

PIXELWORKS, INC  
Form 10-K  
March 06, 2013

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

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FORM 10-K

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ANNUAL REPORT PURSUANT TO SECTION 13 or 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2012

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: 000-30269

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PIXELWORKS, INC.  
(Exact name of registrant as specified in its charter)

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Oregon (State or other jurisdiction of incorporation or organization)	91-1761992 (I.R.S. Employer Identification No.)
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224 Airport Parkway, Suite 400, San Jose, CA (Address of principal executive offices)	95110 (Zip Code)
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408-200-9200  
(Registrant's telephone number, including area code)

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

Title of each class Common Stock	Name of each exchange on which registered NASDAQ Global Market
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Securities registered pursuant to Section 12(g) of the Act:  
None

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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 15(d) of the Act. Yes  No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or Section 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 (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form

10-K.

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

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>

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

Aggregate market value of voting Common Stock held by non-affiliates of the registrant at June 30, 2012: \$32,198,782. For purposes of this calculation, executive officers and directors are considered affiliates.

Number of shares of Common Stock outstanding as of February 28, 2013: 18,454,540

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Documents Incorporated by Reference

Part III incorporates information by reference to the registrant's definitive proxy statement, to be filed with the Securities and Exchange Commission within 120 days after the close of the fiscal year ended December 31, 2012.

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FOR THE YEAR ENDED DECEMBER 31, 2012  
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## Forward-looking Statements

This Annual Report on Form 10-K, including Management's Discussion and Analysis of Financial Condition and Results of Operation in Part II, Item 7, contains "forward-looking statements" that are based on current expectations, estimates, beliefs, assumptions and projections about our business. Words such as "expects," "anticipates," "intends," "plans," "believes," "seeks," "estimates" and variations of such words and similar expressions are intended to identify such forward-looking statements. These statements are not guarantees of future performance and involve numerous risks, uncertainties and assumptions that are difficult to predict. Actual results could vary materially from those contained in forward looking statements due to many factors, including, without limitation: our ability to deliver new products in a timely fashion; our new product yield rates; changes in estimated product costs; product mix; supply of products from third-party foundries; failure or difficulty in achieving design wins; timely customer transition to new product designs; competitive factors, such as rival chip architectures, introduction or traction by competing designs, or pricing pressures; the success of our products in expanded markets; current global economic challenges; levels of inventory at distributors and customers; changes in the digital display and projection markets; changes in customer ordering patterns or lead times; seasonality in the consumer electronics market; insufficient, excess or obsolete inventory and variations in inventory valuation; litigation related to our intellectual property rights; our limited financial resources; economic and political challenges due to operations in Asia; failure to retain or attract qualified employees; fluctuations in foreign currencies; natural disasters, and other risks identified in the risk factors contained in Part I, Item 1A of this Annual Report on Form 10-K. These forward-looking statements speak only as of the date on which they are made, and we do not undertake any obligation to update any forward-looking statement to reflect events or circumstances after the date of this Annual Report on Form 10-K. If we do update or correct one or more forward-looking statements, you should not conclude that we will make additional updates or corrections with respect thereto or with respect to other forward-looking statements. Except where the context otherwise requires, in this Annual Report on Form 10-K, the terms "Pixelworks," the "Company," "we," "us" and "our" mean Pixelworks, Inc., an Oregon corporation, and its wholly-owned subsidiaries.

## PART I

### Item 1. Business.

#### Overview

We are an innovative designer, developer and marketer of video and pixel processing semiconductors and software for high-end digital video applications and hold 120 patents related to the visual display of digital image data. Our solutions enable manufacturers of digital display and projection devices, such as large-screen flat panel televisions and digital front projectors, to manufacture their products with a consistently high level of video quality, regardless of the content's source or format. Our core technology leverages unique proprietary techniques for intelligently processing video signals from a variety of sources to ensure that all resulting images are optimized. Additionally, our products help our customers reduce costs and differentiate their display and projection devices, an important factor in industries that experience rapid innovation.

Our business also includes the license of technologies developed for our integrated circuit ("IC") semiconductor products to customers and partners, as well as co-development arrangements with current or prospective IC customers. Pixelworks was founded in 1997 and is incorporated under the laws of the state of Oregon.

Pixelworks' flexible design architecture enables our technology to produce outstanding image quality in our customers' products with a range of single-purpose integrated circuits ("ICs"), to system-on-chip ("SoC") ICs that integrate microprocessor, memory and image processing functions. Additionally, we provide full solutions, including a software development environment and operating system, which enable our customers to more quickly develop and customize their display products, thus reducing their time to market and allowing them to incorporate differentiated features and functions.

Our primary target markets are liquid crystal display ("LCD") large-screen televisions and 3LCD and digital light processing ("DLP") digital front projectors, however we also target other segments within the flat panel display market, including digital signage.

We have adopted a product strategy that leverages our core competencies in video display processing technology to address the evolving needs of the advanced flat panel display, digital projection and other markets that require superior image quality. We focus our product investments on developing video enhancement solutions for these markets, with particular focus on adding increased performance and functionality. Additionally, we look for ways to leverage our research and development investment into products that address other high-value markets where our innovative proprietary technology provides differentiation for us and our customers. We continually seek to expand our technology portfolio through internal development, co-development with business partners and evaluation of acquisition opportunities.

#### Digital Video Technology Trends

Over the course of the last several years, video technology has moved rapidly from analog technology, which utilizes waveform signals, to a new generation of digital technologies that utilize a grid of thousands of tiny picture elements, or pixels. Consequently, digital display devices have rapidly evolved to incorporate higher pixel counts and faster rates of screen refresh, both of which contribute to a sharper, clearer image. At the same time, digital display devices have increased in size and begun to incorporate newer video capabilities such as high-definition and, most recently, 3D and Ultra HD. Accordingly, the video image processors that drive newer displays have had to increase their capabilities as well to keep pace with the ever growing needs for greater resolution, size and speed that digital technology affords.

The number and variety of digital video applications is increasing rapidly, and video is expanding to play a pervasive role across many aspects of business and personal lifestyle. Digital video content is being delivered from an increasing array of sources that vary dramatically in quality—on Blu-ray DVDs, via cable and satellite, across the Internet and on cell phones and smart devices. The sources and quality of video content range from very high-resolution programming produced by network or movie studios to very poor quality clips created by individuals. In the aggregate, video content is expected to increase to previously unimaginable levels in the next 3 years, according to a recent study by Cisco Systems, with Internet video traffic increasing to 55% of all consumer Internet traffic, accounting for 1.2 million minutes of video crossing the network every second.



Regardless of the source or quality, increasingly, consumers are sharing video with others and viewing video on a growing array of form factors—from handheld devices to large screen displays. At the same time, the consumer expectation for ever higher quality video continues to rise, driven by higher display resolutions on larger TVs. These trends place new demands on video signal and pixel processing technology to enable display and projection devices to provide the best viewing experience possible across multiple display formats. For example, content created for one type of display device, such as a PC, must be scaled up or down to play back clearly on a different device, such as a television. On larger, higher-resolution TV screens, image quality deteriorates significantly, and must be compensated for with video processing technology that restores or even creates higher video quality. This trend is exemplified further by the increasing desire to display low resolution and low bit rate user content from social media sites. In addition, new over the top video services designed to replace existing TV programming services rely heavily on the display being able to reconstruct a better image in order to improve the quality of service over bandwidth varying communications links, such as the Internet.

With continuous improvements in manufacturing technology, the latest generations of advanced digital display are fulfilling the consumer's desire for a more immersive experience. The latest generations of advanced digital display devices enhance image performance in a number of ways, chief among them being increasing the size of the display, increasing the display resolution and increasing the number of times per second the image is refreshed. Premium displays currently feature "full HD" resolutions of 1920 columns by 1080 rows of pixels progressively scanned ("1080p"), display frame rates of 240Hz or more, are 3D ready and measure from 32 inches to 84 inches or more diagonally. The size and resolution of the display are expected to continually increase. Display manufacturers and content providers are pursuing the evolution from "full HD" to Ultra High Definition, or "Ultra HD." Ultra HD displays will offer resolutions in excess of 3,840 pixels horizontally and 2,160 lines vertically. Such a change in resolution offers the display an increased ability to display fine detail previously absent in "full HD" content and displays, creating a demand for more advanced image processing. In addition to the need for image enhancement, various applications, such as digital signage, Internet-enabled televisions and connected classroom environments, are creating a need for new networking capabilities that can enable the sharing of video across display devices and display environments. This desire drives the need for innovative solutions to an increasingly more complex usage model where content can seamlessly be transferred from device to device and all displays interoperate with one another to create an enhanced usage model for the consumer.

#### Large-Screen Flat Panel Display Market

The market for flat panel TVs has risen rapidly over the past decade and is projected to be worth more than \$100 billion in sales annually by 2013, according to the industry research firm NPD DisplaySearch. Key segments of growth within the flat panel display industry are consumer applications, such as PC monitors and digital televisions. Digital TVs in particular have transformed the flat panel market, as consumers have enthusiastically embraced advanced television displays that offer sharper and more lifelike images on larger and thinner screens. Increasingly, commercial applications such as public-space advertising, a form of digital signage, are also contributing to the growth of the flat panel market and the drive to improve the image and video quality of the panels themselves. Flat panel display technologies include LCD, plasma display, rear-projection using LCDs, digital micro-mirror, and newer technologies, such as liquid crystal on silicon ("LCoS") and organic light emitting diodes ("OLED"). Within flat panel displays, LCD and plasma have emerged as the preferred digital display technologies, with LCD leading the market in growth. The digital TV market and its high volume penetration with consumers has helped to secure the dominance of LCD technology. Shipments of LCD TVs are expected to account for around 92% of all TVs sold and grow from 205 million units in 2012 to 216 million units in 2013, according to NPD DisplaySearch.

A large consumer market has pressured flat panel manufacturers to continually improve the quality of their displays, and as a result LCDs and other flat panel displays continue to increase in resolution and size. 1080p resolution is now the high-end standard but is expected to be replaced by 4kx2k or larger. Larger flat panel displays are shifting rapidly from refresh rates of 50/60Hz to faster rates of 100/120Hz, 200/240Hz and even 400/480Hz. The shift to large, high-resolution flat panel displays combined with the transition to Ultra HD content and higher refresh rates is driving the need for high performance processor solutions to meet the enhanced video quality requirements of next generation display products. As flat panel display resolution and size increase, the challenge of "judder" becomes more of an issue. Judder occurs when content recorded at one rate of frames per second for film content must be converted to

faster video rates, and as a result there is a jerkiness, or judder in the resulting video performance. This problem is intensified in larger displays and can be a problem regardless of the panel technology being used.



In addition to judder, LCD panels also suffer from blur in motion images as a result of the way the human brain processes the longer frame durations produced by an LCD panel. In the past, LCD panel manufacturers have tried to reduce blur by increasing the refresh rate of the panel to higher rates and inserting an extra "black" frame to reduce frame duration. But the black frame insertion method has had drawbacks—one of which was to make LCD screens seem less bright. Newer motion estimation/motion compensation ("MEMC") technology uses the insertion of interpolated frames based on complex mathematical algorithms to shorten the duration of the video frame and create a clearer, crisper picture. MEMC also provides de-judder processing that smoothes out the jerkiness often apparent with large screen displays.

In recent years, TV manufacturers have added new design elements and performance features to differentiate their products and slow price declines. Among these are the adoption of light emitting diode ("LED") backlighting, an emphasis on lower power consumption, Internet connectivity and the development of 3D-enabled TVs. All of these trends are driving the need for high performance processor solutions to meet the enhanced video quality requirements of next generation display products.

LED backlighting enables higher contrast images in more advanced TVs. Manufacturers can use either dynamic color LEDs that are positioned behind the panel and allow for local area dimming, which provides higher contrast on selected sections of the screen; or white edge-LEDs positioned around the rim of the screen, which use a special diffusion panel to spread the light evenly behind the screen. LED backlighting also serves as a critical enabler of reduced power consumption. Because of its advantages, LED backlighting is expected to achieve an 88% share of LCD TV shipments in 2013, according to NPD DisplaySearch. LED backlighting requires a video processing control mechanism that determines when certain LEDs are lit, and how brightly, based on the video being displayed.

Consumers' desire to use their televisions to view Internet content ranging from YouTube videos to downloaded high definition movies from Netflix and other vendors is driving TV manufacturers to incorporate Internet connectivity into their products, including those marketed as "smart" TVs. In addition to simple connectivity, these devices must also be able to scale and enhance Internet content so as to be optimally viewed on a large flat panel display. Limitations in bandwidth, latency, noise and content resolution create significant challenges, and video processors must be able to scale poorer quality video, reduce signal noise inherent to networks and enhance image quality in order to ensure optimal video performance. NPD DisplaySearch estimates that consumer-controlled (open Internet access) smart TVs shipped will grow from 41 million units in 2012 to 85 million units in 2016.

Increasing screen sizes, higher pixel resolutions, higher frame rates, the desire to view Internet content on high-resolution displays, LED backlighting, 3D and other trends all present video performance challenges that must be addressed and are exacerbated with each new cycle of additional features. To differentiate their products, advanced flat panel manufacturers must implement video processing technologies that address these video performance issues as rapidly, as fully and as cost effectively as possible. Additionally, the interplay of performance, features, cost and power consumption is a key area of differentiation for digital television manufacturers. Most features and performance improvements carry cost premiums and increased power consumption, but intelligent design and utilization of appropriate video processing technologies can enable simultaneous improvements.

#### Digital Projection Market

Increasingly affordable price points are driving continued adoption of digital projectors in business and education, as well as among consumers. Technology improvements are helping reduce the size and weight of projection devices and increasing their performance. Projector models range from larger units designed to be permanently installed in a conference hall or other venue, to ultra-portable devices weighing fewer than two pounds for maximum portability. According to PMA Research Limited (formerly Pacific Media Associates), the worldwide front projector market maintained sales levels of 9.5 million units in 2012 and 2011, up from 8.5 million units in 2010.

Currently, the largest segment of the installed front projector market consists of business users who employ multimedia projectors to display both still and video presentation materials from PCs or other sources. Requirements for the business market include portability, compatibility with multiple software and hardware applications and features that ensure simple operation. In educational environments from elementary schools to university campuses, projectors help teachers integrate media-rich instruction into classrooms. Growth in overall projector sales is expected to come both from the business sector and the education market. Tiny, battery powered "pico" projectors embedded in a cell phone or PC, or available as independent devices weighing less than a pound, also are beginning to take hold in

the consumer and business markets, fueled by their capability to display video content on a larger surface area.

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Consistent with the trends of other consumer products, digital projectors are increasingly incorporating networking capabilities that enable the sharing of video and other content among multiple devices. This in turn is enabling new use models for digital projection in both the education and business environments. For example, one teacher can present the same material simultaneously in multiple classrooms, and students in different classrooms can display and discuss their work. Such connectivity allows instant access to content and sharing of content, which promotes interaction and collaboration among dispersed groups. In the business setting, this connectivity enables teleconferencing and the seamless sharing of content for more effective meetings.

#### Additional Markets

In addition to the large-screen flat panel display and digital projection markets, other markets are also taking advantage of the trend towards higher performance and connectivity in digital video technology. Some of the applications expected to grow as a result of enhanced video quality include digital signage, video conferencing and specialty monitors. Also, smaller screen displays are seeing higher pixel resolutions and increased pixel density creates a need for video display processing technology as the consumption of video moves to devices of all sizes. Worldwide, the emerging economies of Brazil, Russia, India and China, commonly referred to collectively as "BRIC," are expected to be a leading driver of demand for information technology of all kinds, including projectors for business, education and the consumer sectors.

#### Our Core Technologies and Products

We have developed a portfolio of advanced video algorithms and intellectual property ("IP") to address a broad range of challenges in digital video. Our technologies can dramatically improve video quality and are increasingly important as screen size and resulting quality issues increase. Our products are designed with a flexible architecture that allows us to combine algorithms and functional blocks of digital and mixed signal circuitry. Accordingly, our technologies can be implemented across multiple products, in powerful combinations within single products and can be applied to practically any device, including tablets and ultrabooks. The majority of our products include one or more technologies to provide high-quality video solutions to our customers, regardless of screen size.

Some of our proprietary core video display technologies include:

**MEMC (motion estimation/motion compensation).** Our proprietary MEMC technology significantly improves the performance and viewing experience of large advanced LCD panels by solving problems such as motion blur and judder. It also supports significant digital TV trends such as 3D, LED backlight local dimming (both edge-lit and full array) and 240Hz and higher frame rates. Additionally, our MEMC technology improves video performance in non-TV applications such as video conferencing, 3D gaming and projection.

**2D to 3D conversion.** Our proprietary 2D to 3D conversion technology offers 3D display systems the ability to provide a sense of depth to existing 2D content and displays it in 3D. Given the limited availability of native 3D content and virtually unlimited 2D content, this technology is a cornerstone for any 3D display system.

**Networking.** Our networking technology enables the same video stream to be networked across multiple displays, for applications such as connected video projection and digital signage.

**Digital keystone correction.** Our technology provides enhanced keystone and image correction performance for digital projection systems, particularly for "short throw" projectors which must project clearly at severe angles due to space limitations.

Our product development strategy is to leverage our expertise in video processing to address the evolving needs of the advanced flat panel display, digital projection and other markets that require superior image quality. We plan to continue to focus our development resources to maintain our market lead and provide leading edge solutions for the advanced 3LCD and DLP digital projection markets and to enhance our video processing solutions for advanced flat panel displays and other emerging markets. Additionally, we look for ways to leverage our research and development investment into products that address high-value markets, such as mobile, where our innovative proprietary technology provides differentiation for us and our customers. We deliver our technology in a variety of offerings, which take the form of single-purpose chips, highly integrated SoCs that incorporate specialized software, and full solutions incorporating software and other tools.

Our primary video display processor product categories include the following:

**ImageProcessor ICs.** Our ImageProcessor ICs include embedded microprocessors, digital signal processing technology and software that control the operations and signal processing within high-end display systems such as projectors and high-resolution flat panels. ImageProcessor ICs were our first product offerings and continue to comprise the majority of our business. We have continued to refine the architectures for optimal performance, manufacturing our products on process technologies that align with our customers' requirements. Additionally, we provide a software development environment and operating system that enables our customers to more quickly develop and customize the "look and feel" of their products.

**Video Co-Processor ICs.** Products in this category work in conjunction with an image processor to post-process video signals in order to enhance the performance or feature set of the overall video solution (for example, by significantly reducing judder and motion blur). Our video co-processor ICs can be used with our ImageProcessor ICs or with image processing solutions from other manufacturers, and in most cases can be incorporated by a display manufacturer without assistance from the supplier of the base image processor. This flexibility enables manufacturers to augment their existing or new designs to enhance their video display products.

**Networked Display ICs.** Our Networked Display ICs allow the same video stream to be networked across multiple displays, for example to connect projectors in different classrooms or to enable networked streaming of video in digital signage applications. Our Networked Display IC combines video sharing capabilities with video image processing, wireless connectivity and Internet connection to ensure high quality, multi-source video output and enhanced value to our projection display customers.

#### Customers, Sales and Marketing

The key focus of our global sales and marketing strategy is to achieve design wins with industry leading branded manufacturers in targeted markets and to continue building strong customer relationships. Once a design win has been achieved, sales and marketing efforts are focused on building long-term mutually beneficial business relationships with our customers by providing superior technology and reducing their costs, which complements our customers' product development objectives and meets their expectations for price-performance and time to market. Marketing efforts are focused on building market-leading brand awareness and preference for our solutions.

We utilize direct sales and marketing resources in the U.S., China, Taiwan, Japan and Korea as well as indirect resources in several regions. In addition to sales and marketing representatives, we have field application engineers who provide technical expertise and assistance to manufacturing customers on final product development.

Our global distribution channel is multi-tiered and involves both direct and indirect distribution channels, as described below:

**Distributors.** Distributors are resellers in local markets who provide engineering support and stock our semiconductors in direct relation to specific manufacturing customer orders. Our distributors often have valuable and established relationships with our end customers, and in certain countries it is customary to sell to distributors. While distributor payment to us is not dependent upon the distributor's ability to resell the product or to collect from the end customer, our distributors may provide longer payment terms to end customers than those we would offer. Sales to distributors accounted for 74%, 69% and 61% of revenue in 2012, 2011 and 2010, respectively.

Our largest distributor, Tokyo Electron Device Ltd. ("TED"), is located in Japan. TED represented 50%, 53% and 44% of revenue in 2012, 2011 and 2010, respectively, and accounted for 35% and 54% of accounts receivable at December 31, 2012 and 2011, respectively. No other distributor accounted for more than 10% of revenue in 2012, 2011 and 2010.

We also have distributor relationships in Taiwan, China, Korea, Europe, Southeast Asia and the U.S.

**Direct Relationships.** We have established direct relationships with companies that manufacture high-end display systems. Some of our direct relationships are supported by commission-based manufacturers' representatives, who are independent sales agents that represent us in local markets and provide engineering support but do not carry inventory. Revenue through direct relationships accounted for 26%, 31% and 39% of total revenue in 2012, 2011 and 2010, respectively.

We have direct relationships with companies falling into the following three classifications:

**Integrators.** Integrators are original equipment manufacturers who build display devices based on specifications provided by branded suppliers.

**Branded Manufacturers.** Branded manufacturers are globally recognized manufacturers who develop display device specifications, and manufacture, market and distribute display devices either directly or through resellers to end-users.

**Branded Suppliers.** Branded suppliers are globally recognized suppliers who develop display device specifications and then source them from integrators, typically in Asia, and distribute them either directly or through resellers to end-users.

Revenue attributable to our top five end customers represented 53%, 51% and 58% of revenue in 2012, 2011 and 2010, respectively. End customers include customers who purchase directly from us as well as customers who purchase products indirectly through distributors. Sales to each of Panasonic Corporation and Hitachi represented more than 10% of revenue in 2012, 2011, and 2010. Sales to Seiko Epson Corporation represented more than 10% of revenue in 2011 and 2010. No other end customer accounted for more than 10% of revenue in 2012, 2011 or 2010.

