PIXELWORKS, INC Form 10-K March 08, 2012 Table of Contents

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

FORM 10-K

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

For the fiscal year ended December 31, 2011

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

PIXELWORKS, INC.

(Exact name of registrant as specified in its charter)

Oregon 91-1761992 (State or other jurisdiction of (I.R.S. Employer incorporation or organization) Identification No.)

224 Airport Parkway, Suite 400, San Jose, CA
(Address of principal executive offices)

(Zip Code)

408-200-9200

(Registrant's telephone number, including area code) Securities registered pursuant to Section 12(b) of the Act:

Title of each class

Name of each exchange on which registered

Common Stock NASDAQ Global Market

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

None

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

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 x

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 x 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 x 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 " Accelerated filer

Non-accelerated filer " Smaller reporting company

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

Aggregate market value of voting Common Stock held by non-affiliates of the registrant at June 30, 2011: \$38,555,706. For purposes of this calculation, executive officers and directors are considered affiliates.

Number of shares of Common Stock outstanding as of February 29, 2012: 18,017,665

## 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, 2011.

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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 Orego corporation, and its wholly-owned subsidiaries.

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#### 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 115 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. 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. 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. 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.

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 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 70 inches or more diagonally. The size and resolution of the display is expected to continually increase. Display manufacturers and content providers are already discussing the evolution from "full HD" to Ultra Definition, or "UD." UD display will offer resolutions in excess of 4,000 pixels horizontally and 2000 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 \$110 billion in sales annually by 2012, according to the industry research firm NDP 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 83% of all TVs sold and grow from 206 million units in 2011 to 225 million units in 2012, according to NDP 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 1080p 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 85% share of LCD TV shipments in 2013, according to NDP 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. The combination of LED backlighting and 200/240 Hz technologies provides an enabling platform for new feature developments in LCD TVs, particularly 3D technology, which is an area of intense interest to television manufacturers and consumers alike. NDP DisplaySearch forecasts that worldwide 3D TV shipments will rise from 24 million in 2011 to 106 million in 2015.

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. NDP DisplaySearch estimates that approximately 26% of all TVs shipped in 2011 were Internet enabled, and the number of connected TVs is expected to grow to 138 million in 2015. 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 less than two pounds for maximum portability. According to Pacific Media Associates (PMA), the worldwide front projector market grew to a total of 9.5 million units sold in 2011 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. 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.

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#### Additional Markets

In addition to the large-screen flat panel display and digital projection markets, other sectors 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.

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 and in powerful combinations within single products. The majority of our products include one or more technologies to provide high-quality video solutions to our customers. Some of our proprietary core 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 LCD and DLP digital projection markets and to enhance our video processing solutions for advanced flat panel displays and other markets. Additionally, we look for ways to leverage our research and development investment into products that address high-value markets 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 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.

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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 69%, 61% and 51% of revenue in 2011, 2010 and 2009, respectively.

Our largest distributor, Tokyo Electron Device Ltd. ("TED"), is located in Japan. TED represented 53%, 44% and 35% of revenue in 2011, 2010 and 2009, respectively, and accounted for 54% and 45% of accounts receivable at December 31, 2011 and 2010, respectively. No other distributor accounted for more than 10% of revenue in 2011, 2010 and 2009.

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 31%, 39% and 49% of total revenue in 2011, 2010 or 2009, 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 51%, 58% and 56% of revenue in 2011, 2010 and 2009, respectively. End customers include customers who purchase directly from us as well as customers who purchase products indirectly through distributors. Sales to Seiko Epson Corporation represented more than 10% of revenue in 2011, 2010, and 2009. Sales to SANYO Electric Co., Ltd. represented more than 10% of revenue in 2010 and 2009. Sales to Hitachi represented more than 10% of revenue in 2011 and 2010. No other end customer accounted for more than 10% of revenue in 2011, 2010 or 2009.

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## 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 and 2009, 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 those years.

