2007. This increase was primarily due to higher compensation and related employee costs of approximately \$1.7 million, higher travel expense of approximately \$448,000, and a non-recurring benefit of approximately \$400,000 from a favorable property tax ruling that occurred in 2007. The higher compensation and related employee costs in 2008 compared to 2007 primarily related to additions to our sales and marketing team and annual salary increases, partially offset by lower commissions earned by sales personnel. The above net increase was partially offset by a reduction in stock-based compensation expense of approximately \$1.0 million in 2008.

*General and Administrative Expenses.* In 2008, general and administrative expenses increased 2.3% to \$25.5 million from \$24.9 million in 2007. During 2007, general and administrative expenses included \$1.2 million in professional fees, temporary assistance and other costs related to the completion during 2007 of the restatement of certain of our previously filed financial statements as more fully described in our 2006 Form 10-K. Excluding the above costs, general and administrative expenses increased by approximately \$1.8 million from \$23.7 million in 2007 to \$25.5 million in 2008. This increase was primarily due to higher professional fees of \$1.3 million principally related to litigation costs, higher rent and other facilities costs at our corporate headquarters of \$861,000, and higher compensation and related employee costs of \$403,000 due in part to annual salary increases. These increases were partially offset by lower recruiting fees of \$428,000 and lower stock-based compensation of \$300,000 in 2008.

*Amortization of Intangible Assets.* In 2008, amortization of intangible assets decreased to \$5.7 million from \$7.1 million in 2007. This decrease was primarily related to the completion of amortization periods for certain intangible assets during 2008 and the impairment charge recorded in 2007 attributable to certain intangible assets related to the acquisition of Communication Machinery Corporation in July 2005 and the acquisition of the mobile video test product line from Dilithium Networks in January 2006.

*Acquisition Related Expenses.* In 2008, acquisition related expenses totaled \$1.5 million which consisted of professional fees and other costs related to certain strategic initiatives, of which approximately half of these costs related to the acquisition of Catapult. For additional information, please see Note 3 to Consolidated Financial Statements.

*Impairment of Purchased Technology and Intangible Assets.* In 2007, we recognized impairment charges of \$1.5 million attributable to purchased technology and \$1.8 million attributable to certain intangible assets related to the wireless LAN testing tools acquired as part of Communication Machinery Corporation in July 2005 and the acquisition of the mobile video test product line from Dilithium Networks in January 2006. We determined that the future expected undiscounted cash flows were less than the carrying value of the affected identifiable intangible assets, which indicated that an impairment existed. To measure the impairment, we used the discounted cash flow approach to reduce the carrying value of the affected assets to fair value, which resulted in the \$3.3 million impairment of the above noted purchased technology and other identifiable intangible assets. See Note 7 to our Consolidated Financial Statements.

*Interest and Other Income, Net.* Interest and other income, net decreased to \$6.6 million in 2008 from \$11.7 million in 2007. This decrease was primarily due to the lower effective yields during 2008 as compared to the same period in 2007.

*Other-than-temporary Impairment on Investments.* In 2008, other-than-temporary impairments on investments totaled \$20.2 million. There were no such impairments in 2007. During 2008, other-than-temporary impairments on investments included an impairment charge of \$15.8 million (pre-tax) to earnings related to our illiquid auction rate securities (“ARS”) and an impairment charge of \$4.4 million (pre-tax) to earnings related to our investments in bonds issued by Lehman Brothers Holdings, Inc. As of December 31, 2008, the estimated fair values of our ARS and LBHI bonds approximated \$3.2 million and \$446,000, respectively. See Note 5 to Consolidated Financial Statements.

*Income Tax Expense.* Income tax expense decreased to \$21,000, or an effective rate of -0.1%, in 2008 from \$2.1 million, or an effective rate of 23.2%, in 2007. The effective tax rate in 2008 differs from the effective tax rate in 2007 primarily due to a decrease in pre-tax book earnings.

### Liquidity and Capital Resources

We have funded our operations with our cash balances, cash generated from operations and proceeds from our initial public offering and from stock option exercises. The following table sets forth our cash and short- and long-term investments as of December 31, 2009, 2008 and 2007 (in thousands):

	As of December 31,		
	2009	2008	2007
Cash and cash equivalents	\$ 15,061	\$192,791	\$188,892
Short-term marketable securities	10,337	9,850	4,999
Long-term marketable securities	<u>53,582</u>	<u>3,657</u>	<u>54,609</u>
	<u>\$ 78,980</u>	<u>\$206,298</u>	<u>\$248,500</u>

Our cash, cash equivalents and short- and long-term investments, when viewed as a whole, decreased to \$79.0 million as of December 31, 2009 from \$206.3 million as of December 31, 2008 primarily due to (i) the acquisition of Catapult in June 2009 for \$106.6 million, which was partially offset by Catapult’s existing cash and investments balance of \$41.2 million, and (ii) the acquisition of the N2X Business in October 2009 for \$44.1 million. Our cash, cash equivalents and short- and long-term investments, when viewed as a whole, decreased to \$206.3 million as of December 31, 2008 from \$248.5 million as of December 31, 2007 primarily due to the repurchase of \$43.6 million of our common stock pursuant to our stock buyback programs.

As of December 31, 2009, 2008 and 2007, we held investments in illiquid auction rate securities with estimated fair values of \$5.7 million, \$3.2 million and \$14.3 million, respectively (See Note 5 to Consolidated Financial Statements).



The following table sets forth our summary cash flows for the years ended December 31, 2009, 2008 and 2007 (in thousands):

	Year Ended December 31,		
	2009	2008	2007
Cash (used in) provided by operating activities	\$ (4,725)	\$ 24,335	\$ 45,769
Cash (used in) provided by investing activities	(168,005)	19,082	78,491
Cash used in financing activities	(5,000)	(39,518)	(12)

#### *Cash Flows from Operating Activities*

Operating cash inflows are principally provided by cash collections on sales to our customers. Our primary uses of cash from operating activities are for personnel-related expenditures, product costs and facility-related payments. Going forward, our cash flows from operating activities will be impacted by (i) the extent to which we grow our customer sales and spend on additional headcount in order to grow our business and (ii) by our working capital management.

Cash used in operating activities was \$4.7 million for the year ended December 31, 2009 compared to cash provided by operating activities of \$24.3 million for the year ended December 31, 2008. This decline in cash flow generated from operations was primarily due to (i) a \$14.3 million increase of net working capital changes in 2009 when compared to 2008 that adversely impacted cash flow due in part to an \$11.8 million increase in accounts receivable as of December 31, 2009 when compared to December 31, 2008 related to an increased amount of shipments at the end of 2009 when compared to the end of 2008, and (ii) an increase of approximately \$9.0 million of restructuring and acquisition related costs in 2009 when compared to 2008 due to the acquisitions of Catapult and the N2X Business, as well as the two restructuring programs implemented during 2009. See Notes to Consolidated Financial Statements for additional information.

Cash provided by operating activities was \$24.3 million and \$45.8 million for the years ended December 31, 2008 and 2007, respectively. This decline in cash flow generated from operations was primarily due to (i) a \$11.1 million increase of net working capital changes in 2008 when compared to 2007 that adversely impacted cash flow due in part to the timing of shipments and collections (i.e., accounts receivable increased by \$1.6 million as of December 31, 2008 when compared to December 31, 2007 versus a \$3.8 million decrease in accounts receivable as of December 31, 2007 when compared to December 31, 2006), (ii) an increase in operating expenditures of approximately \$8.0 million in 2008 over 2007, and (iii) a drop in interest income receipts of approximately \$5.0 million in 2008 when compared to 2007.

### *Cash Flows from Investing Activities*

Our cash inflow from investing activities principally relate to proceeds from the sale and maturities of our investments in marketable securities. Our primary uses of cash from investing activities are for payments to acquire products, technologies and businesses, purchases of marketable security investments and capital expenditures to support our growth. Going forward, we expect our cash flows from investing activities to fluctuate based on the number of product, technology and/or business acquisitions we close using cash, if any, and the timing of our sales, maturities and purchases of marketable securities.

Cash used in investing activities was \$168.0 million for the year ended December 31, 2009 compared to cash provided by investing activities of \$19.1 million for the year ended December 31, 2008. This decline in cash flow provided by investing activities was primarily due to a \$120.2 million increase in cash used to acquire businesses in 2009 when compared to 2008 due to the acquisitions of Catapult and the N2X Business in 2009. In addition, during 2009, \$37.2 million of cash was used for net purchases of marketable securities compared to \$30.2 million of net proceeds from marketable securities in 2008.

Cash provided by investing activities was \$19.1 million and \$78.5 million for the years ended December 31, 2008 and 2007, respectively. During 2008, \$30.2 million of cash was provided from net proceeds of marketable securities compared to \$92.8 million of net proceeds from marketable securities in 2007.

### *Cash Flows from Financing Activities*

Our cash inflow from financing activities over the past three years has principally related to proceeds from the exercise of stock options and employee stock purchase plan options. Our primary uses of cash from financing activities over the past three years has related to the repurchase of our common stock pursuant to approved stock buyback plans. Going forward, we expect our cash flows from financing activities to fluctuate based on the number of exercises of share-based awards which is dependent on the performance of our stock price. If deemed appropriate and approved by our Board of Directors, we may raise additional capital through a debt or equity financing, or initiate further stock buyback programs.

Cash used in financing activities was \$5.0 million and \$39.5 million for the years ended December 31, 2009 and 2008, respectively. This decline in cash flow used in financing activities was primarily due to a \$35.2 million decline in stock repurchases in 2009 when compared to 2008.

Cash used in financing activities was \$39.5 million and \$12,000 for the years ended December 31, 2008 and 2007, respectively. This increase in cash flow used in financing activities was primarily due to a \$34.4 million increase in stock repurchases in 2008 when compared to 2007. In addition, cash flows provided by exercises of share-based awards declined by \$5.0 million in 2008 when compared to 2007.

We believe that our existing balances of cash and cash equivalents, investments and cash flows expected to be generated from our operations will be sufficient to satisfy our operating requirements for at least the next twelve months. Nonetheless, we may seek additional sources of capital as necessary or appropriate to fund acquisitions or to otherwise finance our growth or operations; however, there can be no assurance that such funds, if needed, will be available on favorable terms, if at all. Our access to the capital markets to raise funds, through the sale of equity or debt securities, is subject to various factors, including the conditions in the U.S. capital markets and the timely filing of our periodic reports with the Commission.

## Financial Commitments

Our significant financial commitments at December 31, 2009 are as follows (in thousands):

	<u>Total</u>	<u>Less than 1 year</u>	<u>1 - 3 years</u>	<u>3 - 5 years</u>	<u>More than 5 years</u>
Operating leases	\$ 18,290	\$ 7,025	\$ 8,864	\$ 2,139	\$ 262
Purchase obligations	<u>2,875</u>	<u>2,875</u>	<u>—</u>	<u>—</u>	<u>—</u>
	<u>\$ 21,165</u>	<u>\$ 9,900</u>	<u>\$ 8,864</u>	<u>\$ 2,139</u>	<u>\$ 262</u>

Purchase obligations in the table above consist of purchase orders issued to certain of our contract manufacturers in the normal course of business to purchase specified quantities of certain interface cards and chassis. It is not our intent, nor is it reasonably likely, that we would cancel these executed purchase orders.

As of December 31, 2009, we had a net liability for uncertain tax positions of approximately \$5.0 million, which may be payable by us in the future. We are not able to reasonably estimate the timing of the payments or the amount by which the liability for uncertain tax positions will increase or decrease over time; therefore, the liability of \$5.0 million is excluded from the table above. See Note 8 to our Consolidated Financial Statements.

## Recent Accounting Pronouncements

See Note 1 to Consolidated Financial Statements.

## **Item 7A. Quantitative and Qualitative Disclosures About Market Risk**

### **Interest Rate Sensitivity**

The primary objective of our investment activities is to maintain the safety of principal and preserve liquidity while maximizing yields without significantly increasing risk. Some of the fixed rate securities that we have invested in may be subject to market risk. This means that a change in prevailing interest rates may cause the principal amount of the investment to fluctuate. We do not enter into investments for trading or speculative purposes. We maintain our portfolio of cash equivalents and investments in a variety of securities, including U.S. government and federal agency securities, corporate debt securities, auction rate securities and money market funds. Our cash equivalents and investments consist of both fixed and variable rate securities. We do not use any derivatives or similar instruments to manage our interest rate risk. Fixed-rate securities may have their fair market value adversely impacted due to a rise in interest rates. Our fixed rate securities are currently classified as available-for-sale securities. While we do not intend to sell these fixed rate securities prior to maturity based on a sudden change in market interest rates, should we choose to sell these securities in the future, our consolidated operating results or cash flows may be adversely affected. A smaller portion of our cash equivalents and investments portfolio consists of variable interest rate securities. Accordingly, we also have interest rate risk with these variable rate securities as the income produced may decrease if interest rates fall. We do not believe that a 100 basis point decrease in interest rates will have a significant impact on our interest income, operating results or liquidity.

### **Exchange Rate Sensitivity**

The majority of our revenue and expenses are denominated in U.S. dollars. However, since we have sales, marketing and development operations outside of the United States, we do have some transactions that are denominated in foreign currencies, primarily the Japanese Yen, Romanian Lei, Indian Rupee, Chinese Yuan, Singapore Dollar, Canadian Dollar, Swedish Kronor, Euro and British Pound. We utilize foreign currency forward contracts to hedge certain accounts receivable amounts that are denominated in Japanese Yen. These contracts are used to reduce our risk associated with exchange rate movements, as gains and losses on these contracts are intended to offset exchange losses and gains on underlying exposures. Changes in the fair value of these forward contracts are recorded immediately in earnings. We do not enter into foreign exchange forward contracts for speculative or trading purposes and we do not expect net gains or losses on these derivative instruments to have a material impact on our results of operations or cash flows.

## **Item 8. Financial Statements and Supplementary Data**

Our financial statements and supplementary data required by this Item are provided in the consolidated financial statements of the Company included in this Form 10-K as listed in Item 15(a) of this Form 10-K.

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

None.

## Item 9A. Controls and Procedures

### Evaluation of Disclosure Controls and Procedures

Based on our management's evaluation (with the participation of our Chief Executive Officer and Chief Financial Officer), as of the end of the period covered by this Annual Report, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")), were effective to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms and is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

### Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal control over financial reporting is a process designed by, or under the supervision of, our Chief Executive Officer and our Chief Financial Officer, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of our financial statements for external purposes in accordance with U.S. generally accepted accounting principles ("GAAP"). Because of its inherent limitations, our 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 policies or procedures may deteriorate.

As of December 31, 2009, our management (with the participation of our Chief Executive Officer and our Chief Financial Officer) conducted an evaluation of the effectiveness of our internal control over financial reporting 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 our internal control over financial reporting was effective as of December 31, 2009 based on criteria in *Internal Control—Integrated Framework* issued by the COSO.

Our management's evaluation has excluded the N2X Business from its assessment of internal control over financial reporting as of December 31, 2009 because it was acquired by the Company in a purchase business combination during late 2009. Total assets and total revenues of the N2X Business represented 3.2% and 3.9%, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2009.

The effectiveness of our internal control over financial reporting as of December 31, 2009 has been audited by PricewaterhouseCoopers LLP, our independent registered public accounting firm, as stated in its report which is included elsewhere herein.