#### Seasonality

Our business is subject to seasonality related to the markets we serve and the location of our customers. We have historically experienced higher revenue from the multimedia projector market in the third quarter of the year, and lower revenue in the first quarter of the year, as our Japanese customers reduce inventories in anticipation of their March 31 fiscal year end. Additionally, holiday demand for consumer electronics, including high-end televisions, has sometimes contributed to increased revenue in the second half of the year. Our sales in 2010, however, did not follow our historical trends due in part to the adverse global crisis in the credit and financial markets, continued economic uncertainty and reductions in consumer spending during that year. In 2011 and 2012 our sales returned to historical seasonal patterns.

#### Geographic Distribution of Sales

Sales outside the U.S. accounted for approximately 90% of revenue in 2012 and 96% of revenue in 2011 and 2010. Financial information regarding our domestic and foreign operations is presented in "Note 11: Segment Information" in Part II, Item 8 of this Annual Report on Form 10-K.

#### Backlog

Our sales are made pursuant to customer purchase orders for delivery of standard products. The volume of product actually purchased by our customers, as well as shipment schedules, are subject to frequent revisions that reflect changes in both the customers' needs and product availability. Our entire order backlog is cancelable, with a portion subject to cancellation fees. In light of industry practice and our own experience, we do not believe that backlog as of any particular date is indicative of future results.

#### Competition

In general, the semiconductor industry is intensely competitive. The markets for higher performance display and projection devices, including the markets for advanced flat panel display televisions, multimedia projectors and other applications demanding high quality video, are characterized by rapid technological change, evolving industry standards, compressed product life cycles and declining average selling prices. We believe the principal competitive factors in our markets are product performance, time to market, cost, functional versatility provided by software, customer relationships and reputation, patented innovative designs, levels of product integration, compliance with industry standards and system design cost.

Our current products face competition from specialized display controller developers and in-house display controller ICs designed by our customers and potential customers. Additionally, new alternative display processing technologies and industry standards may emerge that directly compete with technologies that we offer.

We compete with specialized and diversified electronics and semiconductor companies that offer display processors or scaling components. Some of these include Actions Microelectronics Co., Ltd., i-Chips Technologies Inc., Intersil Corporation, MediaTek Inc., MStar Semiconductor, Novatech Co., Ltd. Inc., NVIDIA Corporation, QUALCOMM Incorporated, Realtek Semiconductor Corp., Renesas Electronics America, Sigma Designs, Inc., Silicon Image, Inc., STMicroelectronics N.V., Sunplus Technology Co., Ltd., Texas Instruments Incorporated, and other companies. Potential and current competitors may include diversified semiconductor manufacturers and the semiconductor divisions or affiliates of some of our customers, including LG Electronics, Inc., Matsushita Electric Industrial Co., Ltd., Mitsubishi Digital Electronics America, Inc., NEC Corporation, Samsung Electronics Co., Ltd., SANYO Electric Co., Ltd., Seiko Epson Corporation, Sharp Electronics Corporation, Sony Corporation, and Toshiba America, Inc. In addition, start-up companies may seek to compete in our markets.

#### Research and Development

Our internal research and development efforts are focused on the development of our solutions for the multimedia projector, high-end television, and mobile device markets. Our development efforts are focused on pursuing higher levels of video performance, integration and new features in order to provide our customers with solutions that enable them to introduce market leading products and help lower final systems costs for our customers.

We have invested, and expect to continue to invest, significant resources in research and development activities. Our research and development expense was \$20.8 million, \$22.9 million and \$22.8 million in 2012, 2011 and 2010, respectively. During 2012, we received a reimbursement related to a co-development arrangement with a customer for costs incurred in connection with our development of an IC product. As a result of the reimbursement, our overall research and development expense was reduced by \$3.5 million in 2012. There were no reductions to research and development expense related to co-development arrangements in 2011 and 2010.

#### Manufacturing

Within the semiconductor industry we are known as a "fabless" company, meaning that we do not manufacture the semiconductors that we design and develop, but instead contract with a limited number of foundries and assembly and test vendors to produce all of our wafers and for completion of finished products. The fabless approach allows us to concentrate our resources on product design and development where we believe we have greater competitive advantages.

See "Risk Factors" in Part I, Item 1A of this Annual Report on Form 10-K for information on risks related to our manufacturing strategy and processes.

#### Intellectual Property

We rely on a combination of nondisclosure agreements and patent, copyright, trademark and trade secret laws to protect the algorithms, design and architecture of our technology. Currently, we hold 120 patents and have 31 patent applications pending, which relate generally to improvements in the visual display of digital image data including, but not limited to, improvements in image scaling, image correction, automatic image optimization and video signal processing for digital displays. Our U.S. and foreign patents are generally enforceable for 20 years from the date they were filed. Accordingly, our issued patents have from approximately 5 to 16 years remaining in their respective term, depending on their filing and issuance dates. We believe that the remaining term of our patents is adequate relative to the expected lives of our related products.

We intend to seek patent protection for other significant technologies that we have already developed and expect to seek patent protection for future products and technologies as necessary. Patents may not be issued as a result of any pending applications and any claims allowed under issued patents may be insufficiently broad to protect our technology. Existing or future patents may be invalidated, diluted, circumvented, challenged or licensed to others. Furthermore, the laws of certain foreign countries in which our products are or may be developed, manufactured or sold, including various countries in Asia, may not protect our products or intellectual property rights to the same extent as do the laws of the United States and, thus, make the possibility of piracy of our technology and products more likely in these countries.



The semiconductor industry is characterized by vigorous protection of intellectual property rights, which have resulted in significant and often protracted and expensive litigation. We, our customers or our foundries from time to time may be notified of claims that we may be infringing patents or other intellectual property rights owned by third parties. Litigation by or against us relating to patent infringement or other intellectual property matters could result in significant expense to us and divert the efforts of our technical and management personnel, whether or not such litigation results in a determination favorable to us. In the event of an adverse result in any such litigation, we could be required to pay substantial damages, cease the manufacture, use and sale of infringing products, expend significant resources to develop non-infringing technology, discontinue the use of certain processes or obtain licenses to the infringing technology. We may not be able to settle any alleged patent infringement claim through a cross-licensing arrangement. In the event any third party made a valid claim against us, our customers or our foundries, and a license was not made available to us on terms that are acceptable to us or at all, we would be adversely affected. See "Risk Factors" in Part I, Item 1A, and "Note 7: Commitments and Contingencies" in Part II, Item 8 of this Annual Report on Form 10-K for information on various risks related to intellectual property.

#### Environmental Matters

Environmental laws and regulations are complex, change frequently and have tended to become more stringent over time. We have incurred, and may continue to incur, significant expenditures to comply with these laws and regulations and we may incur additional capital expenditures and asset impairments to ensure that our products and our vendors' products are in compliance with these regulations. We would be subject to significant penalties for failure to comply with these laws and regulations.

See "Risk Factors" in Part I, Item 1A of this Annual Report on Form 10-K for information on various environmental risks.

#### Employees

As of December 31, 2012, we had a total of 233 employees compared to 242 employees as of December 31, 2011. We consider our relations with our employees to be good.

#### Availability of Securities and Exchange Commission Filings

We make available through our website our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports free of charge as soon as reasonably practicable after we electronically file such material with the Securities and Exchange Commission. Our Internet address is [www.pixelworks.com](http://www.pixelworks.com). The content on, or that can be accessed through our website is not incorporated by reference into this filing.



Item 1A. Risk Factors.

Investing in our shares of common stock involves a high degree of risk, and investors should carefully consider the risks described below before making an investment decision. If any of the following risks occur, the market price of our shares of common stock could decline and investors could lose all or part of their investment. Additional risks that we currently believe are immaterial may also impair our business operations. In assessing these risks, investors should also refer to the other information contained or incorporated by reference in this Annual Report on Form 10-K for the year ended December 31, 2012, including our consolidated financial statements and related notes, and our other filings made from time to time with the Securities and Exchange Commission.

Company Specific Risks

Our product strategy, which is targeted at markets demanding superior video and image quality, may not lead to new design wins or increased revenue in a timely manner or at all, which could materially adversely affect our results of operations and limit our ability to grow.

We have adopted a product strategy that focuses on our core competencies in pixel processing and delivering high levels of video and image quality. With this strategy, we continue to make further investments in the development of our ImageProcessor architecture for the digital projector market, with particular focus on adding increased performance and functionality. For the advanced television market, our strategy focuses on implementing our intellectual property ("IP") to improve the video performance of our customers' image processors through the use of our MotionEngine® advanced video co-processor integrated circuits. This strategy is designed to address the needs of the large-screen, high-resolution, high-quality segment of the television market. Such markets may not develop or may take longer to develop than we expect. We cannot assure you that the products we are developing will adequately address the demands of our target customers, or that we will be able to produce our new products at costs that enable us to price these products competitively.

Even if our product strategy is properly targeted, we cannot assure you that the products we are developing will lead to an increase in revenue from new design wins. To achieve design wins, we must design and deliver cost-effective, innovative and integrated semiconductors that overcome the significant costs associated with qualifying a new supplier and which make developers reluctant to change component sources. Additionally, potential developers may be unwilling to select our products due to concerns over our financial strength. Further, design wins do not necessarily result in developers ordering large volumes of our products. Developers can choose at any time to discontinue using our products in their designs or product development efforts. A design win is not a binding commitment by a developer to purchase our products, but rather a decision by a developer to use our products in its design process. Even if our products are chosen to be incorporated into a developer's products, we may still not realize significant revenue from the developer if its products are not commercially successful or it chooses to qualify, or incorporate the products, of a second source. Additionally, even if our product strategy is successful at achieving design wins and increasing our revenue, we may continue to incur operating losses due to the significant research and development costs that are required to develop competitive products for the advanced television and digital projection markets. We may fail to retain or attract the specialized technical and management personnel required to successfully operate our business.

Our success depends on the continued services of our executive officers and other key management, engineering, and sales and marketing personnel and on our ability to continue to attract, retain and motivate qualified personnel. Competition for skilled engineers and management personnel is intense within our industry, and we may not be successful in hiring and retaining qualified individuals. For example, we have experienced, and may continue to experience, difficulty and increased compensation expense in order to hire and retain qualified engineering personnel in our Shanghai design center. The loss of, or inability to hire, key personnel could limit our ability to develop new products and adapt existing products to our customers' requirements, and may result in lost sales and a diversion of management resources.

We have significantly less financial resources than most of our competitors which limits our ability to implement new products or enhancements to our current products and may require us to implement future restructuring plans, which could adversely affect our future sales and financial condition.

Financial resource constraints could limit our ability to execute our product strategy or require us to implement restructuring plans, particularly if we are unable to generate cash from operations or obtain additional sources of financing. Any future restructuring actions may slow our development of new or enhanced products by limiting our research and development and engineering activities. Our cash balances are also lower than those of our competitors, which may limit our ability to develop competitive new products on a timely basis. If we are unable to successfully introduce new or enhanced products, our sales and financial condition will be adversely affected.

If we are not profitable in the future, we may be unable to continue our operations.

Although we recorded net income as recently as the year ended December 31, 2010, we have incurred operating losses since 2004. If and when we achieve profitability depends upon a number of factors, including our ability to develop and market innovative products, accurately estimate inventory needs, contract effectively for manufacturing capacity and maintain sufficient funds to finance our activities. We cannot assure to our investors that we will ever achieve profitability. If we are not profitable in the future, we may be unable to continue our operations.

A significant amount of our revenue comes from a limited number of customers and distributors and from time to time we may enter into exclusive deals with customers, exposing us to increased credit risk and subjecting our cash flow to the risk that any of our customers or distributors could decrease or cancel its orders.

The display manufacturing market is highly concentrated and we are, and will continue to be, dependent on a limited number of customers and distributors for a substantial portion of our revenue. Sales to our top distributor represented 50%, 53% and 44% of revenue for the years ended December 31, 2012, 2011, and 2010, respectively. Revenue attributable to our top five end customers represented 53%, 51% and 58% of revenue for the years ended December 31, 2012, 2011, and 2010, respectively. As of December 31, 2012, we had three accounts that each represented 10% or more of accounts receivable. As of December 31, 2011, we had two accounts that each represented 10% or more of accounts receivable. All of the orders included in our backlog are cancelable. A reduction, delay or cancellation of orders from one or more of our significant customers, or a decision by one or more of our significant customers to select products manufactured by a competitor or to use its own internally-developed semiconductors, would significantly impact our revenue. Further, the concentration of our accounts receivable with a limited number of customers increases our credit risk. The failure of these customers to pay their balances, or any customer to pay future outstanding balances, would result in an operating expense and reduce our cash flows.

We may not be able to borrow funds under our credit facility or secure future financing.

In December 2010, we entered into a Loan and Security Agreement with Silicon Valley Bank (the "Loan and Security Agreement") to provide a secured, working capital-based, revolving line of credit. In December 2012, we entered into Amendment No. 1 to that Loan and Security Agreement (the "Amendment"). Among other things, the Amendment revises the calculation of the borrowing base under the Loan and Security Agreement to \$1.0 million plus 80% of eligible domestic accounts receivable. The Amendment also provides an option for LIBOR advances that bear interest based on the LIBOR rate. We view this line of credit as a source of available liquidity to fund fluctuations in our working capital requirements. For example, if we experience an increase in order activity from our customers, our cash balance may decrease due to the need to purchase inventories to fulfill those orders. If this occurs, we may need to draw on this facility in order to maintain our liquidity.

This facility contains various conditions, covenants and representations with which we must be in compliance in order to borrow funds. We cannot assure you that we will be in compliance with these conditions, covenants and representations in the future when we may need to borrow funds under this facility. In addition, this facility expires on December 14, 2014, after which time we may need to secure new financing to continue funding fluctuations in our working capital requirements. We cannot assure you that we will be able to secure new financing, or financing on terms that are acceptable to us.

Part of our business involves licensing our intellectual property, a strategy that increases business risk and volatility. We have licensed certain of our intellectual properties to third parties and may seek to enter into additional license arrangements in the future. We cannot assure you, however, that others will be interested in licensing our intellectual property on commercially favorable terms or at all. We also cannot ensure that licensees will honor agreed-upon

market restrictions, not infringe upon or misappropriate our intellectual property or maintain the confidentiality of our proprietary information.

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IP license agreements are complex and earning revenue under these agreements depends upon many factors including completion of milestones, allocation of values to delivered items and customer acceptances. Many of these factors require significant judgments. Because of its high margin, our licensing revenue can have a disproportionate impact on gross profit and profitability. Also, generating revenue from these arrangements is a lengthy and complex process that may last beyond the period in which efforts begin and, once an agreement is in place, the timing of revenue recognition may depend on customer acceptance of deliverables, achievement of milestones, our ability to track and report progress on contracts, customer commercialization of the licensed technology and other factors. The accounting rules associated with recognizing revenue from these transactions are complex and subject to interpretation. Due to these factors, the amount of license revenue recognized in any period may differ significantly from our expectations. Our net operating loss carryforwards may be limited or they may expire before utilization.

As of December 31, 2012, we had federal and state net operating loss carryforwards of approximately \$187 million and \$32.8 million, respectively, which expire between 2013 and 2032. These net operating loss carryforwards may be used to offset future taxable income and thereby reduce our income taxes otherwise payable. However, we cannot assure you that we will have taxable income in the future before all or a portion of these net operating loss carryforwards expire. Additionally, our federal net operating losses may be limited by Section 382 of the Internal Revenue Code of 1986, as amended (the "Code"), which imposes an annual limit on the ability of a corporation that undergoes an "ownership change" to use its net operating loss carryforwards to reduce its tax liability. An ownership change is generally defined as a greater than 50% point increase in equity ownership by 5% shareholders in any three-year period. In the event of certain changes in our shareholder base, we may at some time in the future experience an "ownership change" and the use of our federal net operating loss carryforwards may be limited.

We face a number of risks as a result of the concentration of our operations and customers in Asia.

Almost all of our customers are located in Japan, the People's Republic of China ("PRC"), Korea, or Taiwan. Sales outside the U.S. accounted for approximately 90% of revenue for the year ended December 31, 2012 and 96% of revenue for the years ended December 31, 2011 and 2010, respectively. We anticipate that sales outside the U.S. will continue to account for a substantial portion of our revenue in future periods. In addition, customers who incorporate our products into their products sell a substantial portion of their products outside of the U.S. All of our products are also manufactured outside of the U.S.; most of our current manufacturers are located in the PRC, Taiwan, or Singapore. Furthermore, most of our employees are located in the PRC, Japan and Taiwan. Our Asian operations require significant management attention and resources, and we are subject to many risks associated with operations in Asia, including, but not limited to:

- difficulties in managing international distributors and manufacturers due to varying time zones, languages and business customs;
- compliance with U.S. laws affecting operations outside of the U.S., such as the Foreign Corrupt Practices Act;
- reduced or limited protection of our IP, particularly in software, which is more prone to design piracy;
- difficulties in collecting outstanding accounts receivable balances;
- changes in tax rates, tax laws and the interpretation of those laws;
- difficulties regarding timing and availability of export and import licenses;
- ensuring that we obtain complete and accurate information from our Asian operations to make proper disclosures in the United States;
- political and economic instability;
- difficulties in maintaining sales representatives outside of the U.S. that are knowledgeable about our industry and products;
- changes in the regulatory environment in the PRC, Japan, Taiwan and Korea that may significantly impact purchases of our products by our customers or our customers' sales of their own products;
- outbreaks of health epidemics in the PRC or other parts of Asia;
- imposition of new tariffs, quotas, trade barriers and similar trade restrictions on our sales;
- varying employment and labor laws; and
- greater vulnerability to infrastructure and labor disruptions than in established markets.



Any of these factors could require a disproportionate share of management's attention, result in increased costs or decreased revenues, and could materially affect our product sales, financial condition and results of operations.

Our operations in Asia expose us to heightened risks due to natural disasters.

The risk of natural disasters in the Pacific Rim region, such as the March 2011 earthquake and tsunami in Japan, is significant due to the proximity of major earthquake fault lines in the area. Natural disasters in countries where our manufacturers or customers are located could result in disruption of our manufacturers' and customers' operations, resulting in significant delays in shipment of, or significant reductions in orders for, our products. There can be no assurance that we can locate additional manufacturing capacity or markets on favorable terms, or find new customers, in a timely manner, if at all. Natural disasters in this region could also result in:

- reduced end user demand due to the economic impact of any natural disaster;
- a disruption to the global supply chain for products manufactured in areas affected by natural disasters that are included in products purchased either by us or by our customers;
- an increase in the cost of products that we purchase due to reduced supply; and
- other unforeseen impacts as a result of the uncertainty resulting from a natural disaster.

For example, the 2011 flooding in Thailand limited the availability of certain component parts that are used in the production of our customers' products which reduced their production capacity and the demand for our products during the first quarter of 2012.

We face additional risks associated with our operations in the PRC.

We have, and expect to continue to have significant operations in the PRC. The economy of the PRC differs from the economies of many countries in important respects such as structure, government involvement, level of development, growth rate, capital reinvestment, allocation of resources, self-sufficiency, rate of inflation, foreign currency flows and balance of payments position, among others. We cannot be assured that the PRC's economic policies will be consistent or effective and our results of operations and financial position may be harmed by changes in the PRC's political, economic or social conditions.

Additionally, our Chinese subsidiary is considered a foreign-invested enterprise and is subject to laws and regulations applicable to foreign investment in the PRC and, in particular, laws applicable to foreign-invested enterprises. For example, China's government imposes control over the convertibility of RMB into foreign currencies, which can cause difficulties converting cash held in Chinese RMB to other currencies. While the overall effect of legislation over the past two decades has significantly enhanced the protections afforded to various foreign investments in the PRC, the PRC has not developed a fully integrated legal system, and recently enacted laws and regulations may not sufficiently cover all aspects of economic activities in the PRC. Because these laws and regulations are relatively new, and published court decisions are limited and nonbinding in nature, the interpretation and enforcement of these laws and regulations involve uncertainties. In addition, the PRC legal system is based in part on government policies and internal rules, some of which are not published on a timely basis or at all, which may have a retroactive effect. As a result, we may not be aware of our violation of these policies and rules until after the violation occurs. Any administrative and court proceedings in the PRC may be protracted, resulting in substantial costs and diversion of resources and management attention. However, since PRC administrative and court authorities have significant discretion in interpreting and implementing statutory and contractual terms, it may be more difficult to evaluate the outcome of administrative and court proceedings. These uncertainties may also impede our ability to enforce the contracts entered into by our PRC subsidiary and could materially and adversely affect our business and results of operations.

Our international operations expose us to risks resulting from the fluctuations of foreign currencies.

We are exposed to risks resulting from the fluctuations of foreign currencies, primarily those of Japan, Taiwan, Korea and the PRC. We sell our products to OEMs that incorporate our products into other products that they sell outside of the U.S. While sales of our products to OEMs are denominated in U.S. dollars, the products sold by OEMs are denominated in foreign currencies. Accordingly, any strengthening of the U.S. dollar against these foreign currencies will increase the foreign currency price equivalent of our products, which could lead to a change in the competitive nature of these products in the marketplace. This in turn could lead to a reduction in revenue.



In addition, a portion of our operating expenses, such as employee salaries and foreign income taxes, are denominated in foreign currencies. Accordingly, our operating results are affected by changes in the exchange rate between the U.S. dollar and those currencies. Any future strengthening of those currencies against the U.S. dollar will negatively impact our operating results by increasing our operating expenses as measured in U.S. dollars.

We may engage in financial hedging techniques in the future as part of a strategy to address potential foreign currency exchange rate fluctuations. These hedging techniques, however, may not be successful at reducing our exposure to foreign currency exchange rate fluctuations and may increase costs and administrative complexity.

As we have limited insurance coverage, any incurred liability resulting from uncovered claims could adversely affect our financial condition and results of operations.

Our insurance policies may not be adequate to fully offset losses from covered incidents, and we do not have coverage for certain losses. For example, we do not have earthquake insurance related to our Asian operations because adequate coverage is not offered at economically justifiable rates. If our insurance coverage is inadequate to protect us against catastrophic losses, any uncovered losses could adversely affect our financial condition and results of operations.

