PIXELWORKS, INC
Form 10-K
March 10, 2010

Table of Contents

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

FORM 10-K

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

For the fiscal year ended December 31, 2009

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 incorporation or organization)	(I.R.S. Employer Identification No.)

16760 SW Upper Boones Ferry Road, Suite 101	97224	503-601-4545
(Address of principal executive offices)	(Zip Code)	(Registrant s telephone number, including area code)

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

Title of each class	Name of each exchange on which registered
Common Stock	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 _____ 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 the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

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

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, 2009: $16,207,762. For purposes of this calculation, executive officers and directors are considered affiliates.

Number of shares of Common Stock outstanding as of February 28, 2010: 13,448,320.

Documents Incorporated by Reference

Portions of the registrant s definitive proxy statement relating to its 2010 Annual Meeting of Shareholders, to be filed not later than 120 days after the close of the 2009 fiscal year are incorporated by reference into Part I and Part III of this Annual Report on Form 10-K.

PIXELWORKS, INC.
FORM 10-K
FOR THE YEAR ENDED DECEMBER 31, 2009

TABLE OF CONTENTS

Table of Contents

Forward-looking Statements

This Annual Report on Form 10-K, including the 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 certain risks and uncertainties that are difficult to predict. Actual outcomes and results may differ materially from what is expressed or forecasted in such forward-looking statements due to numerous factors. Such factors include, but are not limited to, adverse economic conditions, lack of acceptance of new products, increased competition, failure to design, develop and manufacture new products, lack of success in technological advancements, unexpected changes in the demand for our products and services, the inability to successfully manage inventory pricing pressures, failure to reduce costs or improve operating efficiencies, changes to and compliance with international laws and regulations, currency fluctuations, our ability to attract, hire and retain key and qualified employees, 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 Company, Pixelworks, we, us and our refer to Pixelworks, Inc., an Oregon corporation, and, where appropriate, its subsidiaries.

PART I

Item 1. Business.

Overview

We are an innovative designer, developer and marketer of video and pixel processing semiconductors and software for high-end digital video applications and hold 119 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 displays and digital front projectors, to differentiate 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 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

Table of Contents

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. 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 an increasing variety 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.

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 or more diagonally. 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.

Large-Screen Flat Panel Display Market

The market for flat panel displays has risen rapidly over the past decade and is projected to be worth more than $100 billion annually by 2012, according to the industry research firm 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

Table of Contents

technologies, with LCD leading the market in growth. The digital TV market has helped to secure the dominance of LCD technology. Shipments of LCD TVs are expected to grow from 86 million units in 2007 to 171 million units in 2010, according to 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, and larger flat panel displays are shifting rapidly from refresh rates of 50/60Hz to faster rates of 100/120Hz, and even 200/240Hz. The shift to large, high-resolution flat panel displays combined with the transition to 1080p content and 120Hz 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.

Additionally, the increasing trend towards convergence of video and the Internet is presenting new challenges to video processing, as low quality Internet video content increasingly is being displayed on high-end TVs and other devices. Limitations in bandwidth, latency, noise and content resolution create significant challenges for displaying Internet video on large flat panel displays. 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.

During 2009, lower sales of flat panel displays due to the global economic recession stimulated the industry to find new strategies, markets and solutions. TV manufacturers therefore accelerated development of design elements and performance features to differentiate products and slow price declines. Among these were the adoption of light emitting diode (LED) backlighting, an emphasis on lower power consumption, and most recently, 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 higher refresh-rate 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 surpass traditional backlights that use fluorescent tubes by 2011 and achieve 74% penetration in 2013, according to 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 200/240Hz 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. DisplaySearch forecasts 3D-ready TVs will grow from 0.2 million units in 2009

to 64 million units in 2018.

Increasing screen sizes, 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

Table of Contents

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.

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 at high resolutions.

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.

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

Additional Markets

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

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.

Table of Contents

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 trends such as LED backlighting to improve video performance in digital TVs with 120Hz or higher frame rates and accommodates emerging 3D standards. Additionally, our MEMC technology improves video performance in non-TV applications such as video conferencing, 3D gaming and projection.