### Changes in Internal Control over Financial Reporting

There have not been any changes in our internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the fiscal quarter ended December 31, 2009 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

### Inherent Limitations on Effectiveness of Controls

Our management, including our Chief Executive Officer and our Chief Financial Officer, does not expect that our disclosure controls and procedures or our internal control over financial reporting are or will be capable of preventing or detecting all errors and all fraud. Any controls, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the objectives of the controls will be met. The design of controls must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Further, because of the inherent limitations in all controls, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of simple error or mistake. Controls can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions.

### Item 9B. Other Information

None.

## PART III

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

Certain information required by this Item is incorporated herein by reference to information appearing in our definitive Proxy Statement for our Annual Meeting of Shareholders to be held on May 27, 2010, which information will appear under the captions entitled “Proposal 1 - Election of Directors,” “Executive Officers” and “Section 16(a) Beneficial Ownership Reporting Compliance.” The Proxy Statement will be filed with the Commission within 120 days after our last fiscal year-end which was December 31, 2009.

The Registrant has adopted a Code of Ethics for its Chief Executive and Senior Financial Officers, a copy of which is included as Exhibit 14.1 to this Annual Report on Form 10-K.

### Item 11. Executive Compensation

The information required by this Item is incorporated herein by reference to information appearing in our definitive Proxy Statement for our Annual Meeting of Shareholders to be held on May 27, 2010, which information will appear under the captions “Proposal 1 - Election of Directors - Compensation of Directors,” “Executive Compensation and Other Information,” “Compensation Discussion and Analysis” and “Compensation Committee Report.” The Proxy Statement will be filed with the Commission within 120 days after our last fiscal year-end which was December 31, 2009.

### Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this Item is incorporated herein by reference to information appearing in our definitive Proxy Statement for our Annual Meeting of Shareholders to be held on May 27, 2010, which information will appear under the captions “Common Stock Ownership of Principal Shareholders and Management” and “Executive Compensation and Other Information - Equity Compensation Plan Information.” The Proxy Statement will be filed with the Commission within 120 days after our last fiscal year-end which was December 31, 2009.

### Item 13. Certain Relationships and Related Transactions, and Director Independence

Any information required by this Item is incorporated herein by reference to information appearing in our definitive Proxy Statement for our Annual Meeting of Shareholders to be held on May 27, 2010, which information will appear under the caption entitled “Certain Relationships and Related Transactions,” and “Proposal 1 – Election of Directors.” The Proxy Statement will be filed with the Commission within 120 days after our last fiscal year-end which was December 31, 2009.

### Item 14. Principal Accounting Fees and Services

The information required by this Item is incorporated herein by reference to information appearing in our definitive Proxy Statement for our Annual Meeting of Shareholders to be held on May 27, 2010, which information will appear under the caption “Proposal 4 - Ratification of Appointment of Independent Registered Public Accounting Firm.” The Proxy Statement will be filed with the Commission within 120 days after our last fiscal year-end which was December 31, 2009.

## PART IV

### Item 15. Exhibits, Financial Statement Schedules

(a) The following documents are filed as part of this Report:

(1) Consolidated Financial Statements

The consolidated financial statements listed in the accompanying Index to Consolidated Financial Statements are filed as part of this report.

(2) Financial Statement Schedule

The financial statement schedules have been omitted because they are not applicable or the information required to be set forth therein is included in the consolidated financial statements or notes thereto.

(3) Exhibits

- 2.1 Agreement and Plan of Merger dated as of May 11, 2009 among the Company, Catapult Communications Corporation and Josie Acquisition Company<sup>11</sup>
- 2.2 Asset Purchase Agreement, dated October 21, 2009, by and between the Company and Agilent Technologies, Inc.<sup>12</sup>
- 3.1 Amended and Restated Articles of Incorporation, as amended<sup>3</sup>
- 3.2 Bylaws, as amended<sup>4</sup>
- 10.1\* Amended and Restated 1997 Equity Incentive Plan<sup>15</sup>
- 10.2\* Amended and Restated Non-Employee Director Stock Option Plan<sup>6</sup>
- 10.3\* Employee Stock Purchase Plan<sup>7</sup>
- 10.3.1\* Amendment No. 1, dated May 9, 2003, to Ixia Employee Stock Purchase Plan<sup>8</sup>
- 10.3.2\* Supplemental Provisions, effective April 14, 2006, to Ixia Employee Stock Purchase Plan<sup>9</sup>
- 10.4\* Officer Severance Plan<sup>10</sup>, together with Amendment to the Officer Severance Plan<sup>11</sup>
- 10.5\* Ixia Officer Severance Plan (as Amended and Restated effective January 1, 2009)<sup>12</sup>
- 10.6\* Form of Indemnity Agreement between Ixia and its directors and executive officers<sup>13</sup>
- 10.7 Office Lease Agreement dated September 14, 2007 between MS LPC Malibu Property Holdings, LLC and Ixia<sup>14</sup>
- 10.8 License, Distribution and Option Agreement, dated July 7, 2003, between NetIQ Corporation and Ixia<sup>15</sup>
- 10.9 First Amendment to License, Distribution and Option Agreement dated as of January 6, 2005 between the Registrant and NetIQ Corporation<sup>16</sup>
- 10.10 Second Amendment to License, Distribution and Option Agreement dated as of June 16, 2005 between the Registrant and NetIQ Corporation<sup>17,18</sup>
- 10.11\* Compensation of Named Executive Officers and Chief Executive Officer for 2008 and 2009<sup>19</sup>
- 10.12\* Summary of Compensation for the Registrant's Non-Employee Directors<sup>20</sup>
- 10.13\* Ixia 2008 Executive Officer Bonus Plan<sup>21</sup>
- 10.14\* Employment Offer Letter Agreement dated as of August 8, 2007 between the Company and Atul Bhatnagar<sup>22</sup>
- 10.15.1\* Ixia 2008 Equity Incentive Plan, including Amendment No. 1 dated May 28, 2008<sup>23</sup>
- 10.15.2 Amendment No. 2 to Ixia 2008 Equity Incentive Plan, as amended<sup>24</sup>
- 10.16 Master Services Agreement dated as of January 26, 2009 between the Company and Plexus Services Corp and its Affiliates and subsidiaries<sup>25</sup>



14.1	Code of Ethics for Chief Executive and Senior Financial Officers <sup>(26)</sup>
21.1	Subsidiaries of the Registrant
23.1	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm
31.1	Certificate of Chief Executive Officer of Ixia pursuant to Rule 13a-14(a) under the Exchange Act, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certificate of Chief Financial Officer of Ixia pursuant to Rule 13a-14(a) under the Exchange Act, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certificate of Chief Executive Officer and Chief Financial Officer of Ixia pursuant to Rule 13a-14(b) under the Exchange Act and Section 906 of the Sarbanes-Oxley Act of 2002.

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- \* Constitutes a management contract or compensatory plan or arrangement required to be filed as an exhibit to this Annual Report on Form 10-K.
- (1) Incorporated by reference to Exhibit 2.1 to Ixia's Current Report on Form 8-K (File No. 000-31523), as filed with the Commission on May 12, 2009.
- (2) Incorporated by reference to Exhibit 2.1 to Ixia's Current Report on Form 8-K (File No. 000-31523), as filed with the Commission on October 27, 2009.
- (3) Incorporated by reference to Exhibit No. 3.1 to Amendment No. 1 to the Registrant's Registration Statement on Form S-1 (Reg. No. 333-42678) filed with the Commission on September 5, 2000.
- (4) Incorporated by reference to Exhibit No. 3.1 to the Registrant's Current Report on Form 8-K (File No. 000-31523) filed with the Commission on November 16, 2007.
- (5) Incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-8 (Reg. No. 333-117969) filed with the Commission on August 5, 2004.
- (6) Incorporated by reference to Exhibit 4.2 to the Registrant's Registration Statement on Form S-8 (Reg. No. 333-117969) filed with the Commission on August 5, 2004.
- (7) Incorporated by reference to Exhibit No. 10.3 to Amendment No. 1 to the Registrant's Registration Statement on Form S-1 (Reg. No. 333-42678) filed with the Commission on September 5, 2000.
- (8) Incorporated by reference to Exhibit 4.2 to the Registrant's Registration Statement on Form S-8 (Registration No. 333-107818) filed with the Commission on August 8, 2003.
- (9) Incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K (File No. 000-31523) filed with the Commission on April 20, 2006.
- (10) Incorporated by reference to Exhibit No. 10.4 to Amendment No. 1 to the Registrant's Registration Statement on Form S-1 (Reg. No. 333-42678) filed with the Commission on September 5, 2000.
- (11) Incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K (File No. 000-31523) filed with the Commission on January 7, 2009.
- (12) Incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K (File No. 000-31523) filed with the Commission on January 7, 2009.
- (13) Incorporated by reference to Exhibit No. 10.5 to Amendment No. 1 to the Registrant's Registration Statement on Form S-1 (Reg. No. 333-42678) filed with the Commission on September 5, 2000.
- (14) Incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K (File No. 000-31523) filed with the Commission on September 25, 2007.

- (15) Incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K (File No. 000-31523) filed with the Commission on August 19, 2003.
- (16) Incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q (File No. 000-31523) for the fiscal quarter ended June 30, 2005.
- (17) Incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q (File No. 000-31523) for the fiscal quarter ended June 30, 2005.
- (18) Confidential treatment has been requested with respect to a portion of this exhibit, which portion has been omitted and filed separately with the Commission.
- (19) Incorporated by reference to Exhibit 10.2 to the Registrant's Annual Report on Form 10-K (File No. 000-31523) for the fiscal year ended December 31, 2008.
- (20) Incorporated by reference to Exhibit 10.17 to the Registrant's Annual Report on Form 10-K (File No. 000-31523) for the fiscal year ended December 31, 2006.
- (21) Incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K (File No. 000-31523) filed with the Commission on April 17, 2008.
- (22) Incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K (File No. 000-31523) filed with the Commission on September 4, 2007.
- (23) Incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K (File No. 000-31523) filed with the Commission on June 3, 2008.
- (24) Incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K (File No. 000-31523) filed with the Commission on June 2, 2009.
- (25) Incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10 Q (File No. 000 31523) for the fiscal quarter ended March 31, 2009.
- (26) Incorporated by reference to Exhibit 14.1 to the Registrant's Annual Report on Form 10-K (File No. 000-31523) for the fiscal year ended December 31, 2003.

**(b) Exhibits**

See the list of Exhibits under Item 15(a)(3) of this Annual Report on Form 10-K.

**(c) Financial Statement Schedules**

See the Schedule under Item 15(a)(2) of this Annual Report on Form 10-K.

## 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.

Dated: March 5, 2010

IXIA

/s/ ATUL BHATNAGAR

Atul Bhatnagar  
Chief Executive Officer

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>Name</u>	<u>Title</u>	<u>Date</u>
<u>/s/ ATUL BHATNAGAR</u> Atul Bhatnagar	President, Chief Executive Officer and Director (Principal Executive Officer)	March 5, 2010
<u>/s/ THOMAS B. MILLER</u> Thomas B. Miller	Chief Financial Officer (Principal Financial and Accounting Officer)	March 5, 2010
<u>/s/ ERROL GINSBERG</u> Errol Ginsberg	Chief Innovation Officer and Chairman of the Board	March 5, 2010
<u>/s/ JON F. RAGER</u> Jon F. Rager	Director	March 5, 2010
<u>/s/ GAIL HAMILTON</u> Gail Hamilton	Director	March 5, 2010
<u>/s/ JONATHAN FRAM</u> Jonathan Fram	Director	March 5, 2010
<u>/s/ LAURENT ASSCHER</u> Laurent Asscher	Director	March 5, 2010

IXIA

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## Report of Independent Registered Public Accounting Firm

To Board of Directors and Stockholders of Ixia:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, shareholders' equity and cash flows present fairly, in all material respects, the financial position of Ixia and its subsidiaries at December 31, 2009 and 2008, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2009 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2009, based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control Over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated 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 audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for business combinations in 2009.

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

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

As described in Management's Report on Internal Control over Financial Reporting appearing under Item 9A, management has excluded the N2X Business from its assessment of internal control over financial reporting as of December 31, 2009 because it was acquired by the Company in a purchase business combination during late 2009. We have also excluded the N2X Business from our audit of internal control over financial reporting. Total assets and total revenues of the N2X Business represented 3.2% and 3.9%, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2009.

/s/ PricewaterhouseCoopers LLP

Los Angeles, California  
March 5, 2010

IXIA  
Consolidated Balance Sheets  
(in thousands)

	<u>December 31,</u> <u>2009</u>	<u>December 31,</u> <u>2008</u>
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 15,061	\$ 192,791
Short-term investments in marketable securities	10,337	9,850
Accounts receivable, net	55,765	34,001
Inventories	14,541	14,966
Deferred income taxes	—	4,855
Prepaid expenses and other current assets	<u>9,727</u>	<u>4,981</u>
Total current assets	105,431	261,444
Investments in marketable securities	53,582	3,657
Property and equipment, net	18,693	18,506
Deferred income taxes	—	14,945
Intangible assets, net	69,132	10,592
Goodwill	60,121	16,728
Other assets	<u>2,129</u>	<u>2,554</u>
Total assets	<u>\$ 309,088</u>	<u>\$ 328,426</u>
<b>Liabilities and Shareholders' Equity</b>		
Current liabilities:		
Accounts payable	\$ 6,136	\$ 4,729
Accrued expenses	21,253	18,823
Deferred revenues	29,842	19,558
Income taxes payable	<u>1,263</u>	<u>452</u>
Total current liabilities	58,494	43,562
Deferred revenues	7,309	6,109
Other liabilities	<u>6,620</u>	<u>5,559</u>
Total liabilities	<u>72,423</u>	<u>55,230</u>
Commitments and contingencies (Note 9)		
Shareholders' equity:		
Preferred stock, without par value; 1,000 shares authorized and none outstanding	—	—
Common stock, without par value; 200,000 shares authorized at December 31, 2009 and 2008; 63,062 and 63,391 shares issued and outstanding as of December 31, 2009 and 2008, respectively	87,283	92,386
Additional paid-in capital	118,754	107,882
Retained earnings	28,979	73,182
Accumulated other comprehensive income (loss)	<u>1,649</u>	<u>(254)</u>
Total shareholders' equity	<u>236,665</u>	<u>273,196</u>
Total liabilities and shareholders' equity	<u>\$ 309,088</u>	<u>\$ 328,426</u>

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

IXIA  
Consolidated Statements of Operations  
(in thousands, except per share data)

	<u>Year Ended December 31,</u>		
	<u>2009</u>	<u>2008</u>	<u>2007</u>
Revenues:			
Products	\$ 142,871	\$ 146,802	\$ 148,226
Services	35,123	29,065	25,895
Total revenues	<u>177,994</u>	<u>175,867</u>	<u>174,121</u>
Costs and operating expenses: <sup>(1)</sup>			
Cost of revenues - products	36,722	32,411	32,724
Cost of revenues - services	3,859	4,475	3,870
Research and development	53,977	49,167	47,407
Sales and marketing	60,374	59,374	57,420
General and administrative	28,061	25,502	24,927
Amortization of intangible assets	11,391	5,664	7,108
Acquisition related	6,179	1,479	—
Restructuring	4,637	—	—
Impairment of purchased technology and intangible assets	—	—	3,263
Total costs and operating expenses	<u>205,200</u>	<u>178,072</u>	<u>176,719</u>
Loss from operations	(27,206)	(2,205)	(2,598)
Interest and other income, net	2,160	6,574	11,723
Other-than-temporary impairment on investments	(2,761)	(20,243)	—
(Loss) income before income taxes	(27,807)	(15,874)	9,125
Income tax expense	16,396	21	2,119
Net (loss) income	<u>\$ (44,203)</u>	<u>\$ (15,895)</u>	<u>\$ 7,006</u>
(Loss) earnings per share:			
Basic	\$ (0.70)	\$ (0.24)	\$ 0.10
Diluted	\$ (0.70)	\$ (0.24)	\$ 0.10
Weighted average number of common and common equivalent shares outstanding:			
Basic	62,710	65,087	67,936
Diluted	62,710	65,087	69,386
<sup>(1)</sup> Stock-based compensation included in:			
Cost of revenues - products	\$ 478	\$ 513	\$ 519
Cost of revenues - services	182	195	197
Research and development	4,491	4,166	5,243
Sales and marketing	2,989	3,411	4,416
General and administrative	2,395	2,360	2,659