Our dependence on selling to distributors and integrators increases the complexity of managing our supply chain and may result in excess inventory or inventory shortages.

Selling to distributors and OEMs that build display devices based on specifications provided by branded suppliers, also referred to as integrators, reduces our ability to forecast sales accurately and increases the complexity of our business. Our sales are made on the basis of customer purchase orders rather than long-term purchase commitments. Our distributors, integrators and customers may cancel or defer purchase orders at any time but we must order wafer inventory from our contract manufacturers three to four months in advance.

The estimates we use for our advance orders from contract manufacturers are based, in part, on reports of inventory levels and production forecasts from our distributors and integrators, which act as intermediaries between us and the companies using our products. This process requires us to make numerous assumptions concerning demand and to rely on the accuracy of the reports and forecasts of our distributors and integrators, each of which may introduce error into our estimates of inventory requirements. Our failure to manage this challenge could result in excess inventory or inventory shortages that could materially impact our operating results or limit the ability of companies using our semiconductors to deliver their products. For example, we overestimated demand for certain of our products which led to significant charges for obsolete inventory in 2010 and 2009. On the other hand, if we underestimate demand, we would forego revenue opportunities, lose market share and damage our customer relationships.

We may be unable to successfully manage any future growth, including the integration of any future acquisition or equity investment, which could disrupt our business and severely harm our financial condition.

If we fail to effectively manage any future internal growth, our operating expenses may increase more rapidly than our revenue, adversely affecting our financial condition and results of operations. To manage any future growth effectively in a rapidly evolving market, we must be able to maintain and improve our operational and financial systems, train and manage our employee base and attract and retain qualified personnel with relevant experience. We could spend substantial amounts of time and money in connection with expansion efforts for which we may not realize any profit. Our systems, procedures, controls or financial resources may not be adequate to support our operations and we may not be able to grow quickly enough to exploit potential market opportunities. In addition, we may not be able to successfully integrate the businesses, products, technologies or personnel of any entity that we might acquire in the future, and any failure to do so could disrupt our business and seriously harm our financial condition.



Continued compliance with regulatory and accounting requirements will be challenging and will require significant resources.

We spend a significant amount of management time and external resources to comply with changing laws, regulations and standards relating to corporate governance and public disclosure, including evolving Securities and Exchange Commission rules and regulations, NASDAQ Global Market rules, the Dodd-Frank Wall Street Reform and Consumer Protection Act and the Sarbanes-Oxley Act of 2002 which requires management's annual review and evaluation of internal control over financial reporting. Failure to comply with these laws and rules could lead to investigation by regulatory authorities, de-listing from the NASDAQ Global Market, or penalties imposed on us. If we are unable to maintain an effective system of internal controls, our shareholders could lose confidence in the accuracy and completeness of our financial reports which in turn could cause our stock price to decline.

Our effective income tax rate is subject to unanticipated changes in, or different interpretations of tax rules and regulations and forecasting our effective income tax rate is complex and subject to uncertainty.

As a global company, we are subject to taxation by a number of taxing authorities and as such, our tax rates vary among the jurisdictions in which we operate. Unanticipated changes in our tax rates could affect our future results of operations. Our effective tax rates could be adversely affected by changes in the mix of earnings in countries with differing statutory tax rates, changes in tax laws or the interpretation of tax laws either in the United States or abroad, or by changes in the valuation of our deferred tax assets and liabilities. The ultimate outcomes of any future tax audits are uncertain, and we can give no assurance as to whether an adverse result from one or more of them would have a material effect on our operating results and financial position.

The computation of income tax expense is complex as it is based on the laws of numerous tax jurisdictions and requires significant judgment on the application of complicated rules governing accounting for tax provisions under U.S. generally accepted accounting principles. Income tax expense for interim quarters is based on our forecasted tax rate for the year, which includes forward looking financial projections, including the expectations of profit and loss by jurisdiction, and contains numerous assumptions. For these reasons, our tax rate may be materially different than our forecast.

We rely upon certain critical information systems for the operation of our business, and the failure of any critical information system, may result in serious harm to our business.

We maintain and rely upon certain critical information systems for the effective operation of our business. These information systems include telecommunications, the Internet, our corporate intranet, various computer hardware and software applications, network communications and e-mail. These information systems are subject to attacks, failures and access denials from a number of potential sources including viruses, destructive or inadequate code, power failures, and physical damage to computers, communication lines and networking equipment. To the extent that these information systems are under our control, we have implemented security procedures, such as virus protection software and emergency recovery processes, to address the outlined risks. Security procedures for information systems cannot be guaranteed to be failsafe and our inability to use or access these information systems at critical times could compromise the timely and efficient operation of our business. Additionally, any compromise of our information security could result in the unauthorized publication of our confidential business or proprietary information, cause an interruption in our operations, result in the unauthorized release of customer or employee data, result in a violation of privacy or other laws, or expose us to a risk of litigation or damage our reputation, any or all of which could harm our business and operating results.

Environmental laws and regulations have caused us to incur, and may again cause us to incur, significant expenditures to comply with applicable laws and regulations, and we may be assessed considerable penalties for noncompliance.

We are subject to numerous environmental laws and regulations. Compliance with current or future environmental laws and regulations could require us to incur substantial expenses which could harm our business, financial condition and results of operations. We have worked, and will continue to work, with our suppliers and customers to ensure that our products are compliant with enacted laws and regulations. Failure by us or our contract manufacturers to comply with such legislation could result in customers refusing to purchase our products and could subject us to significant monetary penalties in connection with a violation, either of which would have a material adverse effect on our business, financial condition and results of operations.



### Company Risks Related to the Semiconductor Industry and Our Markets

Our highly integrated products and high-speed mixed signal products are difficult to manufacture without defects and the existence of defects could result in increased costs, delays in the availability of our products, reduced sales of products or claims against us.

The manufacture of semiconductors is a complex process and it is often difficult for semiconductor foundries to produce semiconductors free of defects. Because many of our products are more highly integrated than other semiconductors and incorporate mixed signal analog and digital signal processing, multi-chip modules and embedded memory technology, they are even more difficult to produce without defects. Defective products can be caused by design or manufacturing difficulties. Identifying quality problems can be performed only by analyzing and testing our semiconductors in a system after they have been manufactured. The difficulty in identifying defects is compounded because the process technology is unique to each of the multiple semiconductor foundries we contract with to manufacture our products. Despite testing by both our customers and us, errors or performance problems may be found in existing or new semiconductors. Failure to achieve defect-free products may result in increased costs and delays in the availability of our products.

Additionally, customers could seek damages from us for their losses and shipments of defective products may harm our reputation with our customers. We have experienced field failures of our semiconductors in certain customer applications that required us to institute additional testing. As a result of these field failures, we have incurred warranty costs due to customers returning potentially affected products and have experienced reductions in revenues due to delays in production. Our customers have also experienced delays in receiving product shipments from us that resulted in the loss of revenue and profits. In 2010, for example, we incurred higher than expected yield losses due to defective third party IP incorporated into certain of our products, which resulted in higher direct material cost and a temporary inability to meet our customers' requested demand. Although we were able to resolve the issue without incurring material losses and have implemented additional processes to control this type of risk, similar issues may occur again in the future. Additionally, shipments of defective products could cause us to lose customers or to incur significant replacement costs, either of which would harm our business. Any defects, errors or bugs could also interrupt or delay sales of our new products to our customers, which would adversely affect our financial results. The development of new products is extremely complex and we may be unable to develop our new products in a timely manner which could result in a failure to obtain new design wins and/or maintain our current revenue levels. In addition to the inherent difficulty of designing complex integrated circuits, product development delays may result from:

- difficulties in hiring and retaining necessary technical personnel;
- difficulties in reallocating engineering resources and overcoming resource limitations;
- difficulties with contract manufacturers;
- changes to product specifications and customer requirements;
- changes to market or competitive product requirements; and
- unanticipated engineering complexities.

If we are not successful in the timely development of new products, our financial results will be adversely affected. Intense competition in our markets may reduce sales of our products, reduce our market share, decrease our gross profit and result in large losses.

We compete with specialized and diversified electronics and semiconductor companies that offer display processors or scaling components. Some of these include Actions Microelectronics Co., Ltd., i-Chips Technologies Inc., Intersil Corporation, MediaTek Inc., MStar Semiconductor, Novatech Co., Ltd. Inc., Realtek Semiconductor Corp., Renesas Electronics America, Sigma Designs, Inc., Silicon Image, Inc., STMicroelectronics N.V., Sunplus Technology Co., Ltd., and other companies. Potential and current competitors may include diversified semiconductor manufacturers and the semiconductor divisions or affiliates of some of our customers, including LG Electronics, Inc., Matsushita Electric Industrial Co., Ltd., Mitsubishi Digital Electronics America, Inc., NEC Corporation, NVIDIA Corporation, QUALCOMM Incorporated, Samsung Electronics Co., Ltd., SANYO Electric Co., Ltd., Seiko Epson Corporation, Sharp Electronics Corporation, Sony Corporation, Texas Instruments Incorporated and Toshiba America, Inc. In addition, start-up companies may seek to compete in our markets.



Many of our competitors have longer operating histories and greater resources to support development and marketing efforts than we do. Some of our competitors operate their own fabrication facilities. These competitors may be able to react more quickly and devote more resources to efforts that compete directly with our own. Our current or potential customers have developed, and may continue to develop, their own proprietary technologies and become our competitors. Increased competition from both competitors and our customers' internal development efforts could harm our business, financial condition and results of operations by, for example, increasing pressure on our profit margin or causing us to lose sales opportunities. For example, frame rate conversion technology similar to that used in our line of MotionEngine® advanced video co-processors continues to be integrated into the system-on-chip ("SoC") products of our competitors, including in television products with refresh rates as high as 240hz. We cannot assure you that we can compete successfully against current or potential competitors.

If we are not able to respond to the rapid technological changes and evolving industry standards in the markets in which we compete, or seek to compete, our products may become less desirable or obsolete.

The markets in which we compete or seek to compete are subject to rapid technological change and miniaturization capabilities, frequent new product introductions, changing customer requirements for new products and features and evolving industry standards. The introduction of new technologies and emergence of new industry standards could render our products less desirable or obsolete, which could harm our business and significantly decrease our revenue.

Examples of changing industry standards include the growing use of broadband to deliver video content, increased display resolution and size, faster screen refresh rates, video capability such as high definition, Ultra HD, and 3D, the proliferation of new display devices and the drive to network display devices together. Our failure to predict market needs accurately or to timely develop new competitively priced products or product enhancements that incorporate new industry standards and technologies, including integrated circuits with increasing levels of integration and new features, using smaller geometry process technologies, may harm market acceptance and sales of our products.

Our products are incorporated into our customers' products, which have different parts and specifications and utilize multiple protocols that allow them to be compatible with specific computers, video standards and other devices. If our customers' products are not compatible with these protocols and standards, consumers will return, or not purchase, these products and the markets for our customers' products could be significantly reduced. Additionally, if the technology used by our customers becomes less competitive due to cost, customer preferences or other factors relative to alternative technologies, sales of our products could decline.

Dependence on a limited number of sole-source, third-party manufacturers for our products exposes us to possible shortages based on low manufacturing yield, errors in manufacturing, uncontrollable lead-times for manufacturing, capacity allocation, price increases with little notice, volatile inventory levels and delays in product delivery, any of which could result in delays in satisfying customer demand, increased costs and loss of revenue.

We do not own or operate a semiconductor fabrication facility and do not have the resources to manufacture our products internally. We rely on a limited number of foundries and assembly and test vendors to produce all of our wafers and for completion of finished products. Our wafers are not fabricated at more than one foundry at any given time and our wafers typically are designed to be fabricated in a specific process at only one foundry. Sole sourcing each product increases our dependence on our suppliers. We have limited control over delivery schedules, quality assurance, manufacturing yields, potential errors in manufacturing and production costs. We do not have long-term supply contracts with our third-party manufacturers, so they are not obligated to supply us with products for any specific period of time, quantity or price, except as may be provided in a particular purchase order. Our suppliers can increase the prices of the products we purchase from them with little notice, which may cause us to increase the prices to our customers and harm our competitiveness. Because our requirements represent only a small portion of the total production capacity of our contract manufacturers, they could reallocate capacity to other customers during periods of high demand for our products, as they have done in the past. We expect this may occur again in the future.

Establishing a relationship with a new contract manufacturer in the event of delays or increased prices would be costly and burdensome. The lead time to make such a change would be at least nine months, and the estimated time for us to adapt a product's design to a particular contract manufacturer's process is at least four months. Additionally, we have, and may continue to choose new foundries to manufacture our wafers which may require us to modify our design methodology flow for the process technology and intellectual property cores of the new foundry. If we have to qualify a new foundry or packaging, assembly and testing supplier for any of our products or if we are unable to obtain our

products from our contract manufacturers on schedule, at costs that are acceptable to us, or at all, we could incur significant delays in shipping products, our ability to satisfy customer demand could be harmed, our revenue from the sale of products may be lost or delayed and our customer relationships and ability to obtain future design wins could be damaged.

We use a customer-owned tooling process for manufacturing most of our products, which exposes us to the possibility of poor yields and unacceptably high product costs.

We build most of our products on a customer-owned tooling basis ("COT"), whereby we directly contract the manufacture of our products, including wafer production, assembly and test. As a result, we are subject to increased risks arising from wafer manufacturing yields and risks associated with coordination of the manufacturing, assembly and testing process. Poor product yields result in higher product costs, which could make our products less competitive if we increase our prices to compensate for our higher costs, or could result in lower gross profit margins if we do not increase our prices.

We depend on manufacturers of our semiconductor products not only to respond to changes in technology and industry standards but also to continue the manufacturing processes on which we rely.

To respond effectively to changes in technology and industry standards, we depend on our foundries to implement advanced semiconductor technologies and our operations could be adversely affected if those technologies are unavailable, delayed or inefficiently implemented. In order to increase performance and functionality and reduce the size of our products, we are continuously developing new products using advanced technologies that further miniaturize semiconductors and we are dependent on our foundries to develop and provide access to the advanced processes that enable such miniaturization. We cannot be certain that future advanced manufacturing processes will be implemented without difficulties, delays or increased expenses. Our business, financial condition and results of operations could be materially adversely affected if advanced manufacturing processes are unavailable to us, substantially delayed or inefficiently implemented.

Creating the capacity for new technological changes may cause manufacturers to discontinue older manufacturing processes in favor of newer ones. We must then either retire the affected part or port (develop) a new version of the part that can be manufactured with a newer process technology. In the event that a manufacturing process is discontinued, our current suppliers may be unwilling or unable to manufacture our current products. We may not be able to place last time buy orders for the old technology or find alternate manufacturers of our products to allow us to continue to produce products with the older technology while we expend the significant costs for research and development and time to migrate to new, more advanced processes. For example, we utilize 0.18um and 0.15um standard logic processes, which may only be available for the next five to seven years. Additionally, a portion of our products use 0.11um technology for memory die, which is being phased out in favor of 65nm technology to increase yields and decrease cost. Because of this transition, our customers must re-qualify the affected parts.

Shortages of materials used in the manufacturing of our products and other key components of our customers' products may increase our costs, impair our ability to ship our products on time and delay our ability to sell our products.

From time to time, shortages of components and materials that are critical to the manufacture of our products and our customers' products may occur. Such critical components and materials include semiconductor wafers and packages, double data rate memory die, display components, analog-to-digital converters, digital receivers, video decoders and voltage regulators. If material shortages occur, we may incur additional costs or be unable to ship our products to our customers in a timely fashion, both of which could harm our business and adversely affect our results of operations. Because of our long product development process and sales cycles, we may incur substantial costs before we earn associated revenue and ultimately may not sell as many units of our products as we originally anticipated.

We develop products based on anticipated market and customer requirements and incur substantial product development expenditures, which can include the payment of large up-front, third-party license fees and royalties, prior to generating associated revenue. Our work under these projects is technically challenging and places considerable demands on our limited resources, particularly on our most senior engineering talent. Additionally, the transition to smaller geometry process technologies continues to significantly increase the cost and complexity of new product development, particularly with regards to tooling, software tools, third party IP and engineering resources. Because the development of our products incorporates not only our complex and evolving technology, but also our customers' specific requirements, a lengthy sales process is often required before potential customers begin the technical evaluation of our products. Our customers typically perform numerous tests and extensively evaluate our products before incorporating them into their systems. The time required for testing, evaluation and design of our products into a customer's system can take up to nine months or more. It can take an additional nine months or longer before a customer commences volume shipments of systems that incorporate our products, if at all. Because of the

lengthy development and sales cycles, we will experience delays between the time we incur expenditures for research and development, sales and marketing and inventory and the time we generate revenue, if any, from these expenditures.

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Furthermore, we have entered into and may in the future enter into, co-development agreements that do not guarantee future sales volumes and limit our ability to sell the developed products to other customers. The exclusive nature of these development agreements increases our dependence on individual customers, particularly since we are limited in the number of products we are able to develop at any one time.

If actual sales volumes for a particular product are substantially less than originally anticipated, we may experience large write-offs of capitalized license fees, software development tools, product masks, inventories or other capitalized or deferred product-related costs, or increased amortization of non-cancelable prepaid royalties, any of which would negatively affect our operating results. For example, we overestimated demand for certain of our products which led to significant charges for obsolete inventory in 2010 and 2009.

Our developed software may be incompatible with industry standards and challenging and costly to implement, which could slow product development or cause us to lose customers and design wins.

We provide our customers with software development tools and with software that provides basic functionality for our integrated circuits and enables enhanced connectivity of our customers' products. Software development is a complex process and we are dependent on software development languages and operating systems from vendors that may limit our ability to design software in a timely manner. Also, as software tools and interfaces change rapidly, new software languages introduced to the market may be incompatible with our existing systems and tools, requiring significant engineering efforts to migrate our existing systems in order to be compatible with those new languages. Software development disruptions could slow our product development or cause us to lose customers and design wins. The integration of software with our products adds complexity, may extend our internal development programs and could impact our customers' development schedules. This complexity requires increased coordination between hardware and software development schedules and increases our operating expenses without a corresponding increase in product revenue. This additional level of complexity lengthens the sales cycle and may result in customers selecting competitive products requiring less software integration.

The competitiveness and viability of our products could be harmed if necessary licenses of third-party technology are not available to us on terms that are acceptable to us or at all.

We license technology from independent third parties that is incorporated into our products or product enhancements. Future products or product enhancements may require additional third-party licenses that may not be available to us on terms that are acceptable to us or at all. In addition, in the event of a change in control of one of our licensors, it may become difficult to maintain access to its licensed technology. If we are unable to obtain or maintain any third-party license required to develop new products and product enhancements, we may have to obtain substitute technology with lower quality or performance standards, or at greater cost, either of which could seriously harm the competitiveness of our products.

Our limited ability to protect our IP and proprietary rights could harm our competitive position by allowing our competitors to access our proprietary technology and to introduce similar products.

Our ability to compete effectively with other companies will depend, in part, on our ability to maintain the proprietary nature of our technology, including our semiconductor designs and software code. We provide the computer programming code for our software to customers in connection with their product development efforts, thereby increasing the risk that customers will misappropriate our proprietary software. We rely on a combination of patent, copyright, trademark and trade secret laws, as well as nondisclosure agreements and other methods, to help protect our proprietary technologies. We hold 120 patents and have 31 patent applications pending for protection of our significant technologies. Competitors in both the U.S. and foreign countries, many of whom have substantially greater resources than we do, may apply for and obtain patents that will prevent, limit or interfere with our ability to make and sell our products, or they may develop similar technology independently or design around our patents. Effective patent, copyright, trademark and trade secret protection may be unavailable or limited in foreign countries.

We cannot assure you that the degree of protection offered by patent or trade secret laws will be sufficient.

Furthermore, we cannot assure you that any patents will be issued as a result of any pending applications or that any claims allowed under issued patents will be sufficiently broad to protect our technology. We may incur significant costs to stop others from infringing our patents. In addition, it is possible that existing or future patents may be invalidated, diluted, circumvented, challenged or licensed to others.



Others may bring infringement actions against us that could be time-consuming and expensive to defend. We may become subject to claims involving patents or other intellectual property rights. In recent years, there has been significant litigation in the United States and in other jurisdictions involving patents and other intellectual property rights. This litigation is particularly prevalent in the semiconductor industry, in which a number of companies aggressively use their patent portfolios to bring infringement claims. In recent years, there has been an increase in the filing of so-called "nuisance suits," alleging infringement of intellectual property rights. These claims may be asserted initially or as counterclaims in response to claims made by a company alleging infringement of intellectual property rights. These suits pressure defendants into entering settlement arrangements to quickly dispose of such suits, regardless of merit. We may also face claims brought by companies that are organized solely to hold and enforce patents. In addition, we may be required to indemnify our customers against IP claims related to their usage of our products.

IP claims could subject us to significant liability for damages and invalidate our proprietary rights. Responding to such claims, regardless of their merit, can be time-consuming, result in costly litigation, divert management's attention and resources and cause us to incur significant expenses. As each claim is evaluated, we may consider the desirability of entering into settlement or licensing agreements. No assurance can be given that settlements will occur or that licenses can be obtained on acceptable terms or that litigation will not occur. In the event there is a temporary or permanent injunction entered prohibiting us from marketing or selling certain of our products, or a successful claim of infringement against us requiring us to pay damages or royalties to a third-party and we fail to develop or license a substitute technology, our business, results of operations or financial condition could be materially adversely affected. Any IP litigation or claims also could force us to do one or more of the following:

- stop selling products using technology that contains the allegedly infringing IP;
- attempt to obtain a license to the relevant IP, which may not be available on terms that are acceptable to us or at all;
- attempt to redesign those products that contain the allegedly infringing IP; or
- pay damages for past infringement claims that are determined to be valid or which are arrived at in settlement of such litigation or threatened litigation.

If we are forced to take any of the foregoing actions, we may incur significant additional costs or be unable to manufacture and sell our products, which could seriously harm our business. In addition, we may not be able to develop, license or acquire non-infringing technology under reasonable terms. These developments could result in an inability to compete for customers or otherwise adversely affect our results of operations.