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 in the digital projection market 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.

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

Table of Contents

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 51%, 53% and 57% of revenue in 2009, 2008 and 2007, respectively.

Our largest distributor, Tokyo Electron Device Ltd. (TED), is located in Japan. TED represented 35%, 32% and 33% of revenue in 2009, 2008 and 2007, respectively, and accounted for 22% and 32% of accounts receivable at December 31, 2009 and 2008, respectively. No other distributor accounted for more than 10% of revenue in 2009, 2008 and 2007.

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 49%, 47% and 43% of total revenue in 2009, 2008 and 2007, respectively.

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

Integrators. Integrators are original equipment manufacturers (OEMs) 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 56%, 55% and 47% of revenue in 2009, 2008 and 2007, 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 2009, 2008, and 2007. Sales to SANYO Electric Co., Ltd. represented more than 10% of revenue in 2009.

No other end customer accounted for more than 10% of revenue in 2009, 2008 and 2007.

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

Table of Contents

anticipation of their March 31 fiscal year ends. Additionally, holiday demand for consumer electronics, including high-end televisions, has contributed to increased revenue in the second half of certain years. Our sales in 2009 and 2008 did not follow our historical trends due to the global crisis in the credit and financial markets and significant reductions in consumer spending during the last quarter of 2008 and throughout 2009. As a result of the worldwide economic slowdown, it is extremely difficult for us to determine when or if historical trends are likely to resume.

Geographic Distribution of Sales

Sales outside the U.S. accounted for approximately 97%, 95% and 96% of our revenue in 2009, 2008 and 2007, respectively.

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 levels of product integration, compliance with industry standards, time to market, cost, product performance, system design costs, IP, functional versatility provided by software and customer relationships and reputation.

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 Broadcom Corporation, i-Chips Technologies Inc., Integrated Device Technology, Inc., MediaTek Inc., MStar Semiconductor, Inc., Realtek Semiconductor Corp., Renesas Technology Corp., Sigma Designs, Inc., Silicon Image, Inc., STMicroelectronics N.V., Sunplus Technology Co., Ltd., Techwell, Inc., Trident Microsystems, Inc., Zoran Corporation and other companies. Potential and current competitors may include diversified semiconductor manufacturers and the semiconductor divisions or affiliates of some of our customers, including Intel Corporation, LG Electronics, Inc., Matsushita Electric Industrial Co., Ltd., Mitsubishi Digital Electronics America, Inc., National Semiconductor Corporation, NEC Corporation, NVIDIA Corporation, NXP Semiconductors, 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

Table of Contents

levels of video performance, integration and new features in order to provide our customers with solutions that enable them to introduce market leading products and help lower final systems costs for our customers.

We have invested, and expect to continue to invest, significant resources in research and development activities. Our research and development expense was $20.1 million, $26.5 million and $38.8 million in 2009, 2008 and 2007, respectively.

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 three 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 Form 10-K.

Intellectual Property

We rely on a combination of nondisclosure agreements and copyright, trademark and trade secret laws to protect the algorithms, design and architecture of our technology. Currently, we hold 119 patents and have 40 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 7 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, circumvented, challenged or licensed to others. To supplement the technologies we develop internally, we have also licensed rights to use IP held by third parties, and we expect to license additional technology rights in the future.

See Risk Factors in Part I, Item 1A, and Note 8: Commitments and Contingencies in Part II, Item 8 of this Form 10-K.

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 Form 10-K.

Employees

As of December 31, 2009, we had a total of 222 employees compared to 229 employees as of December 31, 2008. We consider our relations with our employees to be good.

Availability of Securities and Exchange Commission Filings

We make available through our website our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports free of charge as soon as reasonably practicable after we electronically file such material with the Securities and Exchange Commission (SEC). Our Internet

Table of Contents

address is *www.pixelworks.com*. The content on, or that can be accessed through, our website is not incorporated by reference into this filing. Documents filed by us with the Securities and Exchange Commission may be read and copied at the Public Reference Section of the SEC, 100 F Street, N.E., Washington, D.C. 20549. Information on the operation of the Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330. Our filings with the SEC are also available to the public through the SEC s website at *www.sec.gov*.