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



IXIA  
Consolidated Statements of Shareholders' Equity  
(in thousands)

	Common Stock		Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Income (loss)	Total
	Shares	Amount				
Balance as of December 31, 2006	67,351	\$132,413	\$ 86,305	\$ 82,071	\$ —	\$300,789
Net income				7,006		7,006
Change in unrealized gains and losses on investments, net of tax					(2,844)	(2,844)
Cumulative translation adjustment					18	18
Comprehensive income						4,180
Shares issued pursuant to stock incentive plans, exercise of employee stock purchase plan options and warrants	1,739	8,870				8,870
Repurchase of shares pursuant to stock buyback program	(919)	(9,191)				(9,191)
Stock-based compensation			13,034			13,034
Stock award tax shortfall			(1,182)			(1,182)
Balance as of December 31, 2007	68,171	132,092	98,157	89,077	(2,826)	316,500
Net loss				(15,895)		(15,895)
Change in unrealized gains and losses on investments, net of tax					(1,680)	(1,680)
Reclassification adjustment for investment losses recognized in net loss, net of tax					4,191	4,191
Cumulative translation adjustment					61	61
Comprehensive loss						(13,323)
Shares issued pursuant to stock incentive plans and employee stock purchase plan options	1,029	3,897				3,897
Repurchase of shares pursuant to stock buyback programs	(5,809)	(43,603)				(43,603)
Stock-based compensation			10,645			10,645
Stock award tax shortfall			(920)			(920)
Balance as of December 31, 2008	63,391	92,386	107,882	73,182	(254)	273,196
Net loss				(44,203)		(44,203)
Change in unrealized gains and losses on investments, net of tax					1,959	1,959
Cumulative translation adjustment					(56)	(56)
Comprehensive loss						(42,300)
Shares issued pursuant to stock incentive plans and employee stock purchase plan options	1,294	3,321				3,321
Repurchase of shares pursuant to stock buyback programs	(1,623)	(8,424)				(8,424)
Stock-based compensation			10,535			10,535
Stock award tax windfall			337			337
Balance as of December 31, 2009	<u>63,062</u>	<u>\$87,283</u>	<u>\$118,754</u>	<u>\$ 28,979</u>	<u>\$ 1,649</u>	<u>\$236,665</u>

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

IXIA  
Consolidated Statements of Cash Flows  
(in thousands)

	Year Ended December 31,		
	2009	2008	2007
<b>Cash flows from operating activities:</b>			
Net (loss) income	\$ (44,203)	\$ (15,895)	\$ 7,006
Adjustments to reconcile net (loss) income to net cash provided by operating activities:			
Depreciation	10,195	11,527	11,560
Amortization of intangible assets	11,391	5,664	7,108
Impairment on investments	2,761	20,243	—
Impairment of purchased technology and intangible assets	—	—	3,263
Stock-based compensation	10,535	10,645	13,034
Deferred income taxes	22,955	(2,455)	(1,478)
Tax benefit (shortfall) from stock award transactions	337	(920)	(1,182)
Excess tax benefits from stock-based compensation	(103)	(188)	(309)
Changes in operating assets and liabilities, net of effect of acquisitions:			
Accounts receivable, net	(11,819)	(1,596)	3,816
Inventories	5,606	(2,235)	(1,127)
Prepaid expenses and other current assets	(2,589)	(1,596)	797
Other assets	1,560	(1,599)	(468)
Accounts payable	(240)	2,255	279
Accrued expenses	(6,494)	(167)	2,146
Deferred revenues	361	(248)	1,367
Income taxes payable and other liabilities	(4,978)	900	(43)
Net cash (used in) provided by operating activities	(4,725)	24,335	45,769
<b>Cash flows from investing activities:</b>			
Purchases of property and equipment	(8,025)	(8,540)	(10,931)
Purchases of available-for-sale securities	(262,704)	—	(54,150)
Proceeds from available-for-sale securities	225,529	2,001	161,850
Purchases of held-to-maturity securities	—	(8,924)	(45,469)
Proceeds from held-to-maturity securities	—	37,104	30,564
Purchases of other intangible assets	(362)	(314)	(175)
Payments in connection with acquisitions, net of cash acquired	(122,443)	(2,245)	(3,198)
Net cash (used in) provided by investing activities	(168,005)	19,082	78,491
<b>Cash flows from financing activities:</b>			
Proceeds from exercise of stock options, warrants and employee stock purchase plan options	3,321	3,897	8,870
Repurchase of common stock	(8,424)	(43,603)	(9,191)
Excess tax benefits from stock-based compensation	103	188	309
Net cash used in financing activities	(5,000)	(39,518)	(12)
Net (decrease) increase in cash and cash equivalents	(177,730)	3,899	124,248
Cash and cash equivalents at beginning of year	192,791	188,892	64,644
Cash and cash equivalents at end of year	\$ 15,061	\$ 192,791	\$ 188,892
<b>Supplemental disclosure of cash flow information:</b>			
Cash paid during the year for:			
Income taxes	\$ 1,326	\$ 5,443	\$ 4,724

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

## IXIA Notes to Consolidated Financial Statements

### 1. Business and Summary of Significant Accounting Policies

#### *Business*

We are a leading provider of converged test systems and services for wireless and wired infrastructures and services. Our hardware and software allow our customers to test and measure the performance, functionality, service quality and conformance of wireless and wired Internet Protocol (IP) equipment and networks, and the applications that run over them. Our solutions generate, capture, characterize and analyze high volumes of realistic network and application traffic, identifying problems, assessing performance, ensuring functionality and interoperability, and verifying conformance to industry specifications. We offer hardware platforms with interchangeable media interfaces, utilizing a common set of applications, Application Programming Interfaces (APIs) and automation tools that allow our customers to create integrated, easy-to-use automated test environments. The networks that our systems analyze primarily include Ethernet networks operating at speeds of up to 100 gigabits per second and wireless networks that carry data traffic over optical fiber, electrical cable and airwaves. We also offer hardware platforms and equipment that test wireless equipment, especially those associated with 3G (third generation), 4G (fourth generation) and Long-Term Evolution (LTE) networks. Customers also use our suite of software applications to test and verify web, Internet, security and business applications.

#### *Use of Estimates*

In the normal course of preparing financial statements in conformity with accounting principles generally accepted in the United States, management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

#### *Consolidation*

All subsidiaries are consolidated as they are 100% owned by us. All significant intercompany transactions and accounts are eliminated in consolidation.

#### *Cash and Cash Equivalents*

We consider all highly liquid investments with a maturity of three months or less at the date of purchase to be cash equivalents. Cash and cash equivalents are carried at cost, which approximates fair value. We generally place funds that are in excess of current needs in high credit quality instruments such as money market funds. There are no restrictions on the use of cash and investments.

#### *Fair Value of Financial Instruments*

Our financial instruments, including cash and cash equivalents, accounts receivable, accounts payable and other liabilities are carried at cost, which approximates their fair values because of the short-term maturity of these instruments and the relative stability of interest rates.

We utilize foreign currency forward contracts to hedge certain accounts receivable amounts that are denominated in Japanese Yen. These contracts are used to reduce the risk associated with exchange rate

movements, as gains and losses on these contracts are intended to offset exchange losses and gains on underlying exposures. Changes in the fair value of these forward contracts are recorded immediately in earnings. We do not enter into foreign exchange forward contracts for speculative or trading purposes. To date, net gains and losses on the above transactions have not been significant. As of December 31, 2009, we did not have any significant foreign currency forward contracts outstanding.

#### *Investments in Marketable Securities*

We determine the appropriate classification of investments in marketable securities at the time of purchase and reevaluate such determination at each balance sheet date. Accretion and amortization of purchase discounts and premiums are included in interest and other income, net. Available-for-sale securities are stated at fair value. The net unrealized gains or losses on available-for-sale securities are reported as a separate component of accumulated other comprehensive income or loss, net of tax. The specific identification method is used to compute realized gains and losses on our marketable securities. Gross realized gains and gross realized losses on our marketable securities were not significant for the years ended December 31, 2009, 2008 and 2007.

As of December 31, 2009, our available-for-sale securities consisted of U.S. government and government agency debt securities, corporate debt securities and auction rate securities. As of December 31, 2008, our available-for-sale securities consisted of corporate debt securities and auction rate securities. In light of the worsening economic climate and volatility in the financial markets, during the fourth quarter of 2008, we transferred our remaining investments in corporate debt securities issued by banks and financial institutions from held-to-maturity securities to available-for-sale securities. As a result of this transfer, we recorded a gross unrealized loss of \$332,000 through other comprehensive income during the fourth quarter of 2008. As of December 31, 2009, our U.S. government and government agency debt and corporate debt securities had a weighted contractual maturity of 1.24 years.

We periodically review our marketable securities for impairment. If we conclude that any of our investments are impaired, we determine whether such impairment is "other-than-temporary." Factors we consider to make such a determination include, among others, the severity of the impairment, the reason for the decline in value and the potential recovery period. In April 2009, we adopted accounting guidance which amended the other-than-temporary impairment model for debt securities. Under the accounting guidance, declines in the fair value of held-to-maturity and available-for-sale debt securities below their cost that are deemed to be other-than-temporary are reflected in earnings to the extent the impairment is related to credit losses. The amount of the impairment related to other factors is recognized in other comprehensive income. During 2007, we recorded an unrealized temporary loss of \$4.7 million (pre-tax) related to our auction rate securities through other comprehensive income. During the fourth quarter of 2008, we recorded an unrealized other-than-temporary impairment charge of \$15.8 million (pre-tax) to earnings related to our auction rate securities, which included the reclassification of the unrealized temporary loss of \$4.7 million (pre-tax) recorded through other comprehensive income for the year ended December 31, 2007. During 2008, we also recorded an other-than-temporary impairment charge of \$4.4 million to earnings related to our investments in bonds issued by Lehman Brothers Holdings, Inc. During 2009, we recorded an other-than-temporary impairment charge of \$2.8 million (pre-tax) to earnings related to our illiquid auction rate securities. See Note 5 for additional information.

#### *Accounts Receivable and Allowance for Doubtful Accounts*

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. The allowance for doubtful accounts is based on the best estimate of the amount of probable credit losses in existing accounts receivable. The allowance for doubtful accounts is determined based on historical write-off experience, our assessment of current customer information and other relevant data. We review the allowance for doubtful

accounts monthly. Past due balances of 60 days and over are reviewed individually for collectibility. Account balances are charged off against the allowance when management believes it is probable the receivable will not be recovered. We do not have any off-balance-sheet credit exposure related to our customers.

#### *Inventories*

Inventories are goods held for sale in the normal course of business. Inventories are stated at the lower of cost (first-in, first-out) or market. The inventory balance is segregated between raw materials, work in process ("WIP") and finished goods. Raw materials are low level components, many of which are purchased from vendors, WIP is partially assembled products and finished goods are products that are ready to be shipped to end customers. Consideration is given to inventory shipped and received near the end of a period and the transaction is recorded when transfer of title occurs. We regularly evaluate inventory for obsolescence and adjust to net realizable value based on inventory that is obsolete or in excess of current demand.

#### *Property and Equipment*

Property and equipment are stated at cost less accumulated depreciation. Depreciation of our computer software and equipment is computed using the straight-line method based upon the estimated useful lives of the applicable assets, ranging from two to five years. Leasehold improvements are amortized over the lesser of the lease term or the estimated useful lives of the improvements. Useful lives are evaluated regularly by management in order to determine recoverability in light of current technological conditions. Property and equipment also includes the cost of our products used for research and development and sales and marketing activities, including product demonstrations for potential customers. Repairs and maintenance are charged to expense as incurred while renewals and improvements are capitalized. Upon the sale or retirement of property and equipment, the accounts are relieved of the cost and the related accumulated depreciation, with any resulting gain or loss included in the statements of operations.

#### *Goodwill, Purchased Intangible and Other Long-Lived Assets*

Goodwill is recorded as the difference, if any, between the aggregate consideration paid for an acquisition and the fair value of the acquired net tangible and intangible assets. Although goodwill is not amortized, we review our goodwill for impairment annually, or more frequently, if events or changes in circumstances warrant a review. We completed our annual impairment test of our single reporting unit in the fourth quarter of 2009 and determined that there was no impairment.

Acquired intangible assets with finite lives, including purchased technology and customer relationships, are amortized over their estimated useful lives and reflected in the Amortization of Intangible Assets line item on our statements of operations. Our acquired intangible assets are reviewed for impairment whenever an impairment indicator exists. We continually monitor events or changes in circumstances that could indicate that the carrying amounts of our long-lived assets, including our intangible assets, may not be recoverable. When such events or changes in circumstances occur, we assess recoverability by determining whether the carrying value of such assets will be recovered through the undiscounted expected future cash flows. If the future undiscounted cash flows are less than the carrying amount of these assets, we recognize an impairment loss based on the excess of the carrying amount over the fair value of the assets. Fair value is determined using a discounted cash flow analysis that involves the use of significant estimates and assumptions, some of which may be based in part on historical experience, forecasted information and discount rates. During the year ended December 31, 2007, we recorded an impairment loss related to previously acquired purchased technology and certain other intangible assets (see Note 7 for additional information). No such impairments were recorded during the years ended December 31, 2009 and 2008.

### *Litigation*

We are currently involved in certain legal proceedings. We accrue for losses when the loss is deemed probable and the liability can reasonably be estimated. Where a liability is probable and there is a range of estimated loss with no best estimate in the range, we record the minimum estimated liability related to the claim. As additional information becomes available, we assess the potential liability related to our pending litigation and revise our estimates. See Note 9 for additional information.

### *Product Warranty*

We generally provide an initial standard warranty (generally for 90-day or 12-month periods) on our hardware products after product shipment and accrue for estimated future warranty costs based on actual historical experience and other relevant data, as appropriate, at the time product revenue is recognized. All product warranty expenses are reflected within cost of sales in the accompanying consolidated statements of operations. Accrued product warranty costs are included as a component of accrued expenses in the accompanying consolidated balance sheets.