Our products are characterized by average selling prices that decline over relatively short periods of time, which will negatively affect our financial results unless we are able to reduce our product costs or introduce new products with higher average selling prices.

Average selling prices for our products decline over relatively short periods of time, while many of our product costs are fixed. When our average selling prices decline, our gross profit declines unless we are able to sell more units or reduce the cost to manufacture our products. We have experienced declines in our average selling prices and expect that we will continue to experience them in the future, although we cannot predict when they may occur or how severe they will be. Our financial results will suffer if we are unable to offset any reductions in our average selling prices by increasing our sales volumes, reducing our costs, adding new features to our existing products or developing new or enhanced products in a timely manner with higher selling prices or gross profits.

The cyclical nature of the semiconductor industry may lead to significant variances in the demand for our products and could harm our operations.

In the past, the semiconductor industry has been characterized by significant downturns and wide fluctuations in supply and demand. Also, the industry has experienced significant fluctuations in anticipation of changes in general economic conditions, including economic conditions in Asia, Europe and North America. The cyclical nature of the semiconductor industry has also led to significant variances in product demand and production capacity. We have experienced, and may continue to experience, periodic fluctuations in our financial results because of changes in industry-wide conditions.

### Other Risks

The continued adverse global economic environment and volatility in global credit and financial markets could materially and adversely affect our business and results of operations.

The state of the global economy continues to be uncertain. As a result of these conditions, our manufacturers, vendors and customers might experience deterioration of their businesses, cash flow shortages and difficulty obtaining financing which could result in interruptions or delays in the performance of any contracts, reductions and delays in customer purchases, delays in or the inability of customers to obtain financing to purchase our products, and bankruptcy of customers. Furthermore, the constraints in the capital and credit markets, may limit the ability of our customers to meet their liquidity needs, which could result in an impairment of their ability to make timely payments to us and reduce their demand for our products, adversely impacting our results of operations and cash flows. This environment has also made it difficult for us to accurately forecast and plan future business activities.

The interest of our current or potential significant shareholders may conflict with other shareholders and they may attempt to effect changes at the Company or acquire control over the Company, which could adversely affect the Company's results of operations and financial condition.

Shareholders of the Company may from time to time engage in proxy solicitations, advance shareholder proposals, acquire control over the Company or otherwise attempt to effect changes, including by directly voting their shares on shareholder proposals. Campaigns by shareholders to effect changes at publicly traded companies are sometimes led by investors seeking to increase short-term shareholder value through actions such as financial restructuring, increased debt, special dividends, stock repurchases or sales of assets or the entire company. Responding to proxy contests and other actions by activist shareholders can be costly and time-consuming, disrupting the Company's operations and diverting the attention of the Company's Board of Directors and senior management from the pursuit of business strategies. Additionally, uncertainty over the Company's direction and leadership may negatively impact the Company's relationship with its customers and make it more difficult to attract and retain qualified personnel and business partners. As a result, shareholder campaigns could adversely affect the Company's results of operations and financial condition.

We have entered into a standstill agreement with Becker Drapkin Management L.P. and related entities ("Becker Drapkin") included in a 13(d) 10% group.

We have entered into a standstill agreement with Becker Drapkin that required us to nominate two directors to our board of directors that have been selected by Becker Drapkin. The standstill agreement also requires Becker Drapkin to vote with the board on certain matters and prevents Becker Drapkin from taking certain actions, including participating in any sale transaction or tender offer that is not approved by our board of directors. There is no restriction, however, on Becker Drapkin's ability to vote against a sale transaction that is approved by our board of directors. All of these provisions could make it more difficult, and deter a third party from making an offer to purchase the Company.

Upon expiration of the term of the standstill agreement, there will no longer be restrictions on Becker Drapkin's ability to buy additional shares, vote or participate in sale transactions or tender offers. As a result, Becker Drapkin will have the ability to exert significant influence on our management and operations, and matters requiring approval of its stockholders, including the approval of significant corporate transactions, such as a merger or other sale of the Company or its assets.

We may from time to time grant Becker Drapkin a waiver from some or all of its obligations under the standstill agreement. For example, in August 2012, we entered into an amendment to the standstill agreement with Becker Drapkin that allowed Becker Drapkin to acquire additional shares of our common stock on or before November 30, 2012.

In addition, the acquisition of additional shares or sale of shares by Becker Drapkin could trigger an "ownership change" under Section 382 of the Code and result in a limitation in our ability to use our net operating loss carryforwards, pursuant to Section 382 of the Code.

Future sales of our equity could result in significant dilution to our existing shareholders and depress the market price of our common stock.

We may need to seek additional capital from time to time. If this financing is obtained through the issuance of equity securities, debt convertible into equity securities, options or warrants to acquire equity securities or similar instruments or securities, our existing shareholders will experience dilution in their ownership percentage upon the issuance, conversion or exercise of such securities and such dilution could be significant. For example, in May 2011, we issued 4.2 million shares of our common stock in an underwritten registered offering. New equity securities issued by us could have rights, preferences or privileges senior to those of our common stock.

In addition, any such issuance by us or sales of our securities by our security holders, or the perception that such issuances or sales could occur, could negatively impact the market price of our securities. For example, a number of shareholders own significant blocks of our common stock. If one or more of these shareholders were to sell large portions of their holdings in a relatively short time, for liquidity or other reasons, the prevailing market price of our common stock could be negatively affected. This could result in further potential dilution to our existing shareholders and the impairment of our ability to raise capital through the sale of equity, debt or other securities.

The price of our common stock has and may continue to fluctuate substantially.

Our stock price and the stock prices of technology companies similar to Pixelworks have been highly volatile. The price of our common stock may decline and the value of your investment may be reduced regardless of our performance.

The daily trading volume of our common stock has historically been relatively low. As a result, our shareholders may be unable to sell significant quantities of common stock in the public trading markets without a significant reduction in the price of our common shares. Additionally, market fluctuations, as well as general economic and political conditions, including recessions, interest rate changes or international currency fluctuations, may negatively impact the market price of our common stock. Other factors that could negatively impact our stock price include:

- actual or anticipated fluctuations in our operating results;
- changes in expectations as to our future financial performance;
- changes in financial estimates of securities analysts;
- announcements by us or our competitors of technological innovations, design wins, contracts, standards, acquisitions or divestitures;
- the operating and stock price performance of other comparable companies;
- issuances or proposed issuances of equity, debt or other securities by us, or sales of securities by our security holders; and
- changes in market valuations of other technology companies.

Any inability or perceived inability of investors to realize a gain on an investment in our common stock could have an adverse effect on our business, financial condition and results of operations by potentially limiting our ability to retain our customers, to attract and retain qualified employees and to raise capital.

We may be unable to maintain compliance with NASDAQ Marketplace Rules which could cause our common stock to be delisted from the NASDAQ Global Market. This could result in the lack of a market for our common stock, cause a decrease in the value of our common stock, and adversely affect our business, financial condition and results of operations.

Under the NASDAQ Marketplace Rules our common stock must maintain a minimum price of \$1.00 per share for continued inclusion on the NASDAQ Global Market. The per share price of our common stock has fluctuated significantly. In 2008, we effected a one-for-three reverse split of our common stock in order to regain compliance with the NASDAQ Marketplace Rules and our stock price was below \$1.00 as recently as May 6, 2009. We cannot guarantee that our stock price will remain at or above \$1.00 per share and if the price again drops below \$1.00 per share, the stock could become subject to delisting, and we may seek shareholder approval for an additional reverse split. A reverse split could produce adverse effects and may not result in a long-term or permanent increase in the price of our common stock.

In addition to the minimum \$1.00 per share requirement, NASDAQ Global Market also requires satisfaction of one of the following in addition to certain other requirements: (i) a minimum of \$50.0 million in total asset value and \$50.0 million in revenues (in the latest fiscal year or in two of the last three fiscal years), (ii) a minimum of \$50.0 million in market value of listed securities, or (iii) a minimum of \$10.0 million in stockholders' equity. We have, and expect to continue to have, a total asset value of less than \$50.0 million. In the future, we may be unable to meet these continued listing requirements and our stock could become subject to delisting.

If our common stock is delisted, trading of the stock will most likely take place on an over-the-counter market established for unlisted securities. An investor is likely to find it less convenient to sell, or to obtain accurate quotations in seeking to buy, our common stock on an over-the-counter market, and many investors may not buy or sell our common stock due to difficulty in accessing over-the-counter markets, or due to policies preventing them from trading in securities not listed on a national exchange or other reasons. For these reasons and others, delisting would adversely affect the liquidity, trading volume and price of our common stock, causing the value of an investment in us to decrease and having an adverse effect on our business, financial condition and results of operations by limiting our ability to attract and retain qualified executives and employees and limiting our ability to raise capital. The anti-takeover provisions of Oregon law and in our articles of incorporation could adversely affect the rights of the holders of our common stock, including by preventing a sale or takeover of us at a price or prices favorable to the holders of our common stock.

Provisions of our articles of incorporation and bylaws and provisions of Oregon law may have the effect of delaying or preventing a merger or acquisition of us, making a merger or acquisition of us less desirable to a potential acquirer or preventing a change in our management, even if our shareholders consider the merger, acquisition or change in management favorable or if doing so would benefit our shareholders. In addition, these provisions could limit the price that investors would be willing to pay in the future for shares of our common stock. The following are examples of such provisions:

- our board of directors is divided into three classes serving staggered terms, which would make it more difficult for a group of shareholders to quickly replace a majority of directors;
- our board of directors is authorized, without prior shareholder approval, to create and issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to acquire us or to effect a change of control, commonly referred to as "blank check" preferred stock;
- members of our board of directors can be removed only for cause and at a meeting of shareholders called expressly for that purpose, by the vote of 75 percent of the votes then entitled to be cast for the election of directors;
- our board of directors may alter our bylaws without obtaining shareholder approval; and shareholders are required to provide advance notice for nominations for election to the board of directors or for proposing matters to be acted upon at a shareholder meeting;
- Oregon law permits our board to consider other factors beyond stockholder value in evaluating any acquisition offer (so-called "expanded constituency" provisions); and
- a supermajority (67%) vote of shareholders is required to approve certain fundamental transactions.

Item 1B. Unresolved Staff Comments.

Not applicable.

## Item 2. Properties.

We lease facilities around the world to house our engineering, sales, sales support, administrative and operations functions. We do not own any of our facilities. At December 31, 2012, our major facilities consisted of the following:

Location	Function(s)	Square Feet Utilized	Lease Expiration
China	Engineering; sales; customer support	48,000	Various dates through November 2013
California	Administration; engineering; sales	23,000	June 2013 (a)
Taiwan	Customer support; sales; operations; engineering	16,000	Various dates through November 2014
Oregon	Administration	5,000	December 2013
Japan	Sales; customer support	3,000	January 2015

(a) Excludes 14,000 square feet that we sublease to a single tenant. The sublease terminates in June 2013.

## Item 3. Legal Proceedings.

We are subject to legal matters that arise from time to time in the ordinary course of our business. Although we currently believe that resolving such matters, individually or in the aggregate, will not have a material adverse effect on our financial position, our results of operations, or our cash flows, these matters are subject to inherent uncertainties and our view of these matters may change in the future.

## Item 4. Mine Safety Disclosures.

Not Applicable.

## PART II

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

## Market for Registrant's Common Equity and Related Stockholder Matters

Our common stock is listed for trading on the NASDAQ Global Market under the symbol "PXLW". Our stock began trading on May 19, 2000. The following table sets forth, for the periods indicated, the highest and lowest sales prices of our common stock as reported on the NASDAQ Global Market.

Fiscal 2012	High	Low
Fourth Quarter	\$3.06	\$2.17
Third Quarter	3.54	2.36
Second Quarter	2.73	2.23
First Quarter	2.55	2.16
Fiscal 2011	High	Low
Fourth Quarter	\$2.42	\$1.80
Third Quarter	2.55	2.03
Second Quarter	3.51	2.24
First Quarter	3.72	3.30

As of February 28, 2013, there were 72 shareholders of record of our common stock and the last per share sales price of the common stock on that date was \$2.40. The number of beneficial owners of our common stock is substantially greater than the number of shareholders of record because a significant portion of our outstanding common stock is held in broker "street name" for the benefit of individual investors.

To date, we have not declared any cash dividends and we currently expect to retain any earnings to finance the expansion and development of our business. In addition, our financial covenants may limit our ability to pay dividends. Accordingly, there is no assurance that we will declare or pay future dividends as they are dependent upon future earnings, capital requirements, our operating and financial condition and approval by our board of directors.



Performance Graph

Set forth below is a graph that compares the cumulative total shareholder return on our common stock with the cumulative total return on the NASDAQ Stock Market (U.S.) Index and the NASDAQ Electronics Components Index over the five-year period ended December 31, 2012. The graph assumes that \$100 was invested on December 31, 2007 in our common stock, the NASDAQ Stock Market (U.S.) Index and the NASDAQ Electronics Components Index. In accordance with guidelines of the Securities and Exchange Commission, the shareholder return for each entity in the peer group index has been weighted on the basis of market capitalization. The stock price performance in the graph is not intended to forecast or indicate future stock price performance.

COMPARISON OF FIVE-YEAR CUMULATIVE TOTAL RETURN  
AMONG PIXELWORKS, INC., THE NASDAQ STOCK MARKET (U.S.)  
INDEX AND THE NASDAQ ELECTRONICS COMPONENTS INDEX

## Item 6. Selected Financial Data.

In thousands, except per share data.

	Year ended December 31,				
	2012	2011	2010	2009	2008
Consolidated Statements of Operations Data					
Revenue, net	\$59,710	\$64,609	\$69,529	\$61,093	\$85,164
Cost of revenue	29,862	34,242	37,366	33,798	42,963
Gross profit	29,848	30,367	32,163	27,295	42,201
Operating expenses:					
Research and development	20,757	22,906	22,810	20,075	26,512
Selling, general and administrative	14,944	15,266	15,167	13,745	17,945
Restructuring	—	—	94	235	1,589
Amortization of acquired intangible assets	—	—	—	—	164
Total operating expenses	35,701	38,172	38,071	34,055	46,210
Loss from operations	(5,853)	(7,805)	(5,908)	(6,760)	(4,009)
Other income (expense), net	(412)	1,380	886	12,338	11,979
Income (loss) before income taxes	(6,265)	(6,425)	(5,022)	5,578	7,970
Provision (benefit) for income taxes	(571)	141	(5,395)	(877)	(8)
Net income (loss)	\$(5,694)	\$(6,566)	\$373	\$6,455	\$7,978
Net income (loss) per share:					
Basic	\$(0.31)	\$(0.40)	\$0.03	\$0.48	\$0.55
Diluted	\$(0.31)	\$(0.40)	\$0.03	\$0.47	\$0.55
Weighted average shares outstanding:					
Basic	18,252	16,330	13,442	13,318	14,399
Diluted	18,252	16,330	14,384	13,687	14,410
	December 31,				
	2012	2011	2010	2009	2008
Consolidated Balance Sheets Data					
Cash and cash equivalents	\$13,404	\$15,092	\$16,872	\$17,797	\$53,149
Short-and long-term marketable securities	—	—	12,969	13,062	10,168
Working capital	10,508	13,210	8,072	25,359	61,947
Total assets	29,541	36,377	52,414	56,078	91,732
Long-term liabilities, net of current portion	3,776	5,690	5,635	26,703	73,250
Total shareholders' equity	14,668	17,800	13,931	13,073	4,711

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

Overview

We are an innovative designer, developer and marketer of video and pixel processing semiconductors and software for high-end digital video applications and hold 120 patents related to the visual display of digital image data. Our solutions enable manufacturers of digital display and projection devices, such as large-screen flat panel televisions and digital front projectors, to manufacture their products with a consistently high level of video quality, regardless of the content's source or format. Our core technology leverages unique proprietary techniques for intelligently processing video signals from a variety of sources to ensure that all resulting images are optimized. Additionally, our products help our customers reduce costs and differentiate their display and projection devices, an important factor in industries that experience rapid innovation.

Our business also includes the license of technologies developed for our integrated circuit ("IC") semiconductor products to non-competitive customers and partners, as well as co-development arrangements with current or prospective IC customers. Pixelworks was founded in 1997 and is incorporated under the laws of the state of Oregon. Pixelworks' flexible design architecture enables our technology to produce outstanding image quality in our customers' products with a range of single-purpose integrated circuits ("ICs"), to system-on-chip ("SoC") ICs that integrate microprocessor, memory and image processing functions. Additionally, we provide full solutions, including a software development environment and operating system, which enable our customers to more quickly develop and customize their display products, thus reducing their time to market and allowing them to incorporate differentiated features and functions.

Our primary target markets are liquid crystal display ("LCD") large-screen televisions and 3LCD and digital light processing ("DLP") digital front projectors, however we also target other segments within the flat panel display market, including digital signage.

We have adopted a product strategy that leverages our core competencies in video processing to address the evolving needs of the advanced flat panel display, digital projection and other markets that require superior image quality. We focus our product investments on developing video enhancement solutions for these markets, with particular focus on adding increased performance and functionality. Additionally, we look for ways to leverage our research and development investment into products that address other high-value markets where our innovative proprietary technology provides differentiation for us and our customers. We continually seek to expand our technology portfolio through internal development, co-development with business partners and evaluation of acquisition opportunities. Historically, significant portions of our revenue have been generated by sales to a relatively small number of end customers and distributors. We sell our products worldwide through a direct sales force, distributors and manufacturers' representatives. We sell to distributors in Japan, Taiwan, China, Korea, Europe, Southeast Asia and the U.S., and our manufacturers' representatives support some of our Korean and European sales. Our distributors typically provide engineering support to our end customers and often have valuable and established relationships with our end customers. In certain countries in which we operate, it is customary to sell to distributors. While distributor payment to us is not dependent upon the distributor's ability to resell the product or to collect from the end customer, the distributors may provide longer payment terms to end customers than those we would offer.

Significant portions of our products are sold overseas. Sales outside the U.S. accounted for approximately 90% of revenue in 2012 and 96% of revenue in 2011 and 2010. Our integrators, branded manufacturers and branded suppliers incorporate our products into systems that are sold worldwide. All of our revenue to date has been denominated in U.S. dollars.

## Results of Operations

Year ended December 31, 2012 compared with year ended December 31, 2011, and year ended December 31, 2011 compared with year ended December 31, 2010.

Revenue, net

Net revenue was as follows (in thousands):

	Year ended December 31,			2012 v. 2011		2011 v. 2010	
	2012	2011	2010	\$ change	% change	\$ change	% change
Revenue, net	\$59,710	\$64,609	\$69,529	\$(4,899 )	(8 )%	\$(4,920 )	(7 )%
2012 v. 2011							

Net revenue decreased \$4.9 million, or 8%, from 2011 to 2012. Revenue related to IC product sales was \$54.7 million and \$63.6 million for 2012 and 2011, respectively. Revenue related to the license of intellectual property ("IP") was \$5.0 million and \$1.0 million for 2012 and 2011, respectively.

The decrease in revenue related to IC product sales was primarily attributable to a 9% decrease in average selling price ("ASP") and a 6% decrease in units sold. The decrease in ASP was primarily due to a greater proportion of unit sales of our latest generation MotionEngine® co-processor ICs, which have lower price points than our other product lines. The decrease in ASP was also attributable to reduced pricing on our earlier generation digital projector products. The decrease in units sold was primarily due to a decrease in sales of our earlier generation digital projector products due to competitive factors affecting customer transition to next generation digital projector solutions.

We anticipate that an industry wide inventory correction and seasonality will contribute to reduced revenue for the first quarter of 2013, compared to the fourth quarter of 2012. We have historically experienced higher revenue from the digital projector market during the third quarter of the year and lower revenue during the first quarter of the year, as our Japanese customers reduce inventories in anticipation of their March 31 fiscal year end.

2011 v. 2010

Net revenue decreased \$4.9 million, or 7%, from 2010 to 2011. Revenue related to IC product sales was \$63.6 million and \$69.5 million for 2011 and 2010, respectively. Revenue related to the license of IP was \$1.0 million 2011. There was no revenue related to the license of IP in 2010

The decrease in revenue related to IC product sales was attributable to a 24% decrease in ASP, partially offset by a 20% increase in units sold. The decrease in ASP was primarily due to a greater proportion of unit sales of our MotionEngine® co-processor ICs, which have a lower price point than our other product lines. The decrease was also attributable to reduced pricing on our earlier generation digital projector products and changes in the mix of digital projector product sales. The increase in units sold was primarily attributable to increased sales into the advanced television market of our MotionEngine® co-processor ICs as sales associated with recent design wins ramped in volume at top-tier advanced television market customers. This increase was partially offset by a decrease in digital projector unit sales which was primarily due to an inventory correction during the first half of 2011.

## Cost of revenue and gross profit

Cost of revenue and gross profit were as follows (in thousands):

	Year ended December 31,							
	2012	% of revenue	2011	% of revenue	2010	% of revenue		
Direct product costs and related overhead <sup>1</sup>	\$28,227	47	% \$33,383	52	% \$34,629	50	%	
Licensing costs <sup>2</sup>	802	1	—	—	—	—	—	
Inventory charges <sup>3</sup>	106	0	289	0	1,543	2		
Amortization of acquired developed technology	—	—	—	—	1,050	2		
Other cost of revenue <sup>4</sup>	727	1	570	1	144	0		
Total cost of revenue	\$29,862	50	% \$34,242	53	% \$37,366	54	%	
Gross profit	\$29,848	50	% \$30,367	47	% \$32,163	46	%	

<sup>1</sup> Includes purchased materials, assembly, test, labor, employee benefits, warranty expense and royalties.

<sup>2</sup> Includes direct labor costs and allocated overhead associated with license revenue arrangements.

<sup>3</sup> Includes charges to reduce inventory to lower of cost or market.

<sup>4</sup> Includes stock-based compensation and additional amortization of a non-cancelable prepaid royalty.