# Geographic Distribution of Sales

Sales outside the U.S. accounted for approximately 96% of revenue in 2011 and 2010 and 97% of revenue in 2009. Financial information regarding our domestic and foreign operations is presented in Note 11 of the Notes to Consolidated Financial Statements included in Item 8. Financial Statements and Supplementary Data.

## 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 CSR plc, 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., Trident Microsystems, Inc. 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.

## Research and Development

Our internal research and development efforts are focused on the development of our solutions for the multimedia projector and high-end television 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 \$22.9 million, \$22.8 million and \$20.1 million in 2011, 2010 and 2009, respectively.

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## 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 four third-party foundries for wafer fabrication and other manufacturers for packaging, assembly and testing of our 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 115 patents and have 30 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 6 to 16 years remaining in their respective term, depending on their filing date. 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 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 environmental risks. Employees

As of December 31, 2011, we had a total of 242 employees compared to 243 employees as of December 31, 2010. We consider our relations with our employees to be good.

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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. 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, 2011, 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.

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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.

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 you that we will ever achieve profitability. If we are not profitable in the future, we may be unable to continue our operations.

Our net operating loss carryforwards may be limited or they may expire before utilization.

As of December 31, 2011, we had federal and state net operating loss carryforwards of approximately \$181.6 million and \$38.8 million, respectively, which expire between 2012 and 2031. 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. A significant amount of our revenue comes from a limited number of customers and distributors, 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 53%, 44% and 35% of revenue for the years ended December 31, 2011, 2010 and 2009, respectively. Revenue attributable to our top five end customers represented 51%, 58% and 56% of revenue for the years ended December 31, 2011, 2010 and 2009, respectively. As of December 31, 2011 and 2010, 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 to provide a secured, working capital-based, revolving line of credit. 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 21, 2012, 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.

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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 a third party 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.

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. Licensing that occurs in connection with actual or contemplated litigation is subject to risk that the adversarial nature of the transaction will induce non-compliance or non-payment. The accounting rules associated with recognizing revenue from these transactions are increasingly complex and subject to interpretation. Due to these factors, the amount of license revenue recognized in any period may differ significantly from our expectations.

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 96% of revenue for the years ended December 31, 2011 and 2010 and 97% of revenue for the year ended December 31, 2009. 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, particularly in the PRC;

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.

The 2011 flooding in Thailand, for example, has limited the availability of certain component parts that are used in the production of our customers' products which has reduced their production capacity and the demand for our products, particularly during the first quarter of 2012. Although our customers have begun efforts to restore their production capacity, we are unable to predict when demand for our products will return to prior levels.

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. 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.

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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. 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 four third-party foundries to produce all of our wafers and three assembly and test vendors 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.

profit and result in large losses.

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. Intense competition in our markets may reduce sales of our products, reduce our market share, decrease our gross

We compete with specialized and diversified electronics and semiconductor companies that offer display processors or scaling components. Some of these include CSR plc, 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., Trident Microsystems, Inc. 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. In 2011 and 2010, for example, frame rate conversion technology similar to that used in our line of MotionEngine® advanced video co-processors continued to be integrated into the system-on-chip ("SoC") products of our competitors, including in television products with refresh rates as high as 120hz. 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 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.

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.

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 115 patents and have 30 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.

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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.

Slow economic activity, increased unemployment, decreased business and consumer confidence, reduced corporate profits and capital spending, adverse business conditions and liquidity concerns have contributed to and continue to contribute to a challenging economic environment. As a result of these conditions and uncertainties, 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, including as a result of the recent crisis involving the Euro and European sovereign debt, 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 to 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.

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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.

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 carryfowards, 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.

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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. As of December 31, 2011, we had a total asset value of less than \$50.0 million and as recently as December 31, 2008, our shareholders' equity was below \$10.0 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.

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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 that will begin serving staggered terms at the 2012 annual meeting of shareholders, which will 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, 2011, 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 May 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	November 2013	
Japan	Sales; customer support	4,000	Various dates through January 2013	

(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.

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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 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
Fiscal 2010	High	Low
Fourth Quarter	\$3.91	\$3.15
Third Quarter	3.62	2.62
Second Quarter	5.78	2.98
First Quarter		