Activity in the product warranty liability account for the years presented is as follows (in thousands):

	December 31, <u>2009</u>	December 31, <u>2008</u>	December 31, <u>2007</u>
Balance at beginning of year	\$ 933	\$ 577	\$ 344
Current year provision	533	619	596
Expenditures	(544)	(263)	(363)
Adjustments relating to pre-existing warranties	<u>(421)</u>	<u>—</u>	<u>—</u>
Balance at end of year	<u>\$ 501</u>	<u>\$ 933</u>	<u>\$ 577</u>

### *Revenue Recognition*

Our revenues are principally derived from the sale and support of our test systems. Product revenues primarily consist of sales of our hardware and software products. Our service revenues primarily consist of the provision of post contract customer support and maintenance ("PCS") related to the initial period provided with the product purchase (generally for 90-day or 12-month periods) and separately purchased extended PCS contracts, and to our implied PCS obligations. Service revenues also include separately purchased extended hardware warranty support for certain of our products, training and other professional services. PCS on our software products includes unspecified when and if available software upgrades and customer technical support services. In some instances our software products may be installed and operated independently from our hardware products. At other times, our software products are installed on and work with our hardware products to enhance the functionality of the overall test system. As our software is generally more than incidental to the sale of our test systems, we recognize revenue by applying software revenue recognition guidance.

Our test systems are generally fully functional at the time of shipment and do not require us to perform any significant production, modification, customization or installation after shipment. As such, revenue from hardware and software product sales to customers, including distributors, is recognized upon shipment provided that (i) evidence of an arrangement exists, which is typically in the form of a customer purchase order; (ii) delivery has occurred (i.e., risks and rewards of ownership have passed to the customer); (iii) the sales price is fixed or determinable; and (iv) collection is deemed probable.

When sales arrangements involve multiple elements, or multiple products, and we have vendor-specific objective evidence ("VSOE") of fair value for each element in the arrangement, we recognize revenue based on the relative fair value of all elements within the arrangement. We determine VSOE based on sales prices charged to customers when the same element is sold separately or based upon stated substantive PCS renewal rates for certain arrangements. Many of our products, such as our software products, typically include an initial period (generally 90-day or 12-month periods) of free PCS, which is not sold separately. Accordingly, we are unable to establish VSOE for these products.

In cases where VSOE only exists for the undelivered elements such as PCS, we apply the residual method to recognize revenue. Under the residual method, the total arrangement fee is allocated first to the undelivered elements, typically PCS, based on their VSOE, and the residual portion of the fee is allocated to the delivered elements, typically our hardware and software products, and is recognized as revenue assuming all other revenue recognition criteria as described above have been met.

If VSOE cannot be determined for all undelivered elements of an arrangement, we defer revenue until the earlier of (i) the delivery of all elements or (ii) the establishment of VSOE for all undelivered elements, provided that if the only undelivered element is PCS or a service, the total arrangement fee is recognized as revenue over the PCS or service term.

Services revenues from our initial and separately purchased extended PCS arrangements (generally offered for 12-month periods) are recognized ratably over the contractual coverage period. In addition, for implied PCS obligations we defer revenues from product sales and allocate these amounts to PCS revenues to account for the circumstances in which we provide PCS after the expiration of the customer's contractual PCS period. Deferred revenues for these implied PCS obligations are recognized ratably over the implied PCS period, which is typically based on the expected economic life of our software products of four years. To the extent we determine that implied PCS is no longer being provided after the expiration of the customer's contractual PCS period, the remaining deferred revenue balance related to the implied PCS obligation is reversed and recognized as revenue in the period of cessation of the implied PCS obligation. The implied PCS obligation for our software products ceases upon (i) the license management of our software upgrades and (ii) our determination not to provide PCS after the expiration of the contractual PCS period. Our implied PCS obligation also ceases for products that are not license managed provided we have discontinued development, sales activities and support for those specific products. Our license management system locks a software license to a specific computer or Ixia hardware product on which our software resides. The system then manages and controls the provision of software upgrades to ensure that the upgrades are only provided to customers that are entitled to receive such upgrades during an initial or extended PCS period. For the years ended December 31, 2009, 2008 and 2007, services revenues related to our implied PCS obligations approximated \$3.9 million, \$4.2 million and \$3.4 million, respectively. For the years ended December 31, 2009, 2008 and 2007, \$575,000, \$0 and \$0, respectively, of deferred revenue relating to implied PCS was reversed and recognized as product revenues as a result of the license management of certain products and our determination not to provide PCS after the expiration of the contractual PCS period.

Revenues from our separately purchased extended hardware warranty arrangements are recognized ratably over the contractual coverage period. We recognize revenues from training and other professional services at the time the services are provided or completed, as applicable.

We use distributors to complement our direct sales and marketing efforts in certain international markets. Due to the broad range of features and options available with our hardware and software products, distributors generally do not stock our products and typically place orders with us after receiving an order from an end customer. These distributors receive business terms of sale generally similar to those received by our other customers.

### *Cost of Revenues*

Our cost of revenues related to the sale of our hardware and software products includes materials, payments to third party contract manufacturers, royalties, and salaries and other expenses related to our manufacturing, operations, technical support and professional service personnel. We outsource the majority of our manufacturing operations, and we conduct supply chain management, quality assurance, documentation control, shipping and some final assembly and testing at our facility in Calabasas, California. Accordingly, a significant portion of our cost of revenues related to our products consists of payments to our contract manufacturers. Cost of revenues related to the provision of services includes salaries and other expenses associated with customer and technical support services, professional services and the warranty cost of hardware that is replaced or repaired during the warranty coverage period. Cost of revenues does not include the amortization of purchased technology related to our acquisitions of certain businesses, product lines and technologies of \$9.2 million, \$4.8 million and \$5.2 million for the years ended December 31, 2009, 2008 and 2007, respectively, which are included within our Amortization of Intangible Assets line item on our consolidated statements of operations.

### *Research and Development*

Research and development expenses consist primarily of salaries and other personnel costs related to the design, development, testing and enhancement of our products. Costs related to research and development activities, including those incurred to establish the technological feasibility of a software product, are expensed as incurred. If technological feasibility is established, all development costs incurred until general product release are subject to capitalization. To date, the establishment of technological feasibility of our products and general release have substantially coincided. As a result, we have not capitalized any development costs.

### *Software Developed for Internal Use*

We capitalize costs of software, consulting services, hardware and payroll-related costs incurred to purchase or develop internal-use software. We expense costs incurred during preliminary project assessment, research and development, re-engineering, training and application maintenance phases. To date, internal costs incurred to develop software for internal use have not been significant.

### *Advertising*

Advertising costs are expensed as incurred. Advertising costs were \$1.0 million, \$1.0 million and \$912,000 for the years ended December 31, 2009, 2008 and 2007, respectively.

### *Stock-Based Compensation*

Share-based payments, including grants of stock options, restricted stock units and employee stock purchase rights, are required to be recognized in the financial statements based on the estimated fair values for accounting purposes on the grant date. We use the Black-Scholes option pricing model to estimate the fair value for accounting purposes of share-based awards. The determination of the fair value of share-based awards utilizing the Black-Scholes model is affected by our stock price and a number of assumptions, including expected volatility, expected life and risk-free interest rate. The expected life and expected volatility are estimated based on historical and other data trended into the future. The risk-free interest rate assumption is based on observed interest rates appropriate for the terms of our share-based awards. Stock-based compensation expense recognized in our consolidated financial statements is based on awards that are ultimately expected to vest. The amount of stock-based compensation expense is reduced for estimated forfeitures based on historical experience as well as future expectations. Forfeitures are required to be estimated at the time of grant and revised, if necessary, in subsequent periods if estimated and actual forfeitures differ from these initial estimates. We



evaluate the assumptions used to value share-based awards on a periodic basis. If factors change and we employ different assumptions, stock-based compensation expense may differ significantly from what we have recorded in the past. If there are any modifications or cancellations of the underlying unvested share-based awards, we may be required to accelerate, increase or cancel any remaining unearned stock-based compensation expense. We attribute the value of stock-based compensation to expense based on the graded, or accelerated multiple-option, approach.

The balance of gross unrecognized stock-based compensation to be expensed in the periods 2010 through 2013 related to unvested share-based awards as of December 31, 2009 was approximately \$15.4 million.

#### *Income Taxes*

We account for income taxes using the liability method. Deferred taxes are determined based on the differences between the financial statement and tax bases of assets and liabilities, using enacted tax rates in effect for the year in which the differences are expected to reverse. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts expected to be realized.

We recognize, in our consolidated financial statements, the impact of tax positions that are more likely than not to be sustained upon examination based on the technical merits of the positions.

#### *Earnings (Loss) Per Share*

Basic (loss) earnings per share is computed using the weighted-average number of common shares outstanding during the period. Diluted earnings per share is computed using the weighted-average number of common shares and dilutive potential common shares outstanding during the period. Dilutive potential common shares primarily consist of employee stock options.

#### *Foreign Currency Translation and Transactions*

Assets and liabilities of non-U.S. subsidiaries that operate in a local currency environment are translated to U.S. Dollars at exchange rates in effect at the balance sheet date, with the resulting translation adjustments included as a separate component in accumulated other comprehensive income (loss), which have not been significant to date. Income and expense accounts are translated at average exchange rates during the year. Where the U.S. Dollar is the functional currency, certain balance sheet and income statement accounts are remeasured at historical exchange rates and translation adjustments from the remeasurement of the local currency amounts to U.S. Dollars are included in interest and other income, net. For the years ended December 31, 2009, 2008 and 2007, gains and losses resulting from foreign currency transactions have not been significant and are included in interest and other income, net.

#### *Comprehensive Income*

Comprehensive income (loss) includes all changes in equity (net assets) during a period from non-owner sources. Accumulated other comprehensive income (loss) includes unrealized gains and losses on investments and foreign currency translation adjustments.

#### *Segments*

Operating segments are defined as components of an enterprise engaged in business activities for which discrete financial information is available and regularly reviewed by the chief operating decision maker ("CODM") of the enterprise to make decisions about resources to be allocated to the segment and to assess its

performance. Our CODM is our Chief Executive Officer who reviews operating results presented on a consolidated basis for the purposes of allocating resources and evaluating financial performance. Accordingly, we have determined that we operated within one separately reportable business segment as of, and for the years ended, December 31, 2009, 2008 and 2007. Future changes to our organizational structure or our business, or changes in the way our CODM manages our business, may result in changes to our reportable segments.

#### *Reclassifications and Presentation*

Certain reclassifications have been made to prior period consolidated financial statements to conform to the current presentation. These reclassifications include (i) presenting acquisition related costs separately in the statements of operations and (ii) including amortization of purchased technology within the amortization of intangible assets line item in the accompanying consolidated statements of operations.

#### *Recent Accounting Pronouncements*

In June 2009, the Financial Accounting Standards Board ("FASB") issued an update of Accounting Standards Codification ("ASC") 105, "Generally Accepted Accounting Principles," ("GAAP") which establishes the FASB Accounting Standards Codification, or Codification. The Codification supersedes all existing accounting standard documents and the Codification is the single source of authoritative non-governmental U.S. GAAP. All other accounting literature not included in the Codification is considered non-authoritative. We have conformed these financial statements and related Notes to the new Codification.

In October 2009, the FASB issued Accounting Standards Update ("ASU") No. 2009-13, "Multiple-Deliverable Revenue Arrangements" ("ASU 2009-13"). ASU 2009-13 establishes the accounting and reporting guidance for arrangements including multiple revenue-generating activities. ASU 2009-13 provides amendments to the criteria for separating deliverables, and measuring and allocating arrangement consideration to one or more units of accounting. The amendments in ASU 2009-13 also establish a selling price hierarchy for determining the selling price of a deliverable. Significantly enhanced disclosures are also required to provide information about a vendor's multiple-deliverable revenue arrangements, including information about the nature and terms, significant deliverables, and its performance within arrangements. This guidance also requires providing information about the significant judgments made and changes to those judgments and about how the application of the relative selling-price method affects the timing or amount of revenue recognition. This guidance is effective prospectively for revenue arrangements entered into or materially modified in the fiscal years beginning on or after June 15, 2010 or on a retrospective basis. Early application is permitted. We expect to adopt ASU 2009-13 on January 1, 2011 and are currently evaluating the impact of adopting ASU 2009-13 on our consolidated financial position, results of operations and cash flows.

In October 2009, the FASB issued ASU No. 2009-14, "Certain Revenue Arrangements That Include Software Elements" ("ASU 2009-14"). ASU 2009-14 changes the accounting model for revenue arrangements that include both tangible products and software elements that are "essential to the functionality," and scopes these products out of current software revenue guidance. The new guidance includes factors to help companies determine the software elements that are considered "essential to the functionality." The amendments will now subject software-enabled products to other revenue guidance and disclosure requirements, such as guidance surrounding revenue arrangements with multiple-deliverables. The amendments in ASU 2009-14 are effective prospectively for revenue arrangements entered into or materially modified in the fiscal years beginning on or after June 15, 2010 or on a retrospective basis. Early application is permitted. We expect to adopt ASU 2009-14 on January 1, 2011 relating to new revenue arrangements entered into or modified after that date, and are currently evaluating the impact of adopting ASU 2009-14 on our consolidated financial position, results of operations and cash flows.

## 2. Acquisitions

On January 1, 2009, we adopted the new accounting guidance for accounting for business combinations, which established principles and requirements for how the acquirer of a business recognizes, measures and discloses in its financial statements the identifiable assets acquired, the liabilities assumed and any noncontrolling interest in the acquiree. The new accounting guidance for business combinations also requires that transaction costs be expensed as incurred. Prior to adoption of the new accounting guidance, transactions costs were recorded as part of the purchase price. The guidance required prospective application for all acquisitions after January 1, 2009. Our acquisitions of Catapult Communications Corporation ("Catapult") on June 23, 2009 and Agilent Technologies, Inc.'s ("Agilent") N2X Data Network Testing Product Line business ("N2X Business") on October 30, 2009 have been accounted for in accordance with the new guidance.

### *Catapult Communications Corporation*

On June 23, 2009, we completed our acquisition of all of the outstanding shares of common stock of Catapult. Catapult provides advanced wireless test systems to network equipment manufacturers and service providers worldwide. Catapult's 3G and 4G wireless networking test solutions complement our IP performance test systems and service verification platforms. With this acquisition, we have broadened our product portfolio and are able to provide a single source solution for testing converged IP services over wireless and wireline networks to new and existing customers. In addition, we expect to realize operational and cost synergies, leverage the existing sales channels and product development resources, and utilize the assembled workforce. These factors, among others, contributed to a purchase price in excess of the estimated fair value of Catapult's net identifiable assets acquired, and, as a result, we have recorded goodwill in connection with this transaction.

The aggregate consideration totaled \$106.6 million and consisted of (i) \$104.6 million paid for the outstanding shares of common stock of Catapult and (ii) \$2.0 million paid to holders of options to purchase Catapult common stock that were cancelled in connection with the acquisition and that had exercise prices lower than the per share purchase price. For the years ended December 31, 2009 and 2008, acquisition costs related to the Catapult transaction, including integration activities, were \$4.0 million and \$741,000, respectively. These acquisition related costs have been expensed as incurred, and have been included within the Acquisition Related expenses line item on our consolidated statements of operations. The acquisition was funded from our existing cash and cash equivalents.

The following table summarizes the preliminary allocation of the purchase price to the estimated fair values of the assets acquired and liabilities assumed at the date of the Catapult acquisition (in thousands):

Cash and cash equivalents	\$	28,190
Short-term investments in marketable securities		8,638
Accounts receivable		3,815
Inventories		3,950
Other current assets		3,331
Long-term investments in marketable securities		4,366
Deferred income taxes (non-current)		2,490
Other non-current assets		2,108
Identifiable intangible assets		48,790
Goodwill		<u>22,466</u>
Total assets acquired		128,144
Accounts payable and accrued expenses		(9,116)
Deferred revenues		(5,900)
Other liabilities (non-current)		<u>(6,570)</u>
Net assets acquired	\$	<u>106,558</u>

The preliminary purchase price allocation is pending the receipt of certain tax-related information, such as the final tax attributes that will be finalized upon the filing of certain pre-acquisition tax returns.