## 2012 v. 2011

Cost of revenue decreased to 50% of revenue in 2012 from 53% of revenue in 2011. The decrease in cost of revenue as a percentage of revenue was due primarily to an increase in the recognition of higher margin licensing revenue during 2012 compared to 2011. The decrease was also due to a decrease in direct product costs as a percentage of revenue due to reduced material costs, partially offset by non-recurring charges related to a discontinued product. Pixelworks' gross margin is subject to variability based on changes in revenue levels, recognition of license revenue, product mix, ASPs, startup costs, and the timing and execution of manufacturing ramps as well as other factors.

## 2011 v. 2010

Total cost of revenue decreased to 53% of revenue in 2011 from 54% of revenue in 2010. The decrease resulted primarily from reduced inventory charges as we transitioned our customers to our next generation of MotionEngine® co-processor IC products in 2010 as well as the elimination of amortization expense for acquired developed technology assets that were fully amortized as of the second quarter of 2010. The increase in direct product costs as a percentage of revenue from 2010 to 2011 was primarily due to customer transition to our new digital projector products and MotionEngine® co-processor IC products, which have higher material costs than earlier generation products; this increase was partially offset by \$1.0 million of IP license revenue recorded in 2011 for which there were no associated period costs.

## Research and development

Research and development expense includes compensation and related costs for personnel, development-related expenses including non-recurring engineering and fees for outside services, depreciation and amortization, expensed equipment, facilities and information technology expense allocations and travel and related expenses.

## Co-development agreement

During the second quarter of 2012, we entered into a best efforts co-development agreement (the "Co-development Agreement") with a customer to defray a portion of the research and development expenses we expect to incur in connection with our development of an IC product to be sold exclusively to the customer. We expect our development costs to exceed the amounts received from the customer under the Co-development Agreement, and although we expect to sell units of the product to the customer, there is no commitment or agreement from the customer for such sales at this time. Additionally, we retain ownership of any modifications or improvements to our pre-existing intellectual property and may use such improvements in products sold to other customers.



The initial \$3.5 million due under the Co-development Agreement was received within sixty days of contract signing and two additional payments of \$1.75 million are each payable upon completion of certain development milestones. As amounts become due and payable without recourse, they are offset against research and development expense up to the amount of related costs incurred. We recognized an offset to research and development expense of \$3.5 million related to the Co-development Agreement during 2012.

During 2013, we expect to complete all of the milestones related to the Co-development Agreement and realize the remaining \$3.5 million of reimbursement.

Research and development expense was as follows (in thousands):

	Year ended December 31,			2012 v. 2011		2011 v. 2010	
	2012	2011	2010	\$ change	% change	\$ change	% change
Research and development	\$20,757	\$22,906	\$22,810	\$(2,149)	(9)%	\$96	—%

2012 v. 2011

Research and development expense decreased \$2.1 million, or 9% from 2011 to 2012. The decrease was primarily attributable to a benefit of \$3.5 million recognized in 2012 partially offset by an increase in non-recurring engineering expense of \$1.3 million. The benefit recognized and the increase in non-recurring engineering expense are both related to the Co-development Agreement. The decrease was also attributable to a decrease of \$0.3 million in outside services expense due to the timing of development activities and a decrease of \$0.2 million from a reduction in direct labor costs and allocated overhead associated with the utilization of research and development engineers on license revenue agreements; these costs were recorded in cost of revenue. These decreases were partially offset by an increase in compensation expense due to annual merit salary increases and variable compensation expense.

2011 v. 2010

Research and development expense increased \$0.1 million from 2010 to 2011. The increase is primarily attributable to a \$1.1 million increase in compensation expense due primarily to annual merit salary increases. The increase is also due to a \$0.8 million increase in depreciation and amortization expense due to intellectual property and engineering software tool additions. These increases were partially offset by a \$1.3 million decrease in non-recurring engineering and outside services expense due to the timing of development activities.

Selling, general and administrative

Selling, general and administrative expense includes compensation and related costs for personnel, sales commissions, allocations for facilities and information technology expenses, travel, outside services and other general expenses incurred in our sales, marketing, customer support, management, legal and other professional and administrative support functions.

Selling, general and administrative expense was as follows (in thousands):

	Year ended December 31,			2012 v. 2011		2011 v. 2010	
	2012	2011	2010	\$ change	% change	\$ change	% change
Selling, general and administrative	\$14,944	\$15,266	\$15,167	\$(322)	(2)%	\$99	1%

2012 v. 2011

Selling, general and administrative expense decreased \$0.3 million, or 2%, from 2011 to 2012. The decrease in selling, general and administrative expense is attributable primarily to a decrease in several expense categories as the Company focused on cost management. The decrease is also attributable in part to decreases in compensation expense achieved by reduced headcount and a decrease in vacation expense. However, these reductions in compensation expense were partially offset by annual merit salary increases and increased variable compensation expense.

2011 v. 2010

Selling, general and administrative expense increased \$0.1 million, or 1%, from 2010 to 2011. The increase in selling, general and administrative expense is primarily attributable to a \$0.7 million increase in compensation expense due to annual merit salary increases and a \$0.3 million increase in stock compensation expense. These increases were offset by a general decrease in most other expense categories as the Company focused on cost management.





## Other income (expense), net

Net other income (expense) consisted of the following (in thousands):

	Year ended December 31,			\$ change	
	2012	2011	2010	2012 v. 2011	2011 v. 2010
Interest expense and other, net <sup>1</sup>	\$(412 )	\$(484 )	\$(511 )	\$72	\$ 27
Gain on sale of patents <sup>2</sup>	—	1,600	—	(1,600 )	1,600
Gain on sale of marketable securities	—	264	1,397	(264 )	(1,133 )
Total other income (expense), net	\$(412 )	\$1,380	\$886	\$(1,792 )	\$ 494

Interest expense and other, net consists of interest expense, interest income and amortization of debt issuance costs.

<sup>1</sup> The decrease from 2012 compared to 2011 and from 2011 compared to 2010 is primarily due to a decrease in interest expense and amortization of debt issuance costs attributable to the repayment of our convertible subordinated debentures in the second quarter of 2011.

<sup>2</sup> In the first quarter of 2011, we sold certain patents and related rights and materials for proceeds and a net gain of \$1.6 million. All of the patents were originally obtained by us during our June 2005 acquisition of Equator Technologies, Inc., and the underlying technologies pertain to markets that we no longer pursue.

## Provision (benefit) for income taxes

The provision (benefit) for income taxes was as follows (in thousands):

	Year ended December 31,		
	2012	2011	2010
Provision (benefit) for income taxes	\$(571 )	\$141	\$(5,395 )

The income tax benefit recorded for the year ended December 31, 2012 is comprised of a benefit of \$1.5 million for the reversal of previously recorded tax contingencies due to the expiration of the applicable statute of limitations, partially offset by \$0.9 million in current and deferred tax expense for our profitable cost-plus foreign entities and accruals for tax contingencies in foreign jurisdictions. The income tax expense recorded for the year ended December 31, 2011 is comprised of \$1.1 million in current and deferred tax expense for our profitable cost-plus foreign entities and accruals for tax contingencies in foreign jurisdictions, partially offset by a benefit of \$1.0 million for the reversal of previously recorded tax contingencies due to the expiration of the applicable statutes of limitation. The income tax benefit recorded for the year ended December 31, 2010 of \$5.4 million was primarily due to the reversal of previously recorded tax contingencies due to the expiration of the applicable statutes of limitation, partially offset by current and deferred tax expense in profitable cost-plus foreign jurisdictions.

We continue to record a full valuation allowance against our U.S. and Canadian net deferred tax assets at December 31, 2012 and 2011 as it is not more likely than not that we will realize a benefit from these assets in a future period. We have not provided a valuation allowance against any of our other foreign net deferred tax assets as we have concluded it is more likely than not that we will realize a benefit from these assets in a future period because our subsidiaries in these jurisdictions are cost-plus taxpayers.

As of December 31, 2012, we have federal, state and foreign net operating loss carryforwards of approximately \$187.0 million, \$32.8 million and \$1.1 million, respectively, which will expire between 2013 and 2032. As of December 31, 2012, we have available federal, state and foreign research and experimentation tax credit carryforwards of approximately \$7.7 million, \$2.9 million and \$1.9 million, respectively, which begin expiring in 2019. We have a general foreign tax credit of \$2.9 million which will begin expiring in 2016. Our ability to utilize our federal net operating losses may be limited by Section 382 of the Internal Revenue Code of 1986, as amended (the "Code"), which imposes an annual limit on the ability of a corporation that undergoes an "ownership change" to use its net operating loss carryforwards to reduce its tax liability. An ownership change is generally defined as a greater than 50% point increase in equity ownership by 5% shareholders in any three-year period.

## Liquidity and Capital Resources

## Cash and short- and long-term marketable securities

Our cash and cash equivalent and short- and long-term marketable securities were as follows (in thousands):

	December 31,			\$ Change	
	2012	2011	2010	2012 v. 2011	2011 v. 2010
Cash and cash equivalents	\$13,404	\$15,092	\$16,872	\$(1,688 )	\$(1,780 )
Short-term marketable securities	—	—	12,366	—	(12,366 )
Long-term marketable securities	—	—	603	—	(603 )
Total cash and marketable securities	\$13,404	\$15,092	\$29,841	\$(1,688 )	\$(14,749 )

Total cash and marketable securities decreased \$1.7 million from 2011 to 2012. The decrease resulted primarily from \$1.8 million used for payments on property and equipment and \$2.1 million in payments on other asset financing, partially offset by \$1.8 million provided by operating activities due primarily to changes in working capital.

Total cash and marketable securities decreased \$14.7 million from 2010 to 2011. The decrease resulted primarily from \$15.8 million used to repurchase our outstanding debentures, \$3.0 million used to repay the outstanding balance on our line of credit, \$2.8 million in payments on other asset financing, \$2.7 million for purchases of property and equipment and other assets and \$0.7 million used in operations. These decreases were partially offset by \$8.3 million in net proceeds from our equity offering and \$1.6 million in proceeds from the sale of patents.

As of December 31, 2012, our cash and cash equivalents balance of \$13.4 million consisted of \$0.3 million in cash and \$13.1 million in U.S. denominated money market funds. Although we did not hold short- or long-term investments as of December 31, 2012, our investment policy requires that our portfolio maintains a weighted average maturity of less than 12 months. Additionally, no maturities can extend beyond 24 months and concentrations with individual securities are limited. Investments must be rated at least A-1 / P-1 / F-1 by at least two Nationally Recognized Statistical Rating Organizations, and our investment policy is reviewed at least annually by our Audit Committee.

Although cash balances held at our foreign subsidiaries would be subject to U.S. taxes if repatriated, we have sufficient U.S. net operating losses to eliminate the liability associated with any such repatriation and foreign taxes due upon repatriation would not be significant.

## Accounts receivable, net

Accounts receivable, net decreased to \$3.8 million at December 31, 2012 from \$4.6 million at December 31, 2011.

Average number of days sales outstanding increased to 25 days at December 31, 2012 from 24 days at December 31, 2011.

## Inventories

Inventories decreased to \$2.7 million at December 31, 2012 from \$4.1 million at December 31, 2011. Inventory turnover decreased to 7.3 at December 31, 2012 from 8.0 at December 31, 2011, primarily due to decreased cost of goods sold during the fourth quarter of 2012 compared to the fourth quarter of 2011. Inventory turnover is calculated based on annualized quarterly operating results and average inventory balances during the quarter.

## Capital resources

## Short-term line of credit

On December 21, 2010, we entered into a Loan and Security Agreement (the "Revolving Loan Agreement") with Silicon Valley Bank (the "Bank"). On December 14, 2012, we and the Bank entered into Amendment No. 1 to the Revolving Loan Agreement. The Revolving Loan Agreement, as amended, provides a secured working capital-based revolving line of credit (the "Revolving Line") in an aggregate amount of up to the lesser of (i) \$10.0 million, or (ii) \$1.0 million plus 80% of eligible domestic accounts receivable and certain foreign accounts receivable. In addition, the Revolving Loan Agreement, as amended, provides for non-formula advances of up to \$10.0 million which may be made solely during the last five business days of any fiscal month or quarter and which must be repaid by the Company on or before the fifth business day after the applicable fiscal month or quarter end. Due to their repayment terms, non-formula advances do not provide the Company with usable liquidity.



The Revolving Loan Agreement, as amended, contains customary affirmative and negative covenants as well as customary events of default. The occurrence of an event of default could result in the acceleration of the Company's obligations under the Revolving Loan Agreement, as amended, and an increase to the applicable interest rate, and would permit the Bank to exercise remedies with respect to its security interest. As of December 31, 2012, we were in compliance with all of the terms of the Revolving Loan Agreement, as amended.

We had no outstanding borrowings under the Revolving Line as of December 31, 2012 and 2011.

#### Equity offering

In May 2011, we sold 4,197,500 shares of common stock in an underwritten registered offering at a price to the public of \$2.24 per share. Net proceeds to the Company, after deducting underwriting discounts, commissions, and other expenses, were approximately \$8.3 million.

#### Liquidity

As of December 31, 2012, we have no short- or long-term debt and our cash and cash equivalents balance of \$13.4 million is highly liquid. We anticipate that our existing working capital will be adequate to fund our operating, investing and financing needs for the next twelve months. If necessary, management will pursue financing arrangements including the issuance of debt or equity securities or will reduce expenditures, in order to meet the Company's cash requirements. There is no assurance that, if required, we will be able to raise additional capital or reduce discretionary spending to provide the required liquidity which, in turn, may have an adverse effect on our results of operations, financial position and cash flows.

From time to time, we may evaluate acquisitions of businesses, products or technologies that complement our business. Any further transactions, if consummated, may consume a material portion of our working capital or require the issuance of equity securities that may result in dilution to existing shareholders.

#### Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires us to make estimates and judgments that affect the amounts reported. On an ongoing basis, we evaluate our estimates, including those related to revenue recognition, product returns, warranty obligations, bad debts, inventories, property and equipment, impairment of long-lived assets, amortization of prepaid royalties, valuation of share-based payments, income taxes, litigation and other contingencies. We base our estimates on historical experience and various other assumptions that we believe to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our consolidated financial statements:

**Revenue Recognition.** We recognize revenue when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed and determinable, and collection is reasonably assured. For product sales, we require customers to provide purchase orders prior to shipment and we consider delivery to occur upon shipment provided title and risk of loss have passed to the customer based on the shipping terms. These conditions are generally satisfied upon shipment of the underlying product.

On occasion, we derive revenue from the license of our internally developed IP. IP licensing agreements that we enter into generally provide licensees the right to incorporate our IP components in their products with terms and conditions that vary by licensee. Our license fee arrangements generally include multiple deliverables and we are required to determine whether there is more than one unit of accounting. To the extent that the deliverables are separable into multiple units of accounting, we allocate the total fee on such arrangements to the individual units of accounting using management's best estimate of selling price ("ESP"), if third party evidence ("TPE") or vendor specific objective evidence ("VSOE") does not exist. We defer revenue recognition for consideration that is contingent upon future performance or other contractual terms.

The Company's process for determining its ESP for deliverables without VSOE or TPE considers multiple factors that may vary depending upon the unique facts and circumstances related to each deliverable. The key factors considered by the Company in developing the ESPs include the nature and complexity of different technologies being licensed, our cost to provide the deliverables, the availability of substitute technologies in the marketplace and the Company's

historical pricing practices. We then recognize revenue for each unit of accounting depending on the nature of the deliverable(s) comprising the unit of accounting in accordance with the revenue recognition criteria mentioned above.

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**Sales Returns and Allowances.** Our customers do not have a stated right to return product except for replacement of defective products under our warranty program discussed below. However, we have accepted customer returns on a case-by-case basis as customer accommodations in the past. As a result, we provide for these returns in our reserve for sales returns and allowances. At the end of each reporting period, we estimate the reserve for returns based on historical experience and knowledge of any applicable events or transactions.

Certain of our distributors have stock rotation provisions in their distributor agreements, which allow them to return 5-10% of the products purchased in the prior six months in exchange for products of equal value. We analyze historical stock rotations at the end of each reporting period. To date, returns under the stock rotation provisions have been nominal.

Certain distributors also have price protection provisions in their distributor agreements with us. Under the price protection provisions, we grant distributors credit if they purchased product for a specific end customer and we subsequently lower the price to the end customer such that the distributor can no longer earn its negotiated margin on in-stock inventory. At the end of each reporting period, we estimate a reserve for price protection credits based on historical experience and knowledge of any applicable events or transactions.

**Product Warranties.** We warrant that our products will be free from defects in materials and workmanship for a period of twelve months from delivery. Warranty repairs are guaranteed for the remainder of the original warranty period.

Our warranty is limited to repairing or replacing products, or refunding the purchase price.

At the end of each reporting period, we estimate a reserve for warranty returns based on historical experience and knowledge of any applicable events or transactions. While we engage in extensive product quality programs and processes, which include actively monitoring and evaluating the quality of our suppliers, should actual product failure rates or product replacement costs differ from our estimates, revisions to the estimated warranty liability may be required.

**Allowance for Doubtful Accounts.** We offer credit to customers after careful examination of their creditworthiness. We maintain an allowance for doubtful accounts for estimated losses that may result from the inability of our customers to make required payments. At the end of each reporting period, we estimate the allowance for doubtful accounts based on our account-by-account risk analysis of outstanding receivable balances. If the financial condition of our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required.

**Inventory Valuation.** We value inventory at the lower of cost or market. In addition, we write down any obsolete, unmarketable or otherwise impaired inventory to net realizable value. The determination of obsolete or excess inventory requires us to estimate the future demand for our products. The estimate of future demand is compared to inventory levels to determine the amount, if any, of obsolete or excess inventory. If actual market conditions are less favorable than those we projected at the time the inventory was written down, additional inventory write-downs may be required. Inventory valuation is re-evaluated on a quarterly basis.

**Amortization of Non-Cancelable Prepaid Royalty.** As of December 31, 2012, we had a prepaid non-cancelable royalty of \$0.8 million for the license of IP from a third party. We amortize the prepaid based on our estimated average unit cost, which is dependent upon forecasted shipments of our products that contain the licensed IP. If our actual shipments are less than forecasted, the estimated amortization rate will increase in the future.

**Useful Lives and Recoverability of Equipment and Other Long-Lived Assets.** We evaluate the remaining useful life and recoverability of equipment and other assets, including identifiable intangible assets with definite lives, whenever events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. If there is an indicator of impairment, we prepare an estimate of future, undiscounted cash flows expected to result from the use of each asset and its eventual disposition. If these cash flows are less than the carrying value of the asset, we adjust the carrying amount of the asset to its estimated fair value. While we have concluded that the carrying value of our long-lived assets is recoverable as of December 31, 2012, our analysis is dependent upon our estimates of future cash flows and our actual results may vary.

**Stock-Based Compensation.** We estimate the fair value of stock options using the Black-Scholes option pricing model, which requires certain estimates, including an expected forfeiture rate and expected term of options granted. We also make decisions regarding the method of calculating expected volatilities and the risk-free interest rate used in the option-pricing model. The resulting calculated fair value of stock options is recognized as compensation expense over

the requisite service period, which is generally the vesting period. When there are changes to the assumptions used in the option-pricing model, including fluctuations in the market price of our common stock, there will be variations in the calculated fair value of our future stock option awards, which results in variation in the compensation cost recognized. Additionally, any modification of an award that increases its fair value will require us to recognize additional expense.

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Income Taxes. We record deferred income taxes for temporary differences between the amount of assets and liabilities for financial and tax reporting purposes and we record a valuation allowance to reduce our deferred tax assets to the amount that is more likely than not to be realized. We also regularly conduct a comprehensive review of our uncertain tax positions. In this regard, an uncertain tax position represents our expected treatment of a tax position taken in a filed tax return, or planned to be taken in a future tax return, that has not been reflected in measuring income tax expense for financial reporting purposes. Until these positions are sustained by the taxing authorities, we do not recognize the tax benefits resulting from such positions and report the tax effects for uncertain tax positions in our consolidated balance sheet.

#### Contractual Payment Obligations

A summary of our contractual obligations as of December 31, 2012 is as follows:

Contractual Obligation	Payments Due By Period		
	Total	Less than 1 year	1-3 years
Operating leases <sup>1</sup>	\$2,065	\$1,561	\$504
Payments on accrued balances related to asset purchases	3,093	1,817	1,276
Estimated purchase commitments to contract manufacturers	4,602	4,602	—
Total <sup>2</sup>	\$9,760	\$7,980	\$1,780

- The operating lease payments above are net of sublease rental income of \$0.1 million for the year ending December 31, 2013.
- We are unable to reliably estimate the timing of future payments related to uncertain tax positions and repatriation of foreign earnings; therefore, \$2.3 million of income taxes payable has been excluded from the table above.

#### Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements that have, or are reasonably likely to have, a material current or future effect on our financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

#### Recent Accounting Pronouncements

See "Note 2: Summary of Significant Accounting Policies" in Part II, Item 8 of this Form 10-K for a description of recent accounting pronouncements, including the expected dates of adoption and estimated effects, if any, on our consolidated financial statements.

#### Item 7A. Quantitative and Qualitative Disclosures about Market Risk.

##### Interest Rate Risk

As of December 31, 2012, all of our cash equivalents were held in highly liquid money market accounts, accordingly, we do not have significant exposure to changes in interest rates.

##### Exchange Rate Risk

We are exposed to risks resulting from the fluctuations of foreign currencies, primarily those of Japan, Taiwan, Korea and the People's Republic of China. We sell our products to Original Equipment Manufacturers ("OEMs") that incorporate our products into other products that they sell outside of the U.S. While sales of our products to OEMs are denominated in U.S. dollars, the products sold by OEMs are denominated in foreign currencies. Accordingly, any strengthening of the U.S. dollar against these foreign currencies will increase the foreign currency price equivalent of our products, which could lead to a change in the competitive nature of these products in the marketplace.