The identifiable intangible assets of \$48.8 million consist of \$26.7 million of acquired technology, \$13.4 million of customer relationships, \$6.1 million of service agreements, \$1.0 million related to a non-compete agreement and \$1.6 million of other identifiable intangible assets. These intangible assets will be amortized using a straight-line method over their expected useful lives ranging from three to six years. The goodwill recorded in connection with this transaction is not deductible for income tax purposes.

*Agilent Technologies' N2X Data Networks Product Line*

On October 30, 2009, we completed our acquisition of Agilent's N2X Business. The N2X Business provides network equipment manufacturers and service providers with solutions to validate the performance and scalability characteristics of next-generation network equipment for voice, video and data (multiplay) services. With this acquisition, we expect to be able to broaden our product portfolio, expand our customer base, accelerate our growth in key markets and capture additional market share. In addition, we expect to realize operational and cost synergies, leverage the existing sales channels and product development resources, and utilize the assembled workforce. We believe that these factors, among others, contributed to a purchase price in excess of the estimated fair value of the net identifiable assets acquired, and, as a result, we recorded goodwill in connection with this transaction.

We paid an initial cash purchase price of \$44.1 million and assumed certain liabilities of Agilent relating to the N2X Business. The cash purchase price was subject to a working capital adjustment and has been subsequently reduced to \$43.5 million. As a result, we have recorded a \$527,000 receivable due from Agilent. The aggregate purchase price was funded from our existing cash and cash equivalents. In return for the consideration paid, we acquired certain assets and liabilities of Agilent's N2X Business, including inventory, accounts receivables, fixed assets, accounts payable, customer relationships, certain intellectual property rights, and other assets. The assembled workforce of the N2X Business was comprised of approximately 200 individuals engaged primarily in research and development and sales activities. As part of the transaction, we also entered into a Transition Services Agreement with Agilent whereby Agilent will continue to assist in the operation of certain portions of the N2X Business for the first 2 to 4 months of 2010 as we work to transition the employees and operations to Ixia. For the year ended December 31, 2009, acquisition costs related to this transaction totaled \$2.2 million. These acquisition costs have been expensed as incurred, and have been included within the Acquisition Related expenses line item on our consolidated statements of operations.

The following table summarizes the preliminary allocation of the purchase price to the estimated fair values of the assets acquired and liabilities assumed at the date of the N2X Business acquisition (in thousands):

Accounts receivable	\$ 6,130
Inventories	1,231
Property and equipment	1,439
Identifiable intangible assets	21,800
Goodwill	<u>20,927</u>
Total assets acquired	51,527
Accounts payable and accrued expenses	(2,757)
Deferred revenues	<u>(5,223)</u>
Net assets acquired	<u>\$ 43,547</u>

The preliminary purchase price allocation is based on a preliminary valuation of the assets acquired and liabilities assumed, and our estimates and assumptions are subject to change within the purchase price allocation period as valuations are finalized.

The identifiable intangible assets of \$21.8 million consist of \$10.4 million of acquired technology, \$10.0 million of customer relationships, \$0.4 million related to a non-compete agreement and \$1.0 million related to order backlog. These intangible assets will be amortized using a straight-line method over their expected economic lives ranging from six months to six years. We currently estimate that approximately \$8.2 million of the goodwill recorded in connection with this transaction will be tax deductible for income tax purposes.

#### *Pro Forma and Post Acquisition Results*

The following table summarizes the unaudited pro forma total revenues and net loss of the combined entities had the acquisitions of Catapult and the N2X Business occurred on January 1, 2009 and 2008, respectively (in thousands):

	<u>Year Ended</u> <u>December 31,</u>	
	<u>2009</u>	<u>2008</u>
	(Pro forma)	(Pro forma)
Total revenues	\$229,978	\$283,616
Net loss	(67,625)	(22,928)

The combined results in the table above have been prepared for comparative purposes only and include acquisition related adjustments for, among others items, amortization of identifiable intangible assets and reductions in revenues related to the estimated fair value adjustment to deferred revenues.

Since the acquisition dates, the results of Catapult and the N2X Business have been included in our consolidated financial statements. Included in our consolidated results of operations for the year ended December 31, 2009 are revenues of \$24.1 million and a loss before income taxes of approximately \$11.3 million related to these acquisitions. The combined results, as well as those of Catapult and the N2X Business included in our results subsequent to the acquisition date, do not purport to be indicative of the results of operations which would have resulted had the acquisition been effective at the beginning of the applicable periods noted above, or the future results of operations of the combined entity.

### **3. Restructuring Costs**

During the second quarter of 2009 and prior to the acquisition of Catapult, our management approved, committed to and initiated a plan to restructure our operations ("Ixia Restructuring"). The Ixia Restructuring included a net reduction in force of approximately 80 positions, which represented approximately 10% of our worldwide work force, including contractors, prior to the announcement of the restructuring. In 2009, we recognized restructuring costs related to our Ixia Restructuring of approximately \$1.1 million, which was recorded to the Restructuring line item within our consolidated statements of operations. These costs primarily related to one-time employee termination benefits consisting of severance and other related costs. The restructuring was substantially completed during the third quarter of 2009, and as of December 31, 2009, we had approximately \$42,000 of liability reserved related to the Ixia Restructuring.

During the third quarter of 2009, our management approved, committed to and initiated a plan to restructure our operations in light of our acquisition of Catapult ("Catapult Restructuring"). The Catapult

Restructuring included a net reduction in force of approximately 45 positions, which represented approximately 4% of our worldwide work force, including contractors, at the beginning of the third quarter of 2009. In 2009, we recognized restructuring costs related to our Catapult Restructuring of approximately \$3.2 million related to one-time employee termination benefits consisting of severance and other related costs, as well as approximately \$354,000 of facility-related costs associated with the consolidation of certain research and development resources, which were recorded to the Restructuring line item within our consolidated statements of operations. The restructuring was substantially completed during the fourth quarter of 2009, and as of December 31, 2009, we had approximately \$837,000 of liability reserved related to the Catapult Restructuring.

Activity and reserve balances for restructuring charges are as follows (in thousands):

	Total	Ixia Restructuring	Catapult Restructuring
Reserve balances at January 1, 2009	\$ —	\$ —	\$ —
Charges	4,637	1,120	3,517
Payments	(3,662)	(1,078)	(2,584)
Non-cash items	(96)	—	(96)
Reserve balances at December 31, 2009	<u>\$ 879</u>	<u>\$ 42</u>	<u>\$ 837</u>

In January 2010, our management approved, committed to and initiated a plan to restructure our operations in light of our acquisition of the N2X Business in the fourth quarter of 2010 ("N2X Restructuring"). The N2X Restructuring includes a net reduction in force of approximately 80 positions, which represented approximately 7% of our worldwide work force, including contractors, at the end of the fourth quarter of 2009.

#### 4. Concentrations

##### *Credit Risk*

Financial instruments that subject us to concentrations of credit risk consist primarily of cash and cash equivalents, investments and trade accounts receivable. We maintain our cash and cash equivalents with reputable financial institutions, and at times, cash balances may be in excess of FDIC insurance limits. We extend differing levels of credit to customers, do not generally require collateral, and maintain reserves for potential credit losses based upon the expected collectibility of accounts receivable.

The continuing uncertain conditions in the financial and credit markets have reduced our ability to liquidate our auction rate securities that we have classified as long-term investments in marketable securities on our balance sheet. Of our total cash and investments balance of \$79.0 million as of December 31, 2009, \$5.7 million consists of these illiquid auction rate securities. See Note 5 for additional information.

##### *Significant Customer*

For the years ended December 31, 2009, 2008 and 2007, only one customer comprised more than 10% of total revenues as follows (in thousands, except percentages):

	Year Ended December 31,		
	2009	2008	2007
Amount of total revenues	\$ 27,792	\$ 36,857	\$ 41,655
As a percentage of total revenues	15.6%	21.0%	23.9%

As of December 31, 2009 and 2008, we had receivable balances from the customer approximating 14.2% and 13.9%, respectively, of total accounts receivable.

*International Data*

For the years ended December 31, 2009, 2008 and 2007, total international revenues based on customer location consisted of the following (in thousands, except percentages):

	Year Ended December 31,		
	2009	2008	2007
Amount of total revenues	\$ 76,325	\$ 63,045	\$ 60,946
As a percentage of total revenues	42.9%	35.8%	35.0%

As of December 31, 2009 and 2008, our property and equipment were geographically located as follows (in thousands):

	As of December 31,	
	2009	2008
United States	\$ 10,874	\$ 11,361
Romania	2,647	3,419
India	2,506	2,761
Other	<u>2,666</u>	<u>965</u>
	<u>\$ 18,693</u>	<u>\$ 18,506</u>

*Sources of Supply*

We outsource the manufacture, assembly and testing of printed circuit board assemblies, certain interface cards and certain chassis to a limited number of third party contract manufacturers and assembly companies. We cannot be certain that we will be able to effectively manage or retain our contract manufacturers, or that these contract manufacturers will continue to operate as going concerns or to meet our future requirements for timely delivery of products of sufficient quality and quantity. We and our contract manufacturers currently buy a number of key components of our products from a limited number of suppliers, which are manufactured by a limited number of companies. Although we believe that other contract manufacturers and suppliers could provide similar services and components on comparable terms, a change in one of our key contract manufacturers or suppliers could cause a delay in manufacturing, additional cost inefficiencies and a possible loss of sales, which could adversely affect our consolidated operating results.

**5. Selected Balance Sheet Data**

*Accounts Receivable, Net*

Accounts receivable, net consisted of the following (in thousands):

	December 31, 2009	December 31, 2008
Trade accounts receivable	\$ 56,419	\$ 34,765
Allowance for doubtful accounts	(654)	(764)
	<u>\$ 55,765</u>	<u>\$ 34,001</u>

Activity in the allowance for doubtful accounts during the years presented is as follows (in thousands):

	December 31, 2009	December 31, 2008	December 31, 2007
Balance at beginning of year	\$ 764	\$ 614	\$ 1,174
Charged to cost and expenses	372	300	300
Reversal of cost and expenses	—	—	(60)
Deductions	(482)	(150)	(800)
Balance at end of year	<u>\$ 654</u>	<u>\$ 764</u>	<u>\$ 614</u>

*Investments in Marketable Securities*

Investments in marketable securities as of December 31, 2009 consisted of the following (in thousands):

	Amortized Cost	Fair Value
Available-for-sale – short-term:		
U.S. government and agency debt securities	\$ 5,711	\$ 5,713
Corporate debt securities	<u>4,584</u>	<u>4,624</u>
	10,295	10,337
Available-for-sale – long-term:		
U.S. government and agency debt securities	34,534	34,673
Corporate debt securities	12,605	13,236
Auction rate securities	<u>3,823</u>	<u>5,673</u>
	<u>50,962</u>	<u>53,582</u>
	<u>\$ 61,257</u>	<u>\$ 63,919</u>

Investments in marketable securities as of December 31, 2008 consisted of the following (in thousands):

	Amortized Cost	Fair Value
Available-for-sale – short-term:		
Corporate debt securities	\$ 10,182	\$ 9,850
Available-for-sale – long-term:		
Auction rate securities	3,211	3,211
Corporate debt securities	<u>446</u>	<u>446</u>
	<u>3,657</u>	<u>3,657</u>
	<u>\$ 13,839</u>	<u>\$ 13,507</u>

During the latter half of 2007, certain of our auction rate securities failed to auction due to sell orders exceeding buy orders. Of our total cash and investments balance of \$79.0 million as of December 31, 2009, we currently hold illiquid auction rate securities with an estimated fair value of \$5.7 million (\$22.4 million at par value or original cost).



During the fourth quarter of 2008, Ambac Assurance Corporation ("Ambac") exercised a put option that effectively converted our auction rate debt securities with a par value of \$15.0 million to Ambac Assurance Auction Market Preferred Shares ("AMPS"). The AMPS are not registered; and provide holders with when, and if declared, noncumulative dividends and a liquidation preference in the event of a liquidation or dissolution of Ambac provided there are available funds to be distributed after creditor obligations have been met. The AMPS do not have a conversion feature, mandatory redemption option or maturity date.

We also hold auction rate securities with a par value of \$4.0 million that were issued by a trust created by a bank (the "Trust") and mature in December 2017. The Trust is collateralized by a bank deposit note and includes a pool of credit default swaps that were sold by the Trust, which exposes the collateral to claims in the event of default of any of the related underlying bonds.

During the fourth quarter of 2008, the credit ratings of our auction rate securities issued by Ambac and the Trust were significantly downgraded to as low as Ba1 (Moody's Investor Service) and BBB (Standard & Poor's), respectively. In light of the above and impact of the deepening financial crisis on banks and financial institutions, we believed that our auction rate security investments were other-than-temporarily impaired as it was probable that we would not collect the original principal amounts and the monthly interest or dividend payments. Accordingly, during the fourth quarter of 2008, we recorded an unrealized other-than-temporary impairment charge of \$15.8 million (pre-tax) to earnings related to our auction rate securities, which included the reclassification of the unrealized temporary loss of \$4.7 million (pre-tax) recorded through other comprehensive income for the year ended December 31, 2007.

During the first quarter of 2009, the estimated fair values of our auction rate securities issued by Ambac and the Trust declined substantially, and due to the ongoing financial crisis and the relatively low credit ratings of our auction rate securities, among other factors, we believed that our auction rate securities were other-than-temporarily impaired. Accordingly, during the first quarter of 2009, we recorded an additional other-than-temporary impairment charge of \$1.4 million (pre-tax) to earnings related to our auction rate securities issued by Ambac and the Trust. During the third quarter of 2009, Standard & Poor's Ratings Services downgraded the credit rating of our auction rate securities issued by Ambac from B to C. Ambac Assurance also discontinued paying monthly dividends on the AMPS effective August 1, 2009. Accordingly, an additional other-than-temporary impairment charge of \$1.4 million (pre-tax) was recorded in the third quarter of 2009 related to our auction rate securities issued by Ambac.

As a result of our acquisition of Catapult in June 2009, we acquired additional illiquid auction rate securities with an estimated aggregate fair value of \$4.4 million at the acquisition date. Since the date of acquisition, we have been able to sell nearly \$1.0 million (fair value at acquisition date) of these securities at a minimal loss. The remaining auction rate securities that were acquired as part of the Catapult transaction represent interests in student loans, closed-end mutual fund preferreds and municipal issues.

Based on the general lack of liquidity for our auction rate security portfolio as of December 31, 2009, we continue to classify these investments as long-term on our consolidated balance sheet.

We also hold investments in corporate debt securities that could be subject to default by the issuer or could suffer declines in fair value that become other-than-temporary. We currently hold bonds issued by Lehman Brothers Holdings, Inc. ("LBHI") with a face value of \$5.0 million and maturity date in July 2010. In September 2008, LBHI filed for bankruptcy. As a result, the credit rating of our LBHI bonds was significantly downgraded and LBHI ceased making interest payments on the bonds. We believe that our investment in the LBHI bonds is other-than-temporarily impaired as it is probable that we will not collect the total interest and principal amounts due according to the contractual terms of the bonds. For the year ended December 31, 2008, we recorded

pre-tax other-than-temporary impairment charges of \$4.4 million (i.e., the difference between our then carrying value and estimated fair value of our LBHI bonds) to earnings.