In addition, a portion of our operating expenses, such as employee salaries and foreign income taxes, are denominated in foreign currencies. Accordingly, our operating results are affected by changes in the exchange rate between the U.S. dollar and those currencies. Any future strengthening of those currencies against the U.S. dollar will negatively impact our operating results by increasing our operating expenses as measured in U.S. dollars. We analyze our exposure to foreign currency fluctuations and may engage in financial hedging techniques in the future to attempt to minimize the effect of these potential fluctuations; however, foreign currency exchange rate fluctuations may adversely affect our



financial results in the future.

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Item 8. Financial Statements and Supplementary Data.

The following financial statements and reports are included in Item 8:

Report of Independent Registered Public Accounting Firm

Consolidated Balance Sheets as of December 31, 2012 and 2011

Consolidated Statements of Operations for the years ended December 31, 2012, 2011 and 2010

Consolidated Statements of Comprehensive Loss for the years ended December 31, 2012, 2011 and 2010

Consolidated Statements of Cash Flows for the years ended December 31, 2012, 2011 and 2010

Consolidated Statements of Shareholders' Equity for the years ended December 31, 2012, 2011 and 2010

Notes to Consolidated Financial Statements

Report of Independent Registered Public Accounting Firm  
The Board of Directors and Shareholders  
Pixelworks, Inc:

We have audited the accompanying consolidated balance sheets of Pixelworks, Inc. and subsidiaries as of December 31, 2012 and 2011, and the related consolidated statements of operations, comprehensive loss, shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2012. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

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

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Pixelworks, Inc. and subsidiaries as of December 31, 2012 and 2011, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2012, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Pixelworks, Inc.'s internal control over financial reporting as of December 31, 2012, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated March 6, 2013 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

/s/ KPMG LLP

Portland, Oregon  
March 6, 2013

PIXELWORKS, INC.  
CONSOLIDATED BALANCE SHEETS

(In thousands, except share data)

	December 31,	
	2012	2011
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$13,404	\$15,092
Accounts receivable, net	3,772	4,557
Inventories	2,702	4,107
Prepaid expenses and other current assets	1,727	2,341
Total current assets	21,605	26,097
Property and equipment, net	6,283	7,366
Other assets, net	1,653	2,914
Total assets	\$29,541	\$36,377
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$2,224	\$4,428
Accrued liabilities and current portion of long-term liabilities	8,666	8,247
Current portion of income taxes payable	207	212
Total current liabilities	11,097	12,887
Long-term liabilities, net of current portion	1,445	2,467
Income taxes payable, net of current portion	2,331	3,223
Total liabilities	14,873	18,577
Commitments and contingencies (Note 7)		
Shareholders' equity:		
Preferred stock, \$0.001 par value, 50,000,000 shares authorized, none issued	—	—
Common stock, \$0.001 par value; 250,000,000 shares authorized, 18,400,783 and 17,966,170 shares issued and outstanding as of December 31, 2012 and 2011, respectively	349,531	346,923
Accumulated other comprehensive loss	(113	) (67
Accumulated deficit	(334,750	) (329,056
Total shareholders' equity	14,668	17,800
Total liabilities and shareholders' equity	\$29,541	\$36,377
See accompanying notes to consolidated financial statements.		

PIXELWORKS, INC.  
CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share data)

	Year Ended December 31,			
	2012	2011	2010	
Revenue, net	\$59,710	\$64,609	\$69,529	
Cost of revenue (1)	29,862	34,242	37,366	
Gross profit	29,848	30,367	32,163	
Operating expenses:				
Research and development (2)	20,757	22,906	22,810	
Selling, general and administrative (3)	14,944	15,266	15,167	
Restructuring	—	—	94	
Total operating expenses	35,701	38,172	38,071	
Loss from operations	(5,853	) (7,805	) (5,908	)
Interest expense and other, net	(412	) (484	) (511	)
Gain on sale of patents	—	1,600	—	
Gain on sale of marketable securities	—	264	1,397	
Total other income (expense), net	(412	) 1,380	886	
Loss before income taxes	(6,265	) (6,425	) (5,022	)
Provision (benefit) for income taxes	(571	) 141	(5,395	)
Net income (loss)	\$(5,694	) \$(6,566	) \$373	
Net income (loss) per share				
Basic	\$(0.31	) \$(0.40	) \$0.03	
Diluted	\$(0.31	) \$(0.40	) \$0.03	
Weighted average shares outstanding				
Basic	18,252	16,330	13,442	
Diluted	18,252	16,330	14,384	
(1) Includes:				
Additional amortization of non-cancelable prepaid royalty	\$565	\$441	\$84	
Stock-based compensation	162	129	60	
Amortization of acquired developed technology	—	—	1,050	
(2) Includes stock-based compensation	893	845	437	
(3) Includes stock-based compensation	1,109	1,037	707	
See accompanying notes to consolidated financial statements.				

PIXELWORKS, INC.  
 CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS  
 (In thousands)

	Year Ended December 31,		
	2012	2011	2010
Net income (loss)	\$ (5,694	) \$ (6,566	) \$ 373
Other comprehensive income (loss):			
Reclassification of unrealized gain upon sale of available-for-sale securities	—	(255	) (944
Unrealized gain (loss) on available-for-sale securities	—	(2	) 73
Pension adjustment	(56	) (4	) (37
Tax effect of reclassification of unrealized gain upon sale of available-for-sale securities	—	26	—
Tax effect of unrealized gain (loss) on available-for-sale securities	—	—	(26
Tax effect of pension adjustment	10	1	14
Total comprehensive loss	\$ (5,740	) \$ (6,800	) \$ (547
See accompanying notes to consolidated financial statements.			

PIXELWORKS, INC.  
CONSOLIDATED STATEMENTS OF CASH FLOWS  
(In thousands)

	Year Ended December 31,		
	2012	2011	2010
Cash flows from operating activities:			
Net income (loss)	\$ (5,694	) \$ (6,566	) \$ 373
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:			
Depreciation and amortization	4,735	5,114	4,537
Stock-based compensation	2,164	2,011	1,204
Reversal of uncertain tax positions	(1,455	) (967	) (6,194
Loss on asset disposal	187	—	—
Deferred income tax expense (benefit)	(110	) 23	247
Gain on sale of patents	—	(1,600	) —
Gain on sale of marketable securities	—	(264	) (1,397
Amortization of debt issuance costs	—	31	74
Other non-cash tax expense (benefit)	—	26	(26
Amortization of acquired developed technology	—	—	1,050
Amortization on marketable securities	—	17	98
Other	63	11	52
Changes in operating assets and liabilities:			
Accounts receivable, net	785	(70	) 1,132
Inventories	1,405	751	1,300
Prepaid expenses and other current and long-term assets, net	1,368	875	1,117
Accounts payable	(2,410	) (399	) (3,106
Accrued current and long-term liabilities	187	(274	) (303
Income taxes payable	559	546	479
Net cash provided by (used in) operating activities	1,784	(735	) 637
Cash flows from investing activities:			
Purchases of property and equipment	(1,835	) (2,636	) (1,795
Proceeds from sales and maturities of marketable securities	—	12,961	17,485
Proceeds from sale of patents	—	1,600	—
Purchases of licensed technology	—	(100	) (480
Proceeds from sales of property and equipment	—	11	6
Purchases of available-for-sale marketable securities	—	—	(16,964
Net cash provided by (used in) investing activities	(1,835	) 11,836	(1,748
Cash flows from financing activities:			
Payments on asset financings	(2,081	) (2,760	) (3,015
Proceeds from issuances of common stock	444	331	201
Repurchase of debentures	—	(15,779	) —
Net proceeds from equity offering	—	8,327	—
Net proceeds (payments) from line of credit	—	(3,000	) 3,000
Net cash provided by (used in) financing activities	(1,637	) (12,881	) 186
Net decrease in cash and cash equivalents	(1,688	) (1,780	) (925
Cash and cash equivalents, beginning of period	15,092	16,872	17,797
Cash and cash equivalents, end of period	\$ 13,404	\$ 15,092	\$ 16,872
See accompanying notes to consolidated financial statements.			





## PIXELWORKS, INC.

## CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(In thousands, except share data)

	Common Stock		Accumulated Other Comprehensive Income (loss)	Accumulated Deficit	Total Shareholders' Equity
	Shares	Amount			
Balance as of December 31, 2009	13,403,057	\$ 334,849	\$ 1,087	\$ (322,863 )	\$ 13,073
Stock issued under stock option and stock purchase plans	162,964	201	—	—	201
Stock-based compensation expense	—	1,204	—	—	1,204
Net income	—	—	—	373	373
Reclassification of unrealized gain upon sale of available-for-sale securities	—	—	(944 )	—	(944 )
Unrealized gain on available-for-sale securities, net of tax of \$26	—	—	47	—	47
Pension adjustment, net of tax of \$(14)	—	—	(23 )	—	(23 )
Balance as of December 31, 2010	13,566,021	336,254	167	(322,490 )	13,931
Stock issued under stock option and stock purchase plans	202,649	331	—	—	331
Equity offering	4,197,500	8,327	—	—	8,327
Stock-based compensation expense	—	2,011	—	—	2,011
Net loss	—	—	—	(6,566 )	(6,566 )
Reclassification of unrealized gain upon sale of available-for-sale securities, net of tax of \$(26)	—	—	(229 )	—	(229 )
Unrealized gain on available-for-sale securities, net of tax of \$0	—	—	(2 )	—	(2 )
Pension adjustment, net of tax of \$(1)	—	—	(3 )	—	(3 )
Balance as of December 31, 2011	17,966,170	346,923	(67 )	(329,056 )	17,800
Stock issued under stock option and stock purchase plans	434,613	444	—	—	444
Stock-based compensation expense	—	2,164	—	—	2,164
Net loss	—	—	—	(5,694 )	(5,694 )
Pension adjustment, net of tax of \$(10)	—	—	(46 )	—	(46 )
Balance as of December 31, 2012	18,400,783	\$ 349,531	\$ (113 )	\$ (334,750 )	\$ 14,668

See accompanying notes to consolidated financial statements.

PIXELWORKS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands, except share and per share data)

NOTE 1. BASIS OF PRESENTATION

Nature of Business

We are an innovative designer, developer and marketer of video and pixel processing semiconductors and software for high-end digital video applications and hold 120 patents related to the visual display of digital image data. Our solutions enable manufacturers of digital display and projection devices, such as large-screen flat panel televisions and digital front projectors, to manufacture their products with a consistently high level of video quality, regardless of the content's source or format. Our core technology leverages unique proprietary techniques for intelligently processing video signals from a variety of sources to ensure that all resulting images are optimized. Additionally, our products help our customers reduce costs and differentiate their display and projection devices, an important factor in industries that experience rapid innovation.

Our business also includes the license of technologies developed for our integrated circuit ("IC") semiconductor products to customers and partners, as well as co-development arrangements with current or prospective IC customers. Pixelworks was founded in 1997 and is incorporated under the laws of the state of Oregon.

Our consolidated financial statements include the accounts of Pixelworks and its wholly-owned subsidiaries.

Intercompany accounts and transactions have been eliminated. All foreign subsidiaries use the U.S. dollar as the functional currency, and as a result, transaction gains and losses are included in the statement of operations.

Transaction gains (losses) were \$84, \$(9) and \$6 for the years ended December 31, 2012, 2011 and 2010, respectively.

Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. generally accepted accounting principles ("GAAP") requires us to make estimates and judgments that affect amounts reported in the financial statements and accompanying notes. Our significant estimates and judgments include those related to revenue recognition, product returns, warranty obligations, bad debts, inventories, property and equipment, impairment of long-lived assets, amortization of prepaid royalties, valuation of share-based payments, income taxes, litigation and other contingencies. The actual results experienced could differ materially from our estimates.

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Cash and Cash Equivalents

We classify all cash and highly liquid investments with original maturities of three months or less at the date of purchase as cash and cash equivalents. Cash equivalents totaled \$13,104 and \$9,111 at December 31, 2012 and 2011, respectively.

Marketable Securities

Our investments in marketable securities are classified as available-for-sale. Available-for-sale securities are stated at fair value based on quoted market prices with unrealized holding gains or losses, net of tax, included in accumulated other comprehensive income (loss), a component of shareholders' equity. The cost of securities sold is based on the specific identification method.

Accounts Receivable

Accounts receivable are recorded at invoiced amount and do not bear interest when recorded or accrue interest when past due. We maintain an allowance for doubtful accounts for estimated losses that may result from the inability of our customers to make required payments. At the end of each reporting period, we estimate the allowance for doubtful accounts based on an account-by-account risk analysis of outstanding receivable balances. The determination to write-off specific accounts receivable balances is made based on likelihood of collection and past due status. Past due status is based on invoice date and terms specific to each customer.

Inventories

Inventories consist of finished goods and work-in-process, and are stated at the lower of standard cost (which approximates actual cost on a first-in, first-out basis) or market (net realizable value).



### Property and Equipment

Property and equipment are stated at cost. Depreciation is calculated on a straight-line basis over the estimated useful life of the assets which are generally as follows:

Software	Lesser of 3 years or contractual license term
Equipment, furniture and fixtures	2 years
Tooling	2 to 4 years
Leasehold improvements	Lesser of lease term or estimated useful life

The cost of property and equipment repairs and maintenance is expensed as incurred.

### Licensed Technology

We have capitalized licensed technology assets in other long-term assets. These assets are stated at cost and are amortized on a straight-line basis over the term of the license or the estimated life of the asset, if the license is not contractually limited, which is generally three to five years.

### Useful Lives and Recoverability of Equipment and Other Long-Lived Assets

We evaluate the remaining useful life and recoverability of equipment and other assets, including identifiable intangible assets with definite lives, whenever events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. If there is an indicator of impairment, we prepare an estimate of future, undiscounted cash flows expected to result from the use of each asset and its eventual disposition. If these cash flows are less than the carrying value of the asset, we adjust the carrying amount of the asset to its estimated fair value.

### Revenue Recognition

We recognize revenue when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed and determinable, and collection is reasonably assured. For product sales, we require customers to provide purchase orders prior to shipment and we consider delivery to occur upon shipment provided title and risk of loss have passed to the customer based on the shipping terms. These conditions are generally satisfied upon shipment of the underlying product.

There are no customer acceptance provisions associated with our products, and except for replacement of defective products under our warranty program discussed below, we have no obligation to accept product returns from end customers; however, we have accepted returns on a case-by-case basis as customer accommodations in the past. As a result, we provide for estimated reductions to gross profit for these sales returns in our reserve for sales returns and allowances. At the end of each reporting period, we estimate the reserve based on historical experience and knowledge of any applicable events or transactions. The reserve is included in accrued liabilities in our consolidated balance sheet.

A portion of our sales are made to distributors under agreements that grant the distributor limited stock rotation rights and price protection on in-stock inventory. The stock rotation rights allow these distributors to exchange a limited amount of their in-stock inventory for other Pixelworks product. We analyze historical stock rotations at the end of each reporting period. To date, returns under the stock rotation provision have been nominal, and as a result, we have not recorded a reserve for stock rotations.

Under price protection provisions, we grant distributors credit if they purchased product for a specific end customer and we subsequently lower the price to the end customer such that the distributor can no longer earn its negotiated margin on in-stock inventory. At the end of each reporting period, we estimate a reserve for price protection credits based on historical experience and knowledge of any applicable events or transactions.

On occasion, we derive revenue from the license of our internally developed intellectual property ("IP"). IP licensing agreements that we enter into generally provide licensees the right to incorporate our IP components in their products with terms and conditions that vary by licensee. Our license fee arrangements generally include multiple deliverables and we are required to determine whether there is more than one unit of accounting. To the extent that the deliverables are separable into multiple units of accounting, we allocate the total fee on such arrangements to the individual units of accounting using management's best estimate of selling price ("ESP"), if third party evidence ("TPE") or vendor specific objective evidence ("VSOE") does not exist. We defer revenue recognition for consideration that is contingent upon future performance or other contractual terms.



The Company's process for determining its ESP for deliverables without VSOE or TPE considers multiple factors that may vary depending upon the unique facts and circumstances related to each deliverable. The key factors considered by the Company in developing the ESPs include the nature and complexity of the licensed technologies, our cost to provide the deliverables, the availability of substitute technologies in the marketplace and the Company's historical pricing practices. We then recognize revenue for each unit of accounting depending on the nature of the deliverable(s) comprising the unit of accounting in accordance with the revenue recognition criteria mentioned above.

Fees under these agreements generally include (a) license fees relating to our IP, (b) engineering services, and (c) support services. Historically, each of these elements have standalone value and therefore each are treated as separate units of accounting. Any future licensing arrangements will be analyzed based on the specific facts and circumstances which may be different than our historical licensing arrangements.

For deliverables related to licenses of our technology that involve significant engineering services, we recognize revenue in accordance with the provisions of the proportional performance method. We determine costs associated with engineering services using actual labor dollars incurred and estimated other direct or incremental costs allocated based on the percentage of time the engineer(s) spent on the project. These costs are deferred until revenue recognition criteria have been met, at which time they are reclassified as cost of revenue.

#### Warranty Program

We warrant that our products will be free from defects in material and workmanship for a period of twelve months from delivery. Warranty repairs are guaranteed for the remainder of the original warranty period. Our warranty is limited to repairing or replacing products, or refunding the purchase price. At the end of each reporting period, we estimate a reserve for warranty returns based on historical experience and knowledge of any applicable events or transactions. The reserve for warranty returns is included in accrued liabilities in our consolidated balance sheet.

#### Stock-Based Compensation

We currently sponsor a stock incentive plan that allows for issuance of employee stock options and restricted stock awards, including restricted stock units. We also have an employee stock purchase plan for all eligible employees. The fair value of share-based payment awards is expensed straight-line over the requisite service period, which is generally the vesting period, for the entire award. Additionally, any modification of an award that increases its fair value will require us to recognize additional expense.

The fair values of our stock option grants and purchase rights under our employee stock purchase plan are estimated as of the grant date using the Black-Scholes option valuation model which is affected by our estimates of the risk free interest rate, our expected dividend yield, expected term and the expected share price volatility of our common shares over the expected term. The fair values of our restricted stock awards are based on the market value of our stock on the date of grant, adjusted for the effect of estimated forfeitures.

#### Research and Development

Costs associated with research and development activities are expensed as incurred, except for items with alternate future uses which are capitalized and depreciated over their estimated useful life.

On occasion, we enter into co-development arrangements with current or prospective IC customers to defray a portion of the research and development expenses we expect to incur in connection with our development of an IC product. As amounts become due and payable without recourse under co-development agreements, they are offset against research and development expense up to the amount of related costs incurred.

#### Interest Expense and Other, Net

Interest expense and other, consists of the following:

	Year Ended December 31,		
	2012	2011	2010
Interest expense	\$ (417)	) \$ (468)	) \$ (500)
Interest income	5	15	63
Amortization of debt issuance costs	—	(31)	) (74)
Interest expense and other, net	\$ (412)	) \$ (484)	) \$ (511)



## Income Taxes

We account for income taxes under the asset and liability method. This approach requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of temporary differences between financial statement carrying amounts and tax bases of assets and liabilities. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. We establish a valuation allowance to reduce deferred tax assets if it is "more likely than not" that a portion or all of the asset will not be realized in future tax returns.

An uncertain tax position represents our expected treatment of a tax position taken in a filed tax return, or planned to be taken in a future tax return, that has not been reflected in measuring income tax expense for financial reporting purposes. Until these positions are sustained by the taxing authorities, we do not recognize the tax benefits resulting from such positions and report the tax effects for uncertain tax positions in our consolidated balance sheet.

## Accumulated Other Comprehensive Loss

Accumulated other comprehensive loss, net of tax, consists of the following:

	December 31,		
	2012	2011	
Actuarial loss on pension obligation	\$(80	) \$(30	)
Accumulated transition pension obligation	(33	) (37	)
Accumulated other comprehensive loss	\$(113	) \$(67	)

## Fair Value of Financial Instruments

See Note 4 for information regarding accounting policies related to the fair value of our financial instruments.

## Risks and Uncertainties

### Concentration of Suppliers

We do not own or operate a semiconductor fabrication facility and do not have the resources to manufacture our products internally. We rely on a limited number of foundries and assembly and test vendors to produce all of our wafers and for completion of finished products. We do not have any long-term agreements with any of these suppliers. In light of these dependencies, it is reasonably possible that failure to perform by one of these suppliers could have a severe impact on our results of operations. Additionally, the concentration of these vendors within Taiwan, the People's Republic of China and Singapore increases our risk of supply disruption due to natural disasters, economic instability, political unrest or other regional disturbances.

### Risk of Technological Change

The markets in which we compete, or seek to compete, are subject to rapid technological change, frequent new product introductions, changing customer requirements for new products and features, and evolving industry standards. The introduction of new technologies and the emergence of new industry standards could render our products less desirable or obsolete, which could harm our business.

### Concentrations of Credit Risk

Financial instruments that potentially subject us to concentrations of credit risk consist of cash equivalents and accounts receivable. We limit our exposure to credit risk associated with cash equivalent balances by holding our funds in high quality, highly liquid money market accounts. We limit our exposure to credit risk associated with accounts receivable by carefully evaluating creditworthiness before offering terms to customers.



## Recent Accounting Pronouncements

In May 2011, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update No. 2011-04, Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and International Financial Reporting Standards (Topic 820)-Fair Value Measurement ("ASU 2011-04"), to provide a consistent definition of fair value and ensure that the fair value measurement and disclosure requirements are similar between U.S. GAAP and International Financial Reporting Standards. ASU 2011-04 changes certain fair value measurement principles and enhances the disclosure requirements. The provisions of this new guidance are effective for fiscal years, and interim periods within those years, beginning after December 15, 2011. The Company adopted ASU 2011-04 effective January 1, 2012 and the adoption did not have a material impact on our consolidated financial position or results of operations.

In June 2011, the FASB issued Accounting Standards Update No. 2011-05, Comprehensive Income (Topic 220)-Presentation of Comprehensive Income ("ASU 2011-05"), to require an entity to present the total of comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. ASU 2011-05 eliminates the option to present the components of other comprehensive income as part of the statement of equity. The provisions of this new guidance require retrospective application and are effective for fiscal years, and interim periods within those years, beginning after December 15, 2011. The Company adopted ASU 2011-05 effective January 1, 2012 and elected to present comprehensive income and its components in two separate, consecutive statements.

## NOTE 3. BALANCE SHEET COMPONENTS

## Marketable Securities

As of December 31, 2012 and 2011, we had no short- and long-term marketable securities.

During the year ended December 31, 2011, we sold available-for-sale marketable securities for gross proceeds of \$612 and gross realized gains of \$264. Net unrealized holding gains of \$255 on available-for sale marketable securities were reclassified out of accumulated other comprehensive income during the year ended December 31, 2011.

Unrealized holding gains and losses are recorded in accumulated other comprehensive income (loss), a component of shareholders' equity, in the condensed consolidated balance sheets.

## Accounts Receivable, Net

Accounts receivable consists of the following:

	December 31,	
	2012	2011
Accounts receivable, gross	\$4,124	\$4,918
Allowance for doubtful accounts	(352)	(361)
Accounts receivable, net	\$3,772	\$4,557

The following is a summary of the change in our allowance for doubtful accounts:

	Year Ended December 31,		
	2012	2011	2010
Balance at beginning of year	\$361	\$399	\$428
Reductions credited	(9)	(10)	(29)
Accounts written-off, net of recoveries	—	(28)	—
Balance at end of year	\$352	\$361	\$399

## Inventories

Inventories consist of the following:

	December 31,	
	2012	2011
Finished goods	\$1,090	\$1,203
Work-in-process	1,612	2,904
Inventories	\$2,702	\$4,107

We recorded inventory write-downs of \$106, \$289 and \$1,543 for the years ended December 31, 2012, 2011 and 2010, respectively. The inventory write-downs were for lower of cost or market and excess and obsolescence exposure, net of sales of previously reserved inventory of \$15, \$74 and \$88 for the years ended December 31, 2012, 2011 and 2010, respectively.

## Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consist of current prepaid expenses, deposits, income taxes receivable, other receivables, deferred costs and deferred tax assets.

## Property and Equipment, Net

Property and equipment consists of the following:

	December 31,	
	2012	2011
Software	\$8,835	\$8,411
Equipment, furniture and fixtures	8,150	7,776
Tooling	2,254	2,786
Leasehold improvements	2,212	2,688
	21,451	21,661
Accumulated depreciation and amortization	(15,168	) (14,295
Property and equipment, net	\$6,283	\$7,366

Software amortization was \$2,157, \$1,882 and \$1,803 for the years ended December 31, 2012, 2011 and 2010, respectively. Depreciation and amortization expense for equipment, furniture, fixtures, tooling and leasehold improvements was \$1,908, \$1,707 and \$1,563 for the years ended December 31, 2012, 2011 and 2010, respectively.

## Other Assets, Net

Other assets consist primarily of licensed technology, prepaid royalties and deposits. Amortization of licensed technology was \$670, \$1,525 and \$1,171 for the years ended December 31, 2012, 2011 and 2010, respectively.

## Accrued Liabilities and Current Portion of Long-Term Liabilities

Accrued liabilities and current portion of long-term liabilities consist of the following:

	December 31,	
	2012	2011
Accrued payroll and related liabilities	\$2,305	\$2,638
Accrued commissions and royalties	1,708	1,407
Current portion of accrued liabilities for asset financings	1,688	1,753
Accrued interest payable	808	520
Reserve for warranty returns	457	439
Other	1,700	1,490
Accrued liabilities and current portion of long-term liabilities	\$8,666	\$8,247

The following is a summary of the change in our reserve for warranty returns:

	Year Ended December 31,		
	2012	2011	2010
Reserve for warranty returns:			
Balance at beginning of year	\$439	\$723	\$304
Provision (benefit)	588	(8	) 1,132
Charge-offs	(570	) (276	) (713
Balance at end of year	\$457	\$439	\$723

#### Short-Term Line of Credit

On December 21, 2010, we entered into a Loan and Security Agreement (the "Revolving Loan Agreement") with Silicon Valley Bank (the "Bank"). On December 14, 2012, we and the Bank entered into Amendment No. 1 to the Revolving Loan Agreement. The Revolving Loan Agreement, as amended, provides a secured working capital-based revolving line of credit (the "Revolving Line") in an aggregate amount of up to the lesser of (i) \$10,000, or (ii) \$1,000 plus 80% of eligible domestic accounts receivable and certain foreign accounts receivable. In addition, the Revolving Loan Agreement, as amended also provides for non-formula advances of up to \$10,000 which may be made solely during the last five business days of any fiscal month or quarter and which must be repaid by the Company on or before the fifth business day after the applicable fiscal month or quarter end.

Amounts advanced under the Revolving Line bear interest at an annual rate equal to the lender's prime rate plus 0.25%. The Revolving Loan Agreement, as amended also provides an option for LIBOR advances that bear interest based on the LIBOR rate. Interest on the Revolving Line is due monthly, with the balance due on December 14, 2014, which is the scheduled maturity date for the Revolving Line.

The Revolving Loan Agreement, as amended contains customary affirmative and negative covenants, including with respect to the following: compliance with laws, provision of financial statements and periodic reports, payment of taxes, maintenance of inventory and insurance, maintenance of operating accounts at the Bank, the Bank's access to collateral, formation or acquisition of subsidiaries, incurrence of indebtedness, dispositions of assets, granting liens, changes in business, ownership or business locations, engaging in mergers and acquisitions, making investments or distributions and affiliate transactions. The covenants also require that the Company maintain a minimum ratio of qualifying financial assets to the sum of qualifying financial obligations.

The Revolving Loan Agreement, as amended also contains customary events of default, including the following: defaults with respect to covenant compliance, the occurrence of a material adverse change, the occurrence of certain bankruptcy or insolvency events, cross-defaults, judgment defaults and material misrepresentations. The occurrence of an event of default could result in the acceleration of the Company's obligations under the Revolving Loan Agreement, as amended and an increase to the applicable interest rate, and would permit the Bank to exercise remedies with respect to its security interest.

To secure the repayment of any amounts borrowed under the Revolving Loan Agreement, as amended, the Company granted to the Bank a security interest in substantially all of its assets, excluding its intellectual property assets. The Company has agreed not to pledge or otherwise encumber its intellectual property assets without prior written permission from the Bank.

We had no outstanding borrowings under the Revolving Line as of December 31, 2012 and 2011.

**NOTE 4. 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 an orderly transaction between market participants at the measurement date. Three levels of inputs may be used to measure fair value:

Level 1: Valuations based on quoted prices in active markets for identical assets and liabilities.

Level 2: Valuations based on inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3: Valuations based on unobservable inputs in which there is little or no market data available, which require the reporting entity to develop its own assumptions.

The following table presents information about our assets measured at fair value on a recurring basis in the consolidated balance sheets at December 31, 2012 and 2011:

	Level 1	Level 2	Level 3	Total
As of December 31, 2012:				
Money market funds	\$13,104	\$—	\$—	\$13,104
As of December 31, 2011:				
Money market funds	\$9,111	\$—	\$—	\$9,111

We primarily use the market approach to determine the fair value of our financial assets. The fair value of our current assets and liabilities, including accounts receivable and accounts payable approximates the carrying value due to the short-term nature of these balances. We have currently chosen not to elect the fair value option for any items that are not already required to be measured at fair value in accordance with GAAP.

**NOTE 5. RESEARCH AND DEVELOPMENT**

During the second quarter of 2012, we entered into a best efforts co-development agreement (the "Co-development Agreement") with a customer to defray a portion of the research and development expenses we expect to incur in connection with our development of an IC product to be sold exclusively to the customer. We expect our development costs to exceed the amounts received from the customer under the Co-development Agreement, and although we expect to sell units of the product to the customer, there is no commitment or agreement from the customer for such sales at this time. Additionally, we retain ownership of any modifications or improvements to our pre-existing intellectual property and may use such improvements in products sold to other customers.

The initial \$3,500 due under the Co-development Agreement was received within sixty days of contract signing and two additional payments of \$1,750 are each payable upon completion of certain development milestones. As amounts become due and payable without recourse, they are offset against research and development expense up to the amount of related costs incurred. We recognized an offset to research and development expense of \$3,500 related to the Co-development Agreement during 2012.

## NOTE 6. INCOME TAXES

## Current and Deferred Income Tax Expense (Benefit)

Domestic and foreign pre-tax income (loss) is as follows:

	Year Ended December 31,			
	2012	2011	2010	
Domestic	\$ (7,510	) \$ (8,175	) \$ (6,725	)
Foreign	1,245	1,750	1,703	
Domestic and foreign pre-tax loss	\$ (6,265	) \$ (6,425	) \$ (5,022	)

Income tax expense (benefit) attributable to continuing operations is comprised of the following:

	Year Ended December 31,			
	2012	2011	2010	
Current:				
Federal	\$ 55	\$ 55	\$ (178	)
State	1	3	(150	)
Foreign	(517	) 60	(5,314	)
Total current	(461	) 118	(5,642	)
Deferred:				
Federal	—	(3	) 92	
State	—	1	155	
Foreign	(110	) 25	—	
Total deferred	(110	) 23	247	
Income tax expense (benefit)	\$ (571	) \$ 141	\$ (5,395	)

The reconciliation of the U.S. federal statutory income tax rate to our effective income tax rate is as follows:

	Year Ended December 31,			
	2012	2011	2010	
Federal statutory rate	34	% 34	% 34	%
Stock-based compensation	(14	) (4	) (2	)
Change in valuation allowance	(13	) 29	(25	)
Expiration of tax attributes	(9	) (63	) (12	)
Tax contingencies, net of reversals	6	—	117	
State income taxes, net of federal tax benefit	2	2	1	
Impact of foreign earnings	(2	) 3	(9	)
Other	5	(3	) 4	
Effective income tax rate	9	% (2	)% 108	%

## Deferred Tax Assets, Liabilities and Valuation Allowance

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the amounts for income tax purposes. Significant components of our deferred tax assets and liabilities are as follows:

	December 31,	
	2012	2011
Deferred tax assets:		
Net operating loss carryforwards	\$66,348	\$64,930
Research and experimentation credit carryforwards	12,505	12,384
Foreign tax credit carryforwards	4,499	4,931
Depreciation and amortization	2,348	2,385
Deferred stock-based compensation	2,338	2,728
Capital loss carryforwards	2,218	1,648
Reserves and accrued expenses	670	992
Other	459	475
Total gross deferred tax assets	91,385	90,473
Deferred tax liabilities:		
Foreign earnings	(633	) (679
Other	(327	) (320
Total gross deferred tax liabilities	(960	) (999
Less valuation allowance	(89,841	) (89,009
Net deferred tax assets	\$584	\$465

The current portion of the net deferred tax asset balance was \$216 and \$166 as of December 31, 2012 and 2011, respectively, and is included in prepaid expenses and other current assets in the consolidated balance sheets. The non-current portion of the net deferred tax asset balance was \$368 and \$300 as of December 31, 2012 and 2011, respectively, and is included in other assets, net in the consolidated balance sheets. There were no long-term deferred tax liabilities as of December 31, 2012. Long-term deferred tax liabilities were \$1 as of December 31, 2011 and are included in long-term liabilities, net of current portion in the consolidated balance sheets.

We continue to record a full valuation allowance against our U.S. and Canadian net deferred tax assets at December 31, 2012 and 2011 as it is not more likely than not that we will realize a benefit from these assets in a future period. We have not provided a valuation allowance against any of our other foreign net deferred tax assets as we have concluded it is more likely than not that we will realize a benefit from these assets in a future period because our subsidiaries in these jurisdictions are cost-plus taxpayers. The net valuation allowance increased \$832 and decreased \$1,857 and \$5,901 for the years ended December 31, 2012, 2011, and 2010, respectively.

As of December 31, 2012, we have federal, state and foreign net operating loss carryforwards of approximately \$187,006, \$32,831 and \$1,054, respectively, which will expire between 2013 and 2032. As of December 31, 2012, we have available federal, state and foreign research and experimentation tax credit carryforwards of approximately \$7,673, \$2,894 and \$1,938, respectively, which begin expiring in 2019. We have a general foreign tax credit of \$2,940 which will begin expiring in 2016. Our ability to utilize our federal net operating losses may be limited by Section 382 of the Internal Revenue Code of 1986, as amended (the "Code"), which imposes an annual limit on the ability of a corporation that undergoes an "ownership change" to use its net operating loss carryforwards to reduce its tax liability. An ownership change is generally defined as a greater than 50% point increase in equity ownership by 5% shareholders in any three-year period.

We had undistributed earnings of foreign subsidiaries of approximately \$3,386 as of December 31, 2012, for which we have recorded a deferred tax liability.

Our Chinese subsidiary is designated as an Advanced Technology Service Enterprise, allowing it to benefit from a Chinese tax holiday resulting in a reduction of its tax rates to 15% for 2012 and 2013. The tax rate will return to 25% in 2014 upon expiration of the tax holiday.



The American Taxpayer Relief Act of 2012, which reinstated the United States federal research and development tax credit retroactively from January 1, 2012 through December 31, 2013, was not enacted into law until the first quarter of 2013. Therefore, the deferred tax asset resulting from such reinstatement for 2012 will not be reflected until 2013. The reinstatement should not affect the effective tax rate.

#### Uncertain Tax Positions

We have recorded tax reserves to address potential exposures involving positions that could be challenged by taxing authorities. As of December 31, 2012 and 2011, the amount of our uncertain tax positions was a liability of \$2,090 and \$3,105, respectively.

The following is a summary of the change in our liability for uncertain tax positions and interest and penalties:

	2012	2011
Uncertain tax positions:		
Balance at beginning of year	\$2,255	\$2,625
Accrual for positions taken in a prior year	27	265
Accrual for positions taken in current year	356	28
Reversals due to lapse of statute of limitations	(985	) (663
Balance at end of year	\$1,653	\$2,255
Interest and penalties:		
Balance at beginning of year	\$850	\$949
Accrual for positions taken in prior year	56	188
Accrual for positions taken in current year	1	17
Reversals due to lapse of statute of limitations	(470	) (304
Balance at end of year	\$437	\$850

During the years ended December 31, 2012, 2011 and 2010, we recognized \$57, \$205 and \$210, respectively, of interest and penalties in income tax expense in our consolidated statements of operations.

We file income tax returns in the U.S. and various foreign jurisdictions. A number of years may elapse before an uncertain tax position is resolved by settlement or statute of limitations. Settlement of any particular position could require the use of cash. If the uncertain tax positions we have accrued for are sustained by the taxing authorities in our favor, the reduction of the liability will reduce our effective tax rate. We reasonably expect reductions in the liability for unrecognized tax benefits and interest and penalties of approximately \$423 within the next twelve months due to the expiration of statutes of limitation in foreign jurisdictions.

We are no longer subject to U.S. federal, state, and foreign examinations for years before 2009, 2008 and 2005, respectively. We do not anticipate that any potential tax adjustments will have a significant impact on our financial position or results of operations.

We were not subject to, nor had we received any notice of, income tax examinations as of December 31, 2012.

#### NOTE 7. COMMITMENTS AND CONTINGENCIES

##### Royalties

We license technology from third parties and have agreed to pay certain suppliers a royalty based on the number of chips sold or manufactured, the net sales price of the chips containing the licensed technology or a fixed non-cancelable fee. Royalty expense is recognized based on our estimated average unit cost for royalty contracts with non-cancelable prepayments and the stated contractual per unit rate for all other agreements. Royalty expense was \$1,386, \$1,746 and \$1,489 for the years ended December 31, 2012, 2011 and 2010, respectively, which is included in cost of revenue in the consolidated statements of operations.



#### 401(k) Plan

We sponsor a 401(k) plan for eligible employees. Participants may defer a percentage of their annual compensation on a pre-tax basis, not to exceed the dollar limit that is set by law. A discretionary matching contribution by the Company is allowed and is equal to a uniform percentage of the amount of salary reduction elected to be deferred, which percentage will be determined each year by the Company. The Company made no contributions to the 401(k) plan during the years ended December 31, 2012, 2011 or 2010.

#### Leases

The Company acquires rights to use certain software engineer design tools under software licenses, accounting for such arrangements is similar to capital leases.

Our various office space and equipment leases are classified as operating leases. Certain of our leases for office space contain provisions under which monthly rent escalates over time and certain leases also contain provisions for reimbursement of a specified amount of leasehold improvements. When lease agreements contain escalating rent clauses, we recognize rent expense on a straight-line basis over the term of the lease. When lease agreements provide allowances for leasehold improvements, we capitalize the leasehold improvement assets and amortize them on a straight-line basis over the lesser of the lease term or the estimated useful life of the asset, and reduce rent expense on a straight-line basis over the term of the lease by the amount of the asset capitalized.

As of December 31, 2012, future minimum payments under non-cancelable software licenses and operating lease agreements are as follows:

Year Ending December 31,	Software licenses	Operating leases	Total
2013	\$1,817	\$1,561	\$3,378
2014	1,116	469	1,585
2015	160	35	195
	3,093	\$2,065	\$5,158
Less: Interest component	(266	)	
Present value of minimum software license payments	2,827		
Less: Current portion	(1,688	)	
Long-term portion of obligations	\$1,139		

Minimum lease payments above are net of expected sublease rental income of \$135 for the year ending December 31, 2013. Rent expense for the years ended December 31, 2012, 2011 and 2010 was \$1,976, \$2,155 and \$2,004, respectively.

#### Contract Manufacturers

In the normal course of business, we commit to purchase products from our contract manufacturers to be delivered within the next 90 days. In certain situations, should we cancel an order, we could be required to pay cancellation fees. Such obligations could impact our immediate results of operations but would not materially affect our business.

#### Indemnifications

Certain of our agreements include limited indemnification provisions for claims from third-parties relating to our intellectual property. It is not possible for us to predict the maximum potential amount of future payments or indemnification costs under these or similar agreements due to the conditional nature of our obligations and the unique facts and circumstances involved in each particular agreement. We have not made any payments under these agreements in the past, and as of December 31, 2012, we have not incurred any material liabilities arising from these indemnification obligations. In the future, however, such obligations could immediately impact our results of operations but are not expected to materially affect our business.

#### Legal Proceedings

We are subject to legal matters that arise from time to time in the ordinary course of our business. Although we currently believe that resolving such matters, individually or in the aggregate, will not have a material adverse effect on our financial position, our results of operations, or our cash flows, these matters are subject to inherent uncertainties and our view of these matters may change in the future.



**NOTE 8. EARNINGS PER SHARE**

Basic earnings per share amounts are computed based on the weighted average number of common shares outstanding. Diluted weighted average shares outstanding include the weighted average number of common shares outstanding plus potentially dilutive common shares outstanding during the period.

The following schedule reconciles the computation of basic net income (loss) per share and diluted net income (loss) per share (in thousands, except per share data):

	Year Ended December 31,		
	2012	2011	2010
Net income (loss)	\$(5,694	) \$(6,566	) \$373
Basic weighted average shares outstanding	18,252	16,330	13,442
Dilutive effect of employee equity incentive plans	—	—	942
Diluted weighted average shares outstanding	18,252	16,330	14,384
Net income (loss) per common share			
Basic	\$(0.31	) \$(0.40	) \$0.03
Diluted	\$(0.31	) \$(0.40	) \$0.03

The following weighted average shares were excluded from the calculation of diluted net income (loss) per share as their effect would have been anti-dilutive:

	Year Ended December 31,		
	2012	2011	2010
Employee equity incentive plans	4,172,526	3,728,302	1,650,320
Conversion of debentures	—	—	215,976

Potentially dilutive common shares from employee equity incentive plans are determined by applying the treasury stock method to the assumed exercise of outstanding stock options, the assumed vesting of outstanding restricted stock awards and units, and the assumed issuance of common stock under the stock purchase plan. Potentially dilutive common shares issuable upon conversion of our convertible subordinated debentures were computed using the if-converted-method.

**NOTE 9. SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION**

Supplemental disclosure of cash flow information is as follows:

	Year Ended December 31,		
	2012	2011	2010
Cash paid (received) during the year for:			
Interest	\$118	\$265	\$401
Income taxes, net of refunds received	382	484	(48
Non-cash investing and financing activities:			)
Acquisitions of property and equipment and other assets under extended payment terms	\$1,231	\$2,598	\$4,400
Unrealized gain on available-for-sale securities	—	—	47

**NOTE 10. SHAREHOLDERS' EQUITY****Preferred Stock**

The Company is authorized to issue 50,000,000 shares of preferred stock with a par value of \$0.001 per share. The Board of Directors is authorized to fix or alter the rights, preferences, privileges and restrictions granted to, or imposed on, each series of preferred stock. There are no shares of preferred stock issued as of December 31, 2012 and 2011.

**Common Stock**

The Company is authorized to issue 250,000,000 shares of common stock with a par value of \$0.001 per share. Shareholders of common stock have unlimited voting rights and are entitled to receive the net assets of the Company upon dissolution, subject to the rights of the preferred shareholders, if any.



### Equity Offering

On May 11, 2011, we completed the sale of 3,650,000 shares of common stock in an underwritten registered offering. On May 27, 2011, an additional 547,500 shares were issued pursuant to the 30-day over-allotment option exercised by the underwriter. With the over-allotment shares, a total of 4,197,500 shares of common stock were sold in the offering at a price to the public of \$2.24 per share. Net proceeds to the Company, after deducting underwriting discounts, commissions, and other expenses, were approximately \$8,327.

### Employee Equity Incentive Plans

On May 23, 2006, our shareholders approved the adoption of the Pixelworks, Inc. 2006 Stock Incentive Plan (the "2006 Plan"). Our shareholders approved increases to the total authorized shares of 1,000,000, 1,000,000, 1,150,000, and 1,000,000 on May 15, 2012, May 18, 2010, May 19, 2009, and May 20, 2008, respectively, increasing the total authorized shares available for issuance as equity awards to employees and non-employee directors to 5,483,333 shares. The 2006 Plan replaced our previously existing stock incentive plans including our 1997 Stock Incentive Plan, as amended, our 2001 Nonqualified Stock Option Plan, the Equator Technologies, Inc. 1996 Stock Incentive Plan, as amended, and Equator Technologies, Inc. stand-alone option plans (collectively, "Old Stock Incentive Plans"). Upon adoption of the 2006 Plan, no additional options could be issued under the Old Stock Incentive Plans, although awards previously granted under the Old Stock Incentive Plans remain outstanding according to their original terms. As of December 31, 2012, 478,634 shares were available for grant under the 2006 Plan.