It is possible that we could recognize future impairment charges on our auction rate securities, LBHI bonds or our other investment securities we currently own if future events, new information or the passage of time cause us to determine that a decline in our carrying value is other-than-temporary. We will continue to review and analyze these securities each reporting period.

In light of the worsening economic climate and volatility in the financial markets, during the fourth quarter of 2008, we transferred our remaining investments in corporate debt securities issued by banks and financial institutions from held-to-maturity securities to available-for-sale securities. As a result of this transfer, we recorded a gross unrealized loss of \$332,000 through other comprehensive income during the fourth quarter of 2008.

#### *Inventories*

Inventories consisted of the following (in thousands):

	December 31, <u>2009</u>	December 31, <u>2008</u>
Raw materials	\$ 3,674	\$ 1,987
Work in process	4,731	4,932
Finished goods	<u>6,136</u>	<u>8,047</u>
	<u>\$ 14,541</u>	<u>\$ 14,966</u>

#### *Property and Equipment, Net*

Property and equipment, net consisted of the following (dollars in thousands):

	<u>Useful Life</u> (in years)	December 31, <u>2009</u>	December 31, <u>2008</u>
Computer equipment	3	\$ 10,178	\$ 8,580
Computer software	3-5	9,725	8,601
Demonstration equipment	2	13,382	12,592
Development equipment	5	16,872	15,466
Furniture and other equipment	5	16,751	15,216
Leasehold improvements	5-10	<u>6,645</u>	<u>4,255</u>
		73,553	64,710
Accumulated depreciation		<u>(54,860)</u>	<u>(46,204)</u>
		<u>\$ 18,693</u>	<u>\$ 18,506</u>

### Accrued Expenses

Accrued expenses consisted of the following (in thousands):

	December 31, <u>2009</u>	December 31, <u>2008</u>
Accrued vacation	\$ 4,990	\$ 3,797
Accrued payroll	3,457	2,682
Accrued legal and professional fees	2,395	1,251
Accrued commissions	1,203	1,524
Due to third parties for technology and certain assets	949	1,796
Accrued bonuses	915	2,509
Accrued property and sales tax payable	734	811
Accrued royalties	727	14
Employee stock purchase plan payroll deductions	689	687
Accrued warranty	501	933
Deferred rent	412	357
Accrued travel	349	479
Other	<u>3,932</u>	<u>1,983</u>
	<u>\$ 21,253</u>	<u>\$ 18,823</u>

### 6. Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in the principal or most advantageous market for an asset or liability in an orderly transaction between market participants at the measurement date. The hierarchy below lists three levels of fair value based on the extent to which inputs used in measuring fair value are observable in the market. We categorize each of our fair value measurements in one of these three levels based on the lowest level input that is significant to the fair value measurement in its entirety. These levels are:

- Level 1. Observable inputs such as quoted prices in active markets;
- Level 2. Inputs, other than the quoted prices in active markets, that are observable either directly or indirectly; and
- Level 3. Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

Financial assets carried at fair value as of December 31, 2009 and 2008 are classified in the table below in one of the three categories described above (in thousands):

	December 31, 2009				December 31, 2008			
	Fair Value	Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Inputs	Significant Unobservable Inputs	Fair Value	Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Inputs	Significant Unobservable Inputs
		(Level 1)	(Level 2)	(Level 3)		(Level 1)	(Level 2)	(Level 3)
Cash equivalents: <sup>(1)</sup>								
Money market funds	\$ 241	\$ 241	\$ —	\$ —	\$ 185,858	\$ 185,858	\$ —	\$ —
Short-term investments: <sup>(1)</sup>								
U.S. Treasury, government and agency debt securities	5,713	—	5,713	—	—	—	—	—
Corporate debt securities	4,624	—	4,624	—	9,850	—	9,850	—
Long-term investments:								
U.S. Treasury, government and agency debt securities	34,673	—	34,673	—	—	—	—	—
Corporate debt securities	13,236	—	13,236	—	446	—	446	—
Auction rate securities <sup>(2)</sup>	<u>5,673</u>	<u>—</u>	<u>—</u>	<u>5,673</u>	<u>3,211</u>	<u>—</u>	<u>—</u>	<u>3,211</u>
Total financial assets	<u>\$ 64,160</u>	<u>\$ 241</u>	<u>\$ 58,246</u>	<u>\$ 5,673</u>	<u>\$ 199,365</u>	<u>\$ 185,858</u>	<u>\$ 10,296</u>	<u>\$ 3,211</u>

(1) To estimate the fair value of our money market funds, U.S. government and agency debt securities, and corporate debt securities, we use the estimated fair value per our investment brokerage/custodial statements. To the extent deemed necessary, we may also obtain non-binding market quotes to corroborate the estimated fair values reflected in our investment brokerage/custodial statements.

(2) Given the disruption in the auction process described in Note 5, there is no longer an actively quoted market price for these securities. Accordingly, we utilized models to estimate the fair values of these auction rate securities based on, among other items: (i) the underlying structure of each security; (ii) the present value of future principal, interest and/or dividend payments discounted at the appropriate rate considering the market rate and conditions; (iii) consideration of the probabilities of default, auction failure, or repurchase at par for each period; and (iv) credit quality and estimates of the recovery rates in the event of default for each security. These estimated fair values could change significantly based on, among other events: (i) a further deterioration in market conditions; (ii) further declines in the credit quality of our auction rate securities or of the issuers of our auction rate securities; or (iii) a cessation of dividend payments or default on interest or principal payments by the issuer of the securities.

The following table summarizes the activity for the years ended December 31, 2009 and 2008 for those financial assets (primarily our auction rate securities) where fair value measurements are estimated utilizing Level 3 inputs (in thousands):

	Year Ended December 31,	
	2009	2008
Beginning balance	\$ 3,211	\$ 14,345
Unrealized gain recorded in other comprehensive income	1,849	—
Unrealized loss recorded in earnings (See Note 5)	(2,761)	(11,134)
Settlements	(992)	—
Additions from Catapult acquisition (See Note 2)	<u>4,366</u>	<u>—</u>
Ending balance	<u>\$ 5,673</u>	<u>\$ 3,211</u>
Unrealized losses recorded in earnings for Level 3 assets still held at December 31	<u>\$ (2,761)</u>	<u>\$ (11,134)</u>

On April 1, 2009, we adopted accounting guidance for estimating fair value when the volume and level of activity for the asset or liability have decreased significantly and in identifying circumstances that indicate a transaction is not orderly. This guidance is necessary to maintain the overall objective of fair value measurements, which is that fair value is 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 under current market conditions. The adoption of this accounting guidance had no impact on our financial position or results of operations.

On April 1, 2009, we adopted accounting guidance which amended the other-than-temporary impairment model for debt securities. Under the accounting guidance, declines in the fair value of held-to-maturity and available-for-sale debt securities below their cost that are deemed to be other-than-temporary are reflected in earnings to the extent the impairment is related to credit losses. The amount of the impairment related to other factors is recognized in other comprehensive income.

Effective for the second quarter of 2009, we adopted accounting guidance which required disclosures about the fair value of financial instruments in interim as well as in annual financial statements. Our financial instruments, including cash and cash equivalents, accounts receivable, accounts payable and other liabilities, are carried at cost, which approximates their fair values because of the short-term maturity of these instruments and the relative stability of interest rates.

## 7. Goodwill and Other Intangible Assets

The following table presents 2009 details of our total purchased intangible assets (in thousands):

	Weighted Average Useful Life (in years)	Gross	Accumulated Amortization	Net
Goodwill		\$ 60,121	\$ —	\$ 60,121
Other intangible assets:				
Technology	5.4	\$ 70,742	\$ (33,031)	\$ 37,711
Customer relationships	5.9	24,910	(2,943)	21,967
Service agreements	4.7	6,770	(1,144)	5,626
Non-compete	3.8	2,338	(1,059)	1,279
Trademark	4.7	1,576	(783)	793
Workforce	4.0	395	(395)	—
Other	0.8	4,038	(2,282)	1,756
		<u>\$ 110,769</u>	<u>\$ (41,637)</u>	<u>\$ 69,132</u>

The following table presents 2008 details of our total purchased intangible assets (in thousands):

	Weighted Average Useful Life (in years)	Gross	Accumulated Amortization	Net
Goodwill		\$ 16,728	\$ —	\$ 16,728
Other intangible assets:				
Technology	6.0	\$ 35,633	\$ (26,341)	\$ 9,292
Non-compete	2.4	937	(937)	—
Trademark	7.0	676	(526)	150
Workforce	4.0	395	(395)	—
Customer relationships	5.1	1,511	(1,511)	—
Other	1.4	3,072	(1,922)	1,150
		<u>\$ 42,224</u>	<u>\$ (31,632)</u>	<u>\$ 10,592</u>

In 2007, we recognized an impairment charge of \$1.5 million consisting of \$746,000 of purchased technology and \$765,000 of certain other intangible assets related to the wireless LAN testing tools acquired as part of Communication Machinery Corporation in July 2005. Also, in 2007, we recognized an impairment charge of \$1.8 million consisting of \$700,000 of purchased technology and \$1.1 million of certain other intangible assets related to the acquisition of the mobile video test product line from Dilithium Networks in January 2006. The impairment charges resulted from lower than expected current and projected operating profits for the applicable products and our decision to curtail sales and development efforts related to these products. We determined that the future expected undiscounted cash flows were less than the carrying value of the affected identifiable intangible assets, which indicated that an impairment existed. To measure the impairment, we used the discounted cash flow approach to reduce the carrying value of the affected assets to fair value, which resulted in the \$3.3 million impairment of the above noted purchased technology and other identifiable intangible assets.

The estimated future amortization expense of purchased intangible assets as of December 31, 2009 is as follows (in thousands):

2010	\$ 17,330
2011	14,496
2012	14,003
2013	13,153
2014	7,267
Thereafter	2,883
	<u>\$ 69,132</u>

## 8. Income Taxes

The components of (loss) income before income taxes were (in thousands):

	Year Ended December 31,		
	2009	2008	2007
U.S.	\$ (33,246)	\$ (19,992)	\$ 5,761
Foreign	<u>5,439</u>	<u>4,118</u>	<u>3,364</u>
	<u>\$ (27,807)</u>	<u>\$ (15,874)</u>	<u>\$ 9,125</u>

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

	Year Ended December 31,		
	2009	2008	2007
Current:			
Federal	\$ (3,549)	\$ 856	\$ 3,123
State	670	594	(268)
Foreign	1,692	1,025	741
Deferred:			
Federal	17,112	(1,171)	(543)
State	558	(1,418)	(1,483)
Foreign	<u>(87)</u>	<u>135</u>	<u>549</u>
Income tax expense	<u>\$ 16,396</u>	<u>\$ 21</u>	<u>\$ 2,119</u>

The net effective income tax rate differed from the federal statutory income tax rate as follows (dollars in thousands):

	Year Ended December 31,		
	2009	2008	2007
Federal statutory expense	\$ (9,733)	\$ (5,556)	\$ 3,194
State taxes, net of federal benefit	(2,017)	(1,393)	(1,138)
Research and development credits	(1,292)	(813)	(625)
Stock-based compensation	633	543	809
Domestic production activities deduction	—	(138)	(276)
Foreign tax rate differential	(298)	(282)	113
Acquisition related costs	702	—	—
Valuation allowance	28,078	7,942	—
Other	<u>323</u>	<u>(282)</u>	<u>42</u>
Income tax expense	<u>\$ 16,396</u>	<u>\$ 21</u>	<u>\$ 2,119</u>
Net effective income tax rate	(59.0)%	(0.1)%	23.2%

The primary components of temporary differences that gave rise to deferred taxes were as follows (in thousands):

	December 31, <u>2009</u>	December 31, <u>2008</u>
Deferred tax assets:		
Allowance for doubtful accounts	\$ 307	\$ 297
Research and development credit carryforward	10,732	5,380
Foreign tax credit carryforward	1,418	—
Deferred revenue	3,078	4,168
Stock-based compensation	8,635	6,385
Inventory adjustments	2,796	1,876
Net operating loss carryforward	6,035	445
Unrealized loss on investments	7,913	8,004
Accrued liabilities and other	<u>2,986</u>	<u>2,713</u>
	43,900	29,268
Valuation allowance	<u>(36,150)</u>	<u>(8,072)</u>
	7,750	21,196
Deferred tax liabilities:		
Depreciation and amortization	<u>(8,020)</u>	<u>(1,396)</u>
Net deferred tax assets	<u>\$ (270)</u>	<u>\$ 19,800</u>

The realizability of deferred income tax assets is based on a more likely than not standard. If it is determined that it is more likely than not that deferred income tax assets will not be realized, a valuation allowance must be established against the deferred income tax assets.

Realization of our deferred tax assets is dependent primarily on the generation of future taxable income. In considering the need for a valuation allowance we consider our historical as well as future projected taxable income along with other positive and negative evidence in assessing the realizability of our deferred tax assets.

During 2009, management evaluated the need for a full valuation allowance, net of federal benefit, of \$36.2 million against our net U.S. deferred tax assets and concluded that a full valuation allowance against our net U.S. deferred tax assets was warranted in 2009 due to, among other reasons, (i) the recently realized cumulative accounting losses sustained in the U.S., (ii) the recently completed three-year projections in which we expect to realize additional accounting losses in the U.S., (iii) the determination that we would be in a U.S. taxable loss position in 2009 and (iv) our uncertainty with respect to generating future U.S. taxable income in the near term given our recently completed U.S. projections and a number of inherent uncertainties such as the future level of U.S. tax deductions from our share-based awards.

During 2008, we recorded an \$8.1 million valuation allowance to fully offset the deferred tax assets primarily related to the unrealized loss recorded as a result of the impairment of certain marketable securities (see also Note 5).

For the years ended December 31, 2009 and 2008, we recorded changes in our valuation allowance of \$28.1 million and \$8.1 million, respectively. No valuation allowance was recorded as of December 31, 2007.



As of December 31, 2009, we have gross federal and state research and development credit carryforwards of approximately \$6.5 million and \$12.1 million, respectively. The federal carryovers begin to expire 2021, while the state carryovers have an indefinite carryover period.

As of December 31, 2009, we have gross federal foreign tax credit carryforwards of approximately \$1.4 million which begin to expire 2013.

At December 31, 2009, we have federal and state net operating loss ("NOLs") carryforwards of approximately \$18.8 million and \$35.4 million, respectively. The federal NOLs expire beginning 2022, and the state NOLs begin to expire 2012. Section 382 of the Internal Revenue Code imposes an annual limitation on the utilization of net operating loss carryforwards related to acquired corporations based on a statutory rate of return (usually the "applicable federal funds rate" as defined in the Internal Revenue Code) and the value of the corporation at the time of a "change in ownership" as defined by Section 382. We estimate that our annual limitation under Section 382 of the Internal Revenue Code is approximately \$5.1 million.

Cumulative undistributed earnings of foreign subsidiaries for which no deferred income taxes have been provided approximated \$48.7 million and \$6.0 million at December 31, 2009 and December 31, 2008, respectively. Of the \$48.7 million of undistributed earnings at December 31, 2009, \$40.6 million related to our recent acquisition of Catapult. Deferred income taxes on these earnings have not been provided as these amounts are considered to be permanent in duration.

At December 31, 2009, we had gross unrecognized tax benefits of approximately \$10.6 million. Of this total, approximately \$5.0 million (net of the federal benefit on state issues) would affect our effective tax rate if recognized. We classify liabilities for unrecognized tax benefits for which we do not anticipate payment or receipt of cash within one year in noncurrent other liabilities.