### Stock Options

Options granted must generally be exercised while the individual is an employee. In May 2009, the 2006 Plan was modified to reduce the contractual life of newly issued stock awards from ten to six years. Our new hire vesting schedule provides that each option becomes exercisable at a rate of 25% on the first anniversary date of the grant and 2.083% on the last day of every month thereafter for a total of 36 additional increments. Our merit vesting schedule provides that merit-type awards become exercisable monthly over a period of three years.

The following is a summary of stock option activity:

	Number of shares	Weighted average exercise price
Options outstanding as of December 31, 2011:	3,414,272	\$4.85
Granted	976,500	2.66
Exercised	(183,514)	) 1.39
Canceled and forfeited	(94,110)	) 3.16
Expired	(159,362)	) 12.34
Options outstanding as of December 31, 2012:	3,953,786	\$4.20

The following table summarizes information about options outstanding as of December 31, 2012:

Range of exercise prices	Options Outstanding		Weighted average exercise price	Options Exercisable	
	Number outstanding as of December 31, 2012	Weighted average of remaining contractual life		Number exercisable as of December 31, 2012	Weighted average exercise price
\$0.55 - \$2.00	634,867	5.99	\$0.72	617,579	\$0.69
2.01 - 2.50	969,155	5.08	2.30	450,233	2.30
2.74 - 3.25	821,791	4.33	3.10	391,729	3.12
3.26 - 3.50	955,289	3.56	3.40	673,752	3.38
3.51 - 47.40	572,684	2.75	14.21	561,341	14.41
\$0.55 - \$47.40	3,953,786	4.36	\$4.20	2,694,634	\$4.84

During the years ended December 31, 2012, 2011 and 2010 the total intrinsic value of options exercised was \$251, \$85 and \$340, respectively, for which no income tax benefit has been recorded because a full valuation allowance has

been provided for our U.S. deferred tax assets. As of December 31, 2012, options outstanding had a total intrinsic value of \$991.

Options outstanding that have vested and are expected to vest as of December 31, 2012 are as follows:

	Number of shares	Weighted average exercise price	Weighted average remaining contractual term	Aggregate intrinsic value
Vested	2,694,634	\$4.84	4.12	\$961,957
Expected to vest	1,090,021	2.84	4.81	25,716
Total	3,784,655	\$4.26	4.32	\$987,673

The fair value of options vested in each of the years ended December 31, 2012, 2011 and 2010 approximates total stock-based compensation expense recorded in our statement of operations during each of the respective years.

#### Restricted Stock

The 2006 Plan provides for the issuance of restricted stock, including restricted stock units, to employees and non-employee directors. During the years ended December 31, 2012, 2011 and 2010 we granted 336,150, 218,000, and 48,000 shares, respectively, of restricted stock with a weighted average grant date fair value of \$2.56, \$3.19, and \$4.26 per share, respectively.

The following table summarizes the activities for our unvested restricted stock units for the year ended December 31, 2012:

	Number of shares	Weighted average grant date fair value
Unvested at December 31, 2011:	194,200	\$3.20
Granted	336,150	2.56
Vested	(146,800)	) 3.13
Canceled	(5,900)	) 3.39
Unvested at December 31, 2012:	377,650	\$2.63
Expected to vest after December 31, 2012	349,769	\$2.63

#### Employee Stock Purchase Plans

On January 31, 2010, the 2000 Employee Stock Purchase Plan ("2000 ESPP") expired. During the year ended December 31, 2010 we issued 12,382 shares for proceeds of \$18, under the 2000 ESPP. There have been no shares issued under the 2000 ESPP since it expired.

On May 18, 2010, our shareholders approved the adoption of the 2010 Pixelworks, Inc. Employee Stock Purchase Plan (the "ESPP") for U.S. employees and for certain foreign subsidiary employees. The ESPP provides for separate offering periods commencing on February 1 and August 1, with the first offering period beginning August 1, 2010. Each offering period continues for a period of 18 months with purchases every six months. Each eligible employee may purchase up to 3,000 shares of stock on each purchase date, with a maximum annual purchase amount of \$25. The purchase price is equal to 85% of the lesser of the fair market value of the shares on the offering date or on the purchase date. A total of 1,300,000 shares of common stock have been reserved for issuance under the ESPP. During the years ended December 31, 2012 and 2011, we issued 96,299 and 110,038 shares, respectively for proceeds of \$186 and \$265, respectively, under the ESPP.

## Stock-Based Compensation Expense

The fair value of stock-based compensation was determined using the Black-Scholes option pricing model and the following weighted average assumptions:

	Year Ended December 31,			
	2012	2011	2010	
<b>Stock Option Plans:</b>				
Risk free interest rate	0.79	% 1.97	% 2.11	%
Expected dividend yield	0	% 0	% 0	%
Expected term (in years)	4.69	4.66	4.60	
Volatility	89	% 92	% 92	%
<b>Employee Stock Purchase Plan:</b>				
Risk free interest rate	0.19	% 0.15	% 0.33	%
Expected dividend yield	0	% 0	% 0	%
Expected term (in years)	1.04	1.06	1.10	
Volatility	52	% 52	% 94	%

The weighted average fair value of options granted during the years ended December 31, 2012, 2011 and 2010 was \$1.79, \$2.20 and \$2.27, respectively. The risk free interest rate is estimated using an average of treasury bill interest rates. The expected dividend yield is zero as we have not paid any dividends to date and do not expect to pay dividends in the future. Expected volatility is estimated based on the historical volatility of our common stock over the expected term as this represents our best estimate of future volatility. Subsequent to the May 2009 amendment of our 2006 Stock Incentive Plan, which shortened the contractual life of newly issued stock options from ten to six years, we have elected to use the "simplified method" to estimate expected term. Under the simplified method, an option's expected term is calculated as the average of its vesting period and original contractual life. The expected term of ESPP purchase rights is based on the estimated weighted average time to purchase.

As of December 31, 2012, unrecognized stock-based compensation cost is \$2,837, which is expected to be recognized as stock-based compensation expense over a weighted average period of 2.3 years.



## NOTE 11. SEGMENT INFORMATION

We have identified a single operating segment: the design and development of integrated circuits for use in electronic display devices. Substantially all of our assets are located in the U.S.

## Geographic Information

Revenue by geographic region, attributed to countries based on the domicile of the bill-to customer, was as follows:

	Year Ended December 31,		
	2012	2011	2010
Japan	\$35,198	\$43,207	\$44,982
Taiwan	10,163	10,742	11,577
U.S.	5,996	2,477	2,774
China	3,627	2,294	1,351
Europe	1,871	2,355	2,930
Korea	1,118	1,597	2,674
Other	1,737	1,937	3,241
	\$59,710	\$64,609	\$69,529

## Significant Customers

The percentage of revenue attributable to our distributors, top five end customers, and individual distributors or end customers that represented more than 10% of revenue in at least one of the periods presented, is as follows:

	Year Ended December 31,			
	2012	2011	2010	
Distributors:				
All distributors	74	% 69	% 61	%
Distributor A	50	% 53	% 44	%
End Customers: <sup>(1)</sup>				
Top five end customers	53	% 51	% 58	%
End customer A	17	% 14	% 12	%
End customer B	13	% 13	% 13	%
End customer C	5	% 14	% 20	%

<sup>(1)</sup> End customers include customers who purchase directly from us, as well as customers who purchase our products indirectly through distributors.

Each of the following accounts represented 10% or more of total accounts receivable in at least one of the periods presented:

	December 31,		
	2012	2011	
Account A	35	% 54	%
Account B	15	% 6	%
Account C	15	% —	%
Account D	8	% 10	%



## NOTE 12. QUARTERLY FINANCIAL DATA (UNAUDITED)

	Quarterly Period Ended			
	March 31	June 30	September 30	December 31
2012				
Revenue, net	\$14,330	\$15,524	\$16,285	\$13,571
Gross profit	7,809	7,659	7,788	6,592
Loss from operations	(1,303)	(848)	(471)	(3,231)
Loss before income taxes	(1,401)	(949)	(576)	(3,339)
Net loss	(638)	(1,099)	(400)	(3,557)
Net loss per share - basic and diluted:	(0.04)	(0.06)	(0.02)	(0.19)
2011				
Revenue, net	\$14,700	\$15,690	\$17,391	\$16,828
Gross profit	6,572	7,419	8,456	7,920
Loss from operations	(3,257)	(1,792)	(1,167)	(1,589)
Loss before income taxes	(1,559)	(1,932)	(1,256)	(1,678)
Net loss	(1,468)	(2,058)	(1,083)	(1,957)
Net loss per share - basic and diluted:	(0.11)	(0.13)	(0.06)	(0.11)

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.  
None.

## Item 9A. Controls and Procedures.

## Disclosure Controls and Procedures

As of the end of the period covered by this report, we conducted an evaluation under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer of our disclosure controls and procedures (as defined in Rule 13a-15(e) and Rule 15d-15(f) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")). Based on this evaluation, the Chief Executive Officer and Chief Financial Officer concluded that, as of December 31, 2012 our disclosure controls and procedures were effective to ensure that information required to be disclosed in our periodic reports filed or submitted under the Securities Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms, and (ii) accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding disclosure.

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls and procedures will prevent or detect all errors and all fraud. Disclosure controls and procedures, no matter how well designed, operated and managed, can provide only reasonable assurance that the objectives of the disclosure controls and procedures are met. Because of the inherent limitations of disclosure controls and procedures, no evaluation of such disclosure controls and procedures can provide absolute assurance that all control issues and instances of fraud, if any, have been detected.

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

Our management is responsible for establishing and maintaining a system of internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles. All internal control systems, no matter how well designed, have inherent limitations.

We conducted an assessment of the effectiveness of our system of internal control over financial reporting as of December 31, 2012, the last day of our fiscal year. This assessment was based on criteria established in the framework Internal Control—Integrated Framework, issued by the Committee of Sponsoring Organizations of the Treadway Commission and included an evaluation of elements such as the design and operating effectiveness of key financial reporting controls, process documentation, accounting policies, and our overall control environment. Based on our assessment, management has concluded that our internal control over financial reporting was effective as of the end of

the fiscal year to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with U.S. generally accepted accounting principles. We reviewed the results of management's assessment with the Audit Committee of our Board of Directors.

The effectiveness of our internal control over financial reporting as of December 31, 2012 has been audited by KPMG LLP, our independent registered public accounting firm, as stated in their report, which is presented below.

**Changes in Internal Control Over Financial Reporting**

There were no changes to our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the period covered by this report that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Report of Independent Registered Public Accounting Firm  
The Board of Directors and Shareholders  
Pixelworks, Inc.:

We have audited Pixelworks Inc.'s internal control over financial reporting as of December 31, 2012, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Pixelworks, Inc.'s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

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

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

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

In our opinion, Pixelworks, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2012, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Pixelworks, Inc. and subsidiaries as of December 31, 2012 and 2011, and the related consolidated statements of operations, comprehensive loss, shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2012, and our report dated March 6, 2013 expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG LLP  
Portland, Oregon  
March 6, 2013

Item 9B. Other Information.

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

Information concerning the directors, executive officers and corporate governance of the Company is set forth in the Company's Proxy Statement for its 2013 Annual Meeting of Shareholders (the "2013 Proxy Statement") to be filed pursuant to Regulation 14A and is incorporated herein by reference.

Item 11. Executive Compensation.

Information concerning executive compensation is included in our 2013 Proxy Statement and is incorporated herein by reference.

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

Information concerning security ownership of certain beneficial owners and management and related stockholder matters is included in our 2013 Proxy Statement and is incorporated herein by reference.

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

Information concerning certain relationships and related transactions and director independence is included in our 2013 Proxy Statement and is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services.

Information concerning principal accounting fees and services is set forth in our 2013 Proxy Statement and is incorporated herein by reference.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

(a) 1. Financial Statements.

The following financial statements are included in Item 8. Financial Statements and Supplementary Data:

Report of Independent Registered Public Accounting Firm

Consolidated Balance Sheets as of December 31, 2012 and 2011

Consolidated Statements of Operations for the years ended December 31, 2012, 2011 and 2010

Consolidated Statements of Comprehensive Loss for the years ended December 31, 2012, 2011, and 2010

Consolidated Statements of Cash Flows for the years ended December 31, 2012, 2011 and 2010

Consolidated Statements of Shareholders' Equity for the years ended December 31, 2012, 2011 and 2010

Notes to Consolidated Financial Statements

(a) 2. Financial Statement Schedules.

All schedules have been omitted because the required information is included in the consolidated financial statements or the notes thereto, or is not applicable or required.

(a)3. Exhibits.

The exhibits are either filed with this report or incorporated by reference into this report.

Exhibit Number	Description
3.1	Sixth Amended and Restated Articles of Incorporation of Pixelworks, Inc., As Amended (incorporated by reference to Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q filed on August 9, 2004).
3.2	Third Amendment to Sixth Amended and Restated Articles of Incorporation of Pixelworks, Inc. (incorporated by reference to Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q filed on August 11, 2008).
3.3	Second Amended and Restated Bylaws of Pixelworks, Inc. (incorporated by reference to Exhibit 3.3 to the Company's Annual Report on Form 10-K filed March 10, 2010).
4.1	Reference is made to Exhibit 3.1 above (incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-1 declared effective May 19, 2000).
4.2	Third Amended Registration Rights Agreement dated February 22, 2000 (incorporated by reference to Exhibit 4.2 to the Company's Registration Statement on Form S-1 declared effective May 19, 2000).
10.1	Form of Indemnity Agreement between Pixelworks, Inc. and certain of its Officers and Directors (incorporated by reference to Exhibit 10.1 to the Company's Registration Statement on Form S-1 declared effective May 19, 2000). +
10.2	Form of Indemnity Agreement between Pixelworks, Inc. and each of the members of the Board and Steven Moore, the Company's Chief Financial Officer (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on August 2, 2010). +
10.3	Pixelworks, Inc. 1997 Stock Incentive Plan, as amended (incorporated by reference to Exhibit 99.1 to the Company's Registration Statement on Form S-8 filed on June 21, 2005). +
10.4	Pixelworks, Inc. Amended and Restated 2010 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on May 12, 2011). +
10.5	Pixelworks, Inc. 2001 Nonqualified Stock Option Plan (incorporated by reference to Exhibit 99.1 to the Company's Registration Statement on Form S-8 filed on May 31, 2001). +
10.6	Equator Technologies, Inc. 1996 Stock Option Plan, as amended (incorporated by reference to Exhibit 99.1 to the Company's Registration Statement on Form S-8 filed on June 17, 2005). +
10.7	Pixelworks, Inc. Amended and Restated 2006 Stock Incentive Plan (incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-8 filed on July 16, 2012). +
10.8	Pixelworks, Inc. Amended and Restated 2006 Stock Incentive Plan, Terms and Conditions of Restricted Stock Awards (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q filed on May 7, 2009). +



10.9 Pixelworks, Inc. Amended and Restated 2006 Stock Incentive Plan, Terms and Conditions of Option Grants (incorporated by reference to Exhibit 10.9 to the Company's Annual Report on Form 10-K filed March 8, 2012). +

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- 10.10 Pixelworks, Inc. Amended and Restated 2006 Stock Incentive Plan, Terms and Conditions of Director Stock Unit Awards (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on November 4, 2010). +
- 10.11 Pixelworks, Inc. Amended and Restated 2006 Stock Incentive Plan, Terms and Conditions of Restricted Stock Unit Award (incorporated by reference to Exhibit 10.11 to the Company's Annual Report on Form 10-K filed March 9, 2011). +
- 10.12 Summary of Pixelworks Non-Employee Director Compensation (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on November 4, 2010). +
- 10.13 2012 Executive Employment Agreement dated and effective November 2, 2012, by and between Bruce Walicek and Pixelworks, Inc (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed November 6, 2012). +
- 10.14 Form of Pixelworks, Inc. Senior Management Bonus Plan (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed December 31, 2009). +
- 10.15 Offer letter dated June 22, 2007 between Pixelworks, Inc. and Steven L. Moore (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed August 9, 2007). +
- 10.16 Change of Control Severance Agreement dated May 11, 2009 and effective April 1, 2009, by and between Pixelworks, Inc. and Steven L. Moore (incorporated by reference to Exhibit 10.18 to the Company's Annual Report on Form 10-K filed March 10, 2010). +
- 10.17 Change of Control Severance Agreement dated November 20, 2008, by and between Pixelworks, Inc. and Hongmin (Bob) Zhang (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed November 20, 2008). +
- 10.18 Change of Control Severance Agreement dated November 22, 2008, by and between Pixelworks, Inc. and Tzoyao (T) Chan (incorporated by reference to Exhibit 10.21 to the Company's Annual Report on Form 10-K filed March 10, 2010). +
- 10.19 Change of Control Severance Agreement dated December 27, 2011, by and between Pixelworks, Inc. and John Lau (incorporated by reference to Exhibit 10.19 to the Company's Annual Report on Form 10-K filed March 8, 2012). +
- 10.20 Repatriation Agreement dated December 27, 2011, by and between Pixelworks, Inc. and John Lau (incorporated by reference to Exhibit 10.20 to the Company's Annual Report on Form 10-K filed March 8, 2012). +
- 10.21 Amendment to the Amended and restated Change of Control Severance Agreement by and between Pixelworks, Inc. and Steven Moore (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on February 24, 2012). +
- 10.22 Form of the Amendment to each Change of Control Severance Agreement by and between Pixelworks, Inc. and Tzoyao "T" Chan, John Lau, and Hongmin (Bob) Zhang (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed on February 24, 2012). +
- 10.23

Intellectual Property Sublicense Agreement dated March 30, 1999 between VAutomation Incorporated and Pixelworks, Inc. (incorporated by reference to Exhibit 10.9 to the Company's Registration Statement on Form S-1 declared effective May 19, 2000).

10.24 License Agreement dated February 22, 2000 between Pixelworks, Inc. and InFocus Systems, Inc. (incorporated by reference to Exhibit 10.10 to the Company's Registration Statement on Form S-1 declared effective May 19, 2000).

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- 10.25 Office Lease Agreement dated December 2005, by and between CA-The Concourse Limited Partnership and Pixelworks, Inc. (incorporated by reference to Exhibit 10.42 to the Company's Annual Report on Form 10-K filed March 13, 2006).
- 10.26 Office Lease Agreement dated September 10, 2008 and commencing December 1, 2008 by and between Pixelworks, Inc. and Durham Plaza, LLC (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q filed on November 7, 2008).
- 10.27 Loan and Security Agreement dated December 21, 2010 by and between Silicon Valley Bank and Pixelworks, Inc. (incorporated by reference to Exhibit 10.26 to the Company's Annual Report on Form 10-K filed March 7, 2011).
- 10.28 Amendment No. 1 dated December 14, 2012 to the Loan and Security Agreement dated December 21, 2010, by and between Silicon Valley Bank and Pixelworks, Inc. (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed December 20, 2012).
- 10.29 Agreement dated as of February 8, 2012, by and among Pixelworks, Inc., Steven R. Becker, Matthew A. Drapkin, BC Advisors, LLC, a Texas limited liability company, Becker Drapkin Management, L.P., a Texas limited partnership, Becker Drapkin Partners (QP), L.P., a Texas limited partnership; Becker Drapkin Partners, L.P., a Texas limited partnership; BD Partners IV, L.P., a Texas limited partnership, and Bradley Shisler (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed February 10, 2012).
- 10.30 Amendment No. 1 dated as of August 9, 2012 to the Agreement dated February 8, 2012 by and among Pixelworks, Inc., Steven R. Becker, Matthew A. Drapkin, BC Advisors, LLC, a Texas limited liability company, Becker Drapkin Management, L.P., a Texas limited partnership, Becker Drapkin Partners (QP), L.P., a Texas limited partnership; Becker Drapkin Partners, L.P., a Texas limited partnership; BD Partners IV, L.P., a Texas limited partnership, and Bradley Shisler (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated August 9, 2012).
- 21 Subsidiaries of Pixelworks, Inc. (incorporated by reference to Exhibit 21 to the Company's Annual Report on Form 10-K filed March 7, 2011).
- 23 Consent of KPMG LLP.
- 31.1 Certification of Chief Executive Officer.
- 31.2 Certification of Chief Financial Officer.
- 32.1\* Certification of Chief Executive Officer.
- 32.2\* Certification of Chief Financial Officer.

+ Indicates a management contract or compensation arrangement.

Exhibits 32.1 and 32.2 are being furnished and shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liability of that section, nor shall such exhibits be deemed to be incorporated by reference in any registration statement or other document filed under the Securities Act of 1933, as amended, or the Exchange Act, except as otherwise stated in such filing.



SIGNATURES

Pursuant to the requirements of Sections 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.

PIXELWORKS, INC.

Dated: March 6, 2013

By: /s/ Bruce A. Walicek  
 Bruce A. Walicek  
 President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Bruce A. Walicek Bruce A. Walicek	President and Chief Executive Officer	March 6, 2013
/s/ Steven L. Moore Steven L. Moore	Vice President, Chief Financial Officer, Secretary and Treasurer	March 6, 2013
/s/ Richard L. Sanquini Richard L. Sanquini	Chairman of the Board	March 6, 2013
/s/ Steven R. Becker Steven R. Becker	Director	March 6, 2013
/s/ Mark A. Christensen Mark A. Christensen	Director	March 6, 2013
/s/ Barry L. Cox Barry L. Cox	Director	March 6, 2013
/s/ Stephen L. Domenik Stephen L. Domenik	Director	March 6, 2013
/s/ C. Scott Gibson C. Scott Gibson	Director	March 6, 2013
/s/ Daniel J. Heneghan Daniel J. Heneghan	Director	March 6, 2013
/s/ Bradley J. Shisler Bradley J. Shisler	Director	March 6, 2013
/s/ Bruce A. Walicek Bruce A. Walicek	Director	March 6, 2013