We recognize interest and penalties related to uncertain tax positions in income tax expense. During the years ended December 31, 2009, 2008, and 2007, we recognized approximately \$101,000, \$25,000, and \$8,000, net of federal benefit, of interest within our statements of operations. We had accrued interest, net of federal benefit, of \$1.3 million and \$34,000 at December 31, 2009 and December 31, 2008, respectively. Approximately \$1.2 million of the total interest accrued at December 31, 2009 related to uncertain tax positions associated with the recent acquisition of Catapult.

We file income tax returns in the U.S. federal jurisdiction and in various state and foreign jurisdictions. With few minor exceptions, we are no longer subject to U.S. federal, state and local, or non-U.S. income tax examinations by tax authorities in material jurisdictions for the tax years ended prior to 2005.

A reconciliation of the beginning and ending amounts of gross unrecognized tax benefits is as follows (in thousands):

	<u>2009</u>	<u>2008</u>	<u>2007</u>
Unrecognized Tax Benefits – beginning balance	\$ 4,320	\$ 4,367	\$ 4,848
Acquired unrecognized tax benefits	5,655	—	—
Gross increases – Tax positions taken in prior period	6	18	164
Gross decreases – Tax positions taken in prior period	—	(13)	(1,183)
Gross increases – Tax positions taken in current period	878	617	707
Lapse of statute of limitations	(230)	(669)	(169)
Unrecognized Tax Benefits – ending balance	<u>\$ 10,629</u>	<u>\$ 4,320</u>	<u>\$ 4,367</u>

At December 31, 2009, we expect approximately \$1.0 million in reductions to our recorded liability for unrecognized tax benefits to occur over the next 12 months.

## 9. Commitments and Contingencies

We lease our facilities under noncancelable operating leases for varying periods through February 2016, excluding options to renew. The following are the future minimum commitments under these leases (in thousands):

Year Ending <u>December 31.</u>	
2010	\$ 7,025
2011	4,692
2012	4,172
2013	1,896
2014	243
Thereafter	<u>262</u>
	<u>\$ 18,290</u>

Rent expense for the years ended December 31, 2009, 2008 and 2007 was approximately \$6.5 million, \$6.1 million and \$5.2 million, respectively.

### *Litigation*

*Ixia v. Charles Bettinelli and IneoQuest Technologies, Inc.* In October 2005, Ixia filed a complaint against its former employee, Charles Bettinelli, and his then-employer, IneoQuest Technologies, Inc. ("IneoQuest") in Los Angeles County Superior Court. Ixia's complaint alleged breach of contract, misappropriation of trade secrets, intentional interference with contract and prospective business advantage, unfair competition, fraud, and violation of California Penal Code Section 502 (computer data access and fraud act). IneoQuest filed a motion for summary judgment in June 2008. In October 2008, IneoQuest's motion for summary judgment was denied in its entirety, and the matter went to trial in September 2009. Ixia sought monetary damages in excess of \$10 million in addition to equitable relief. After a three-week trial, the jury returned a verdict in mid-October 2009 finding that (i) Mr. Bettinelli breached his non-disclosure agreement with Ixia; and (ii) both IneoQuest and Mr. Bettinelli misappropriated Ixia's trade secrets and used Ixia's trade secret customer contact information. Notwithstanding the jury's finding of wrongdoing by IneoQuest and Mr. Bettinelli, the jury did not award damages to Ixia. Judgment was therefore entered by the Court on November 24, 2009. IneoQuest, Mr. Bettinelli and Ixia each filed motions for attorneys' fees after entry of the judgment. On February 25, 2010, IneoQuest was awarded costs in the amount of approximately \$278,000. IneoQuest and Ixia's motions for attorneys' fees were both denied, and Mr. Bettinelli's motion for attorneys' fees was continued for hearing on March 24, 2010. Ixia filed its Notice of Appeal from the judgment in favor of Mr. Bettinelli only on February 18, 2010. Ixia dismissed the appeal on March 4, 2010 in exchange for Mr. Bettinelli's withdrawal of his motion for attorneys' fees and mutual releases.

In a related proceeding based on the same facts, Mr. Bettinelli was criminally charged with felony violation of Penal Code Section 502 for his unauthorized use of Ixia's computer data; he pleaded no contest to the felony charge in September 2008, which was reduced to a misdemeanor at sentencing upon his payment of \$75,000 to Ixia as restitution.

*IneoQuest Technologies, Inc. vs. Ixia.* In November 2008, IneoQuest filed a complaint against Ixia in the United States District Court for the Central District of California. The complaint alleges that Ixia makes and sells

products that infringe a patent owned by IneoQuest, and that Ixia misappropriated IneoQuest's trade secrets, in addition to numerous other related claims. The patent at issue allegedly relates to a system and method for analyzing the performance of multiple transportation streams of streaming media in packet-based networks. IneoQuest seeks a permanent injunction enjoining Ixia from infringing the patent at issue and from using IneoQuest's trade secrets and confidential information, unspecified general and exemplary damages, and attorneys' fees and costs.

In January 2009, Ixia filed an answer and counterclaim to IneoQuest's complaint denying IneoQuest's claims and raising several affirmative defenses. Ixia has also asserted a counterclaim against IneoQuest seeking declaratory relief that Ixia has not infringed the IneoQuest patent and that such patent is invalid. In April 2009, Ixia filed an amended answer and counterclaim to IneoQuest's complaint in which Ixia asserted that IneoQuest has infringed four patents owned by Ixia. Although the Company cannot predict the outcome of this matter, Ixia believes that it has strong defenses to IneoQuest's claims and is defending the action vigorously. The parties commenced discovery in this matter in the 2009 second quarter. The parties filed a Joint Claim Construction brief on November 30, 2009, and are awaiting a claim construction ruling from the Court.

*Tucana Telecom NV vs. Catapult.* On May 22, 2007, the Antwerp Court of Appeal heard an appeal by Tucana Telecom NV, a Belgian company, of the previous dismissal by the Antwerp Commercial Court of an action by Tucana against Catapult. Tucana had sought damages of 12,461,000 Euros (approximately \$17.9 million as of December 31, 2009) for the alleged improper termination in 2002 by Catapult of Tucana's distribution agreement with Catapult. On June 19, 2007, the Antwerp Court of Appeal confirmed the Commercial Court's dismissal of Tucana's action and assessed the costs of the appeal against Tucana. On July 22, 2008, Catapult was notified by its Belgian counsel that Tucana has appealed the judgment of the Antwerp Court of Appeal to the Belgian Supreme Court. In a decision dated January 14, 2010, the Belgium Supreme Court set aside the decision of the Antwerp Court of Appeal and remanded the matter for trial to the Gent Court of Appeal. The matter has not yet been set for trial.

Catapult believes that it properly terminated any contract it had with Tucana and that Tucana is not entitled to any damages in this matter. Catapult has defended the action vigorously to date and will continue to do so. Catapult may be able to seek indemnification from Tekelec for any damages assessed against Catapult in this matter under the terms of the Asset Purchase Agreement that Catapult entered into with Tekelec, although there is no assurance that such indemnification would be available. It is not possible to determine the amount of any loss that might be incurred in this matter.

We are not aware of any other pending legal proceedings than the matters mentioned above that, individually or in the aggregate, would have a material adverse effect on our business, results of operations or financial position. We may in the future be party to litigation arising in the ordinary course of business, including claims that we allegedly infringe upon third party trademarks or other intellectual property rights. Such claims, even if without merit, could result in the expenditure of significant financial and managerial resources.

#### *Indemnifications*

In the normal course of business, we provide certain indemnifications, commitments and guarantees of varying scope to customers, including against claims of intellectual property infringement made by third parties arising from the use of our products. We also have certain obligations to indemnify our officers, directors and employees for certain events or occurrences while the officer, director or employee is or was serving at our request in such capacity. The duration of these indemnifications, commitments and guarantees varies and in certain cases, is indefinite. Many of these indemnifications, commitments and guarantees do not provide for any limitation of the maximum potential future payments that we could be obligated to make. However, our director and officer insurance policy may enable us to recover a portion of any future payments related to our officer,

director or employee indemnifications. Historically, costs related to these indemnifications, commitments and guarantees have not been significant and accordingly, we believe the estimated fair value of these indemnifications, commitments and guarantees are not material. With the exception of the product warranty accrual (see Note 1), no liabilities have been recorded for these indemnifications, commitments and guarantees.

## 10. Shareholders' Equity

### *Stock Award Plans*

Our Amended and Restated 1997 Equity and Incentive Plan, as amended (the "1997 Plan"), provides for the issuance of share-based awards to our eligible employees and consultants. The share-based awards may include incentive stock options, nonqualified stock options, restricted stock units ("RSU") or restricted stock awards. Options become exercisable over a vesting period as determined by the Board of Directors and expire over terms not exceeding 10 years from the date of grant. The exercise price for options granted under the 1997 Plan may not be granted at less than 100% of the fair market value of our Common Stock on the date of grant (110% if granted to an employee who owns more than 10% of the voting shares of the outstanding stock). Options generally vest over a four-year period. In the event the holder ceases to be employed by us, all unvested options are forfeited and all vested options may be exercised within a period of up to 30 days after the optionee's termination for cause, up to three months after termination other than for cause or as a result of death or disability, or up to six months after termination as a result of disability or death. The 1997 Plan terminated in May 2008 and as such, no shares are available for future grant. As of December 31, 2009, 4.4 million awards remained outstanding under the 1997 Plan.

Our 2008 Equity Incentive Plan, as amended (the "2008 Plan"), provides for the issuance of share-based awards to our eligible employees and consultants. The share-based awards may include incentive stock options, nonqualified stock options, stock appreciation rights, restricted stock units ("RSU") or restricted stock awards. Options become exercisable over a vesting period as determined by the Board of Directors and expire over terms not exceeding 10 years from the date of grant. The exercise price for options granted under the 2008 Plan may not be granted at less than 100% of the fair market value of our Common Stock on the date of grant (110% if granted to an employee who owns more than 10% of the voting shares of the outstanding stock). Options generally vest over a four-year period. In the event the holder ceases to be employed by us, all unvested options are forfeited and all vested options may be exercised within a period of up to 90 days after termination other than (i) for termination for cause for which the vested options are forfeited on the termination date or (ii) as a result of death or disability for which vested options may be exercised for up to 180 days after termination. The 2008 Plan will terminate in May 2018, unless terminated sooner by the Board of Directors. As of December 31, 2009, we have reserved 11.6 million shares of our Common Stock for issuance under the 2008 Plan, 4.6 million shares of which were available for future grant as of such date.

Our Amended and Restated Non-Employee Director Equity Incentive Plan (the "Director Plan") provides for the issuance of share-based awards to our non-employee directors. We have reserved a total of 400,000 shares of Common Stock for issuance under the Director Plan. The grants under the plan are automatic and non-discretionary. Effective May 2007, the Director Plan provides for an initial grant to a non-employee director of 10,000 RSUs upon the director's appointment to the Board of Directors, which vest in eight equal quarterly installments. The Director Plan also provides for each non-employee director to be granted 4,000 RSUs upon the director's re-election to the Board of Directors at an annual meeting of shareholders. These subsequent grants vest in four equal quarterly installments commencing on the 15th day of the second calendar month during the first calendar quarter following the calendar quarter in which the RSUs are granted. The Director Plan will terminate in September 2010, unless terminated sooner by the Board of Directors. As of December 31, 2009, the Director Plan had approximately 206,000 shares available for future grant.

The following table summarizes stock option activity for the year ended December 31, 2009 (in thousands, except per share and contractual life data):

	Number of Options	Weighted Average Exercise Price Per Share	Weighted Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value
Outstanding as of December 31, 2008	8,443	\$ 8.30		
Granted	1,939	\$ 6.12		
Exercised	(268)	\$ 1.53		
Forfeited/canceled	<u>(887)</u>	\$ 8.97		
Outstanding as of December 31, 2009	<u>9,227</u>	\$ 7.98	3.74	\$ 5,534
Exercisable as of December 31, 2009	<u>5,359</u>	\$ 8.40	2.44	\$ 2,925

Excluding the effects of the incremental gross stock-based compensation related to the Stock Option Exchange Program in August of 2008 discussed below, the weighted average grant-date fair value of options granted for the years ended December 31, 2009, 2008 and 2007 was \$2.15, \$2.96 and \$4.51 per share, respectively. The total intrinsic value of options exercised during the years ended December 31, 2009, 2008 and 2007 was \$1.4 million, \$1.7 million and \$5.5 million, respectively. As of December 31, 2009, the remaining unrecognized compensation expense related to stock options is expected to be recognized over a weighted average period of 1.43 years.

The following table summarizes RSU activity for the year ended December 31, 2009 (in thousands, except per share data):

	Number of Awards	Weighted Average Grant Date Fair Value Per Share
Outstanding as of December 31, 2008	1,475	\$ 6.77
Awarded	1,166	\$ 6.40
Released	(467)	\$ 7.21
Forfeited/canceled	<u>(90)</u>	\$ 6.54
Outstanding as of December 31, 2009	<u>2,084</u>	\$ 6.53

The weighted average remaining contractual life and expense recognition period of the outstanding RSUs as of December 31, 2009 was 1.63 years.

#### *Employee Stock Purchase Plan*

The employee stock purchase plan (the "Plan") was adopted and approved in September 2000. The Plan became effective upon the closing of our initial public offering in October 2000. We have reserved a total of 4.0 million shares of Common Stock for issuance under the Plan, together with the potential for an annual increase in the number of shares reserved under the Plan on May 1 of each year. As of December 31, 2009, 634,000 shares were available for future issuance. For the years ended December 31, 2009 and 2008, 559,000 and 405,000 shares, respectively, were issued under the Plan.

The Plan permits eligible employees to purchase Common Stock, subject to limitations as set forth in the Plan, through payroll deductions which may not exceed the lesser of 15% of an employee's compensation or \$21,250 per annum.

The Plan is designed to provide our employees with an opportunity to purchase, on a periodic basis and at a discount, shares of our Common Stock through payroll deductions. The Plan was adopted and approved by the Board of Directors and the shareholders of the Company in 2000 and was amended in May 2003 and in April 2006. The Plan is implemented in a series of consecutive, overlapping 24-month offering periods, with each offering period consisting of four six-month purchase periods. Offering periods begin on the first trading day on or after May 1 and November 1 of each year. During each 24-month offering period under the Plan, participants accumulate payroll deductions which on the last trading day of each six-month purchase period within the offering period are applied toward the purchase of shares of our Common Stock at a purchase price equal to 85% of the lower of (i) the fair market value of a share of our Common Stock as of the first trading day of the 24-month offering period and (ii) the fair market value of a share of Common Stock on the last trading day of the six-month purchase period. The Plan will terminate in September 2010, unless it is earlier terminated by the Board of Directors.

#### *Stock-Based Compensation Expense*

We calculated the estimated fair value for accounting purposes of each share-based award on the respective dates of grant using the Black-Scholes option-pricing model using the following weighted average assumptions:

	<u>Year Ended December 31,</u>		
	<u>2009</u>	<u>2008</u>	<u>2007</u>
Expected lives (in years)	3.6	4.0	4.5
Risk-free interest rates	1.7%	2.4%	4.4%
Dividend yield	0.0%	0.0%	0.0%
Expected volatility	46.5%	48.2%	52.4%

#### *Stock Buyback Programs*

We announced a six-month stock buyback program in November 2008 to repurchase up to \$25 million of our common stock. This program expired in May 2009 and was in addition to the \$50 million repurchase program, which was announced in August 2007 and completed in June 2008. From January 1, 2009 through the May 2009 expiration date, we repurchased 1.6 million shares of our common stock for \$8.4 million, or approximately \$5.19 per share. During 2008, we repurchased 5.8 million shares of our common stock for \$43.6 million, or approximately \$7.51 per share. During 2007, we repurchased 918,935 shares of our common stock for \$9.2 million, or approximately \$10.00 per share. These repurchased shares remain authorized, but are no longer issued and outstanding.

#### *Option Exchange Program*

During the second quarter of 2008, our shareholders approved a Stock Option Exchange Program (the "Program"), which allowed current employees, other than executive officers and members of our Board of Directors, to exchange certain underwater options for fewer new options. On August 7, 2008, we completed the Program by canceling 3.7 million old options and granting 2.6 million new options. The canceled old options had per share exercise prices ranging from \$9.30 to \$21.50, and the new options were granted with an exercise price of \$8.58 per share, the closing price of our common stock on August 7, 2008 as reported on the Nasdaq Global Select Market. The new options have vesting schedules ranging from approximately one to

four years and have contractual terms ranging from approximately three to six years. The additional gross stock-based compensation expense of \$3.1 million related to this Program will be recognized over the vesting periods of one to four years from the date of grant of the new options.

*Accumulated Other Comprehensive Income (Loss)*

The following table summarizes, as of each balance sheet date, the components of our accumulated other comprehensive income (loss), net of income taxes (in thousands):

	<u>December 31,</u>	
	<u>2009</u>	<u>2008</u>
Unrealized gains (losses) on marketable securities	\$ 1,627	\$ (332)
Foreign currency translation gains	<u>22</u>	<u>78</u>
Total accumulated other comprehensive income (loss)	<u>\$ 1,649</u>	<u>\$ (254)</u>

**11. Retirement Plan**

We provide a 401(k) Retirement Plan (the "Plan") to eligible employees who may authorize contributions up to IRS annual deferral limits to be invested in employee elected investment funds. As determined annually by the Board of Directors, we may contribute matching funds of 50% of the employee contributions up to \$2,500. These matching contributions vest based on the employee's years of service with us. For the years ended December 31, 2009, 2008 and 2007, we expensed and made contributions to the Plan in the amount of approximately \$70,000, \$741,000 and \$713,000, respectively. The matching of employee 401(k) contributions was suspended in January 2009 and reinstated in January 2010.

**12. Earnings Per Share**

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

	<u>Year Ended December 31,</u>		
	<u>2009</u>	<u>2008</u>	<u>2007</u>
<i>Basic Presentation</i>			
Numerator:			
Net (loss) income	\$ (44,203)	\$ (15,895)	\$ 7,006
Denominator:			
Weighted average common shares	<u>62,710</u>	<u>65,087</u>	<u>67,936</u>
Basic (loss) earnings per share	<u>\$ (0.70)</u>	<u>\$ (0.24)</u>	<u>\$ 0.10</u>
<i>Diluted presentation</i>			
Denominator:			
Shares used to calculate basic	62,710	65,087	67,936
Weighted average effect of stock options and other share-based awards	<u>—</u>	<u>—</u>	<u>1,450</u>
Denominator for diluted computation	<u>62,710</u>	<u>65,087</u>	<u>69,386</u>
Diluted (loss) earnings per share	<u>\$ (0.70)</u>	<u>\$ (0.24)</u>	<u>\$ 0.10</u>

The diluted earnings per share computations for the years ended December 31, 2009, 2008 and 2007, exclude employee stock options and other share-based awards to purchase or otherwise acquire 10.5 million, 7.0 million and 6.4 million shares, respectively, which were antidilutive.

### 13. Quarterly Financial Summary (Unaudited)

	Three Months Ended							
	Dec. 31 <u>2009</u>	Sep. 30 <u>2009</u>	Jun. 30 <u>2009</u>	Mar. 31 <u>2009</u>	Dec. 31 <u>2008<sup>(1)</sup></u>	Sep. 30 <u>2008<sup>(1)</sup></u>	Jun. 30 <u>2008</u>	Mar. 31 <u>2008</u>
	(in thousands, except per share data)							
<b>Statement of Operations</b>								
<b>Data:</b>								
Total revenues	\$56,091	\$46,374	\$38,405	\$ 37,124	\$ 40,972	\$ 47,324	\$45,920	\$41,651
Total cost of revenues <sup>(2)</sup>	15,820	14,324	9,983	9,674	9,958	10,238	11,012	10,456
Gross profit	40,271	32,050	28,422	27,450	31,014	37,086	34,908	31,195
(loss) income before income taxes	(6,470)	(9,388)	(5,906)	(6,043)	(19,164)	509	2,762	19
Net (loss) income <sup>(3)</sup>	(31,335)	(6,223)	(2,654)	(3,991)	(18,265)	483	1,781	106
(Loss) earnings per share:								
Basic	\$ (0.50)	\$ (0.10)	\$ (0.04)	\$ (0.06)	\$ (0.29)	\$ 0.01	\$ 0.03	\$ 0.00
Diluted	\$ (0.50)	\$ (0.10)	\$ (0.04)	\$ (0.06)	\$ (0.29)	\$ 0.01	\$ 0.03	\$ 0.00

<sup>(1)</sup> In the third and fourth quarters of 2008, we recorded other-than-temporary impairment charges of \$4.3 million and \$15.9 million, respectively, related to our previous investments in auction rate securities and our investment in long term bonds issued by Lehman Brothers Holdings, Inc. See Note 5 for additional information.

<sup>(2)</sup> For the quarters ended December 31, 2009, September 30, 2009, June 30, 2009, March 31, 2009, December 31, 2008, September 30, 2008, June 30, 2008, March 31, 2008, total cost of revenues include charges related to amortization of intangible assets of \$3.8 million, \$3.0 million, \$1.2 million, \$1.2 million, \$1.2 million, \$1.2 million, \$1.2 million, and \$1.2 million, respectively.

<sup>(3)</sup> In the fourth quarter of 2009, our income tax expense includes a \$27.6 million charge related primarily to the establishment of a valuation allowance against our remaining net U.S. deferred tax assets. In the fourth quarter of 2008, our income tax expense includes a \$7.7 million charge, related primarily to the establishment of a valuation allowance against our deferred tax assets associated with the unrealized impairment (capital) losses discussed in footnote 1 above.



## EXHIBIT INDEX

Exhibit No.	Description
21.1	Subsidiaries of the Registrant
23.1	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm
31.1	Certification of Chief Executive Officer of Ixia pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer of Ixia pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certifications of Chief Executive Officer and Chief Financial Officer of Ixia pursuant to Rule 13a-14(b) under the Exchange Act and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

## Subsidiaries of the Registrant

<u>Name of Subsidiary *</u>	<u>State or Other Jurisdiction of Incorporation or Organization</u>
Catapult Communications Corporation	Nevada
Communication Machinery Corporation	California
G3 Nova Technology, Inc.	California
Ixia Europe Limited	United Kingdom
Ixia Federal Systems, Inc.	Delaware
Ixia K.K.	Japan
S.C. Ixia SRL	Romania
Ixia Pte. Ltd.	Singapore
Ixia Technologies Private Limited	India
Ixia (Beijing) Trading Company Limited	China
Catapult Communications Corporation Subsidiaries	
Ixia Australia Pty. Ltd.	Australia
Ixia Communications Canada Limited	Canada
Ixia Technologies International Limited (formerly Catapult Communications International Limited)	Ireland
Ixia Communications Kabushiki Kaisha (formerly Catapult Communications Kabushiki Kaisha)	Japan
Ixia Technologies Europe Limited (formerly Catapult Communications Limited)	United Kingdom
Ixia Technologies (Shanghai) Company Limited (formerly Catapult Communications (China) Corporation Limited)	China
Ixia Korea, Inc.	South Korea
Ixiacom Technologies Sdn. Bhd.	Malaysia
Catapult Communications Applications Development, Inc.	Philippines
Catapult Communications Bangalore Private Limited	India

\* The subsidiaries of the Registrant do not do business under any name other than as listed above.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-48814, 333-66382, 333-107818, 333-117969, 333-151764 and 333-162322) of Ixia of our report dated March 5, 2010 relating to the consolidated financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

Los Angeles, California  
March 5, 2010

Certification of Chief Executive Officer of Ixia pursuant to  
Rule 13a-14(a) under the Exchange Act,  
as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Atul Bhatnagar, certify that:

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

Date: March 5, 2010

/s/ ATUL BHATNAGAR  
 \_\_\_\_\_  
 Atul Bhatnagar  
 President and Chief Executive Officer

Certification of Chief Financial Officer of Ixia pursuant to  
Rule 13a-14(a) under the Exchange Act,  
as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Thomas B. Miller, certify that:

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

Date: March 5, 2010

/s/ THOMAS B. MILLER

Thomas B. Miller  
Chief Financial Officer

**Certifications of Chief Executive Officer and Chief Financial Officer of Ixia Pursuant to  
Rule 13a-14(b) under the Exchange Act and 18 U.S.C. Section 1350, as Adopted Pursuant to  
Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the Annual Report of Ixia (the "Company") on Form 10-K for the period ended December 31, 2009 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we, Atul Bhatnagar, President and Chief Executive Officer of the Company, and Thomas B. Miller, Chief Financial Officer of the Company, certify, to the best of our knowledge, pursuant to Rule 13a-14(b) under the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

Date: March 5, 2010 \_\_\_\_\_ /s/Atul Bhatnagar  
Atul Bhatnagar  
President and Chief Executive Officer

Date: March 5, 2010 \_\_\_\_\_ /s/Thomas B. Miller  
Thomas B. Miller  
Chief Financial Officer

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## Directors and Officers

### Board of Directors

*Jean-Claude Asscher*

Chairman Emeritus  
Ixia

*Errol Ginsberg*

Chairman of the Board and  
Chief Innovation Officer  
Ixia

*Laurent Asscher*

President and  
Chief Executive Officer  
Airtek Capital Group

*Atul Bhatnagar*

President and  
Chief Executive Officer  
Ixia

*Jonathan Fram*

Managing Partner  
Maveron III LLC

*Gail E. Hamilton*

Retired Executive Vice President  
Symantec

*Jon F. Rager*

Private Investor

### Executive Officers

*Atul Bhatnagar*

President and  
Chief Executive Officer

*Tom Miller*

Chief Financial Officer

*Errol Ginsberg*

Chief Innovation Officer

*Victor Alston*

Senior Vice President  
Product Development

*Ronald W. Buckley*

Senior Vice President  
Corporate Affairs and  
General Counsel

*Alan Grahame*

Senior Vice President  
Worldwide Sales

*Walker H. Colston, II*

Vice President  
Engineering Operations

*Raymond de Graaf*

Vice President  
Operations

*Jim Smith*

Vice President  
Marketing

*Chris Williams*

Vice President  
Human Resources



## Corporate Information

**Independent Accountants**  
*PricewaterhouseCoopers LLP*  
Los Angeles, California

**Legal Counsel**  
*Bryan Cave LLP*  
Los Angeles, California

**Transfer Agent**  
*Computershare Trust Company, N.A.*  
P.O. Box 43070  
Providence, Rhode Island 02940-3070  
800.962.4284

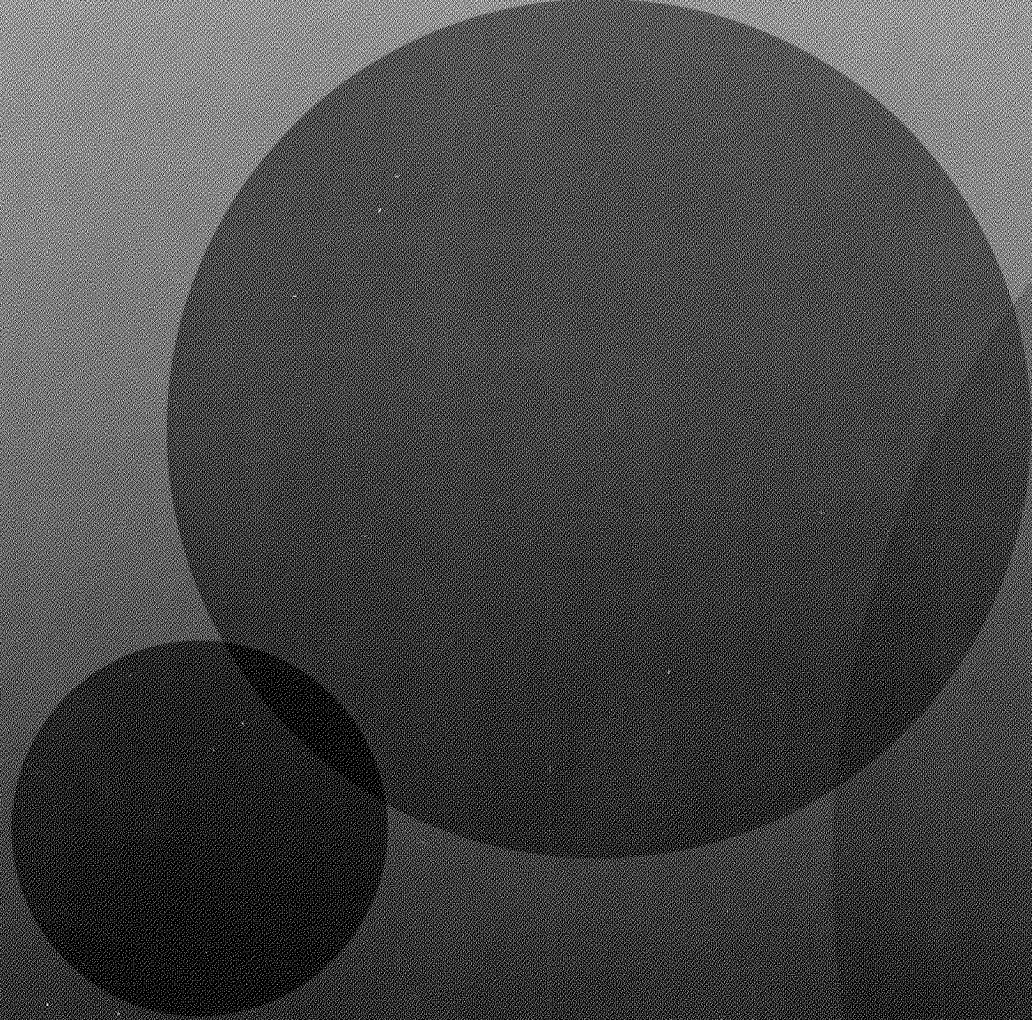
**Corporate Headquarters**  
*Ixia*  
26601 West Agoura Road  
Calabasas, California 91302  
818.871.1800

**Common Stock**  
The Company's common stock is quoted on the Nasdaq Global Select Market under the symbol XXIA.

**Web Site**  
Additional information about the Company is available on its web site at [www.ixiacom.com](http://www.ixiacom.com).

**Report on Form 10-K**  
A copy of the Company's Annual Report on Form 10-K for the year ended December 31, 2009, is available, without charge, upon written request to Investor Relations, Ixia, 26601 W. Agoura Road, Calabasas, California 91302 or via the Internet at [www.ixiacom.com](http://www.ixiacom.com).

**Annual Meeting of Shareholders**  
9:00 AM, Thursday  
May 27, 2010  
Renaissance Hotel  
30100 Agoura Road  
Agoura Hills, California 91301



**IXIA<sup>®</sup>**

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International + 818-871-1800  
[www.ixiacom.com](http://www.ixiacom.com)