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, 2009, including our consolidated financial statements and related notes, and our other filings made from time to time with the Securities and Exchange Commission.

Macroeconomic Risks Related to the Company

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

Financial, commercial and consumer markets may continue to experience extreme disruption and there can be no assurance that there will not be further deterioration of these markets. While we do not currently require access to credit markets to finance our operations, these economic developments have adversely affected, and are likely to continue to affect, our business in a number of ways. For instance, the economic crisis has decreased, and may continue to decrease, market acceptance of, and reduce the demand for, our products and the success of our product strategy. We face an increased risk that our customers and suppliers, who may experience decreased revenue and difficulty obtaining financing, will be unable to make significant purchases and continue their operations. It may become more difficult for us to collect payments from our customers on a timely basis, or at all, and our suppliers may not be able to maintain their production capacity and fulfill our orders on a timely basis, or at all. This has resulted, and could continue to result, in a decrease or cancellation of orders for our products.

As a result of the worldwide economic slowdown, it is difficult for us and our customers to forecast future sales levels based on historical information and trends. Portions of our expenses are fixed and other expenses are tied to expected levels of sales activities. To the extent that we do not achieve our anticipated levels of sales, our gross profit and net income could continue to be adversely affected until such expenses are reduced to an appropriate level. Additionally, if we are unable to reduce our costs to respond to future decreases in revenue, we may utilize more of our cash resources than we planned. Any future actions that we take to limit our usage of cash may also reduce our ability to execute our plans and strategies, which may weaken our competitive positioning and cause us to lose market share. We are unable to predict the duration and severity of the current disruption in financial markets and adverse economic conditions in the U.S. and other countries.

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 significantly 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

Table of Contents

adding increased performance and functionality. For the advanced television market, we are shifting away from our previous approach of implementing our intellectual property (IP) exclusively in system-on-chip integrated circuits (ICs), to an approach designed to improve video performance of our customers image processors through the use of our line of Motion Estimation Motion Compensation (MEMC) co-processor ICs. This strategy is designed to address the needs of the large-screen, high-resolution, high-quality segment of the television market. Although our new product strategy is developed to take advantage of market trends, 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 new product strategy is properly targeted, we cannot assure you that the products we are developing will lead to a significant 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. 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.

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

Excluding gains on the repurchase of our convertible subordinated debentures, 2004 is our only year of profitability since inception and 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. If we are not profitable in the future, we may be unable to continue our operations.

We have incurred indebtedness as a result of the sale of convertible debentures. We anticipate that we must repay or refinance the debentures by May 2011. We may be unable to meet this, or other, future capital requirements.

As of December 31, 2009, $15.8 million of our 1.75% convertible subordinated debentures were outstanding. Although the debentures are not due until 2024, the holders have the right to require us to purchase all or a portion of the debentures at each of the following dates: May 15, 2011, May 15, 2014 and May 15, 2019. Since the market price of our common stock is significantly below the conversion price of the debentures, we expect the holders to exercise their put option on May 15, 2011. We may not be able to refinance the debentures at terms that are as favorable as those currently contained in the debentures, or at terms that are acceptable to us at all. While we believe that our current cash and marketable securities balances will be sufficient to meet our capital requirements for the next twelve months, we cannot assure you that we will be able to maintain sufficient cash and marketable security balances to refinance or pay off the debentures when and if the put option is exercised, or that such a repurchase would not result in cash reserves too low for us to continue our business as a going concern. We may need, or could elect to seek, additional funding through public or private equity or debt financing, which we may not be able to obtain. If we issue equity securities, our shareholders may experience additional dilution or the new equity securities may have rights, preferences or privileges senior to those of our common stock.

Table of Contents

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. 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. We cannot assure you that the time required for the testing, evaluation and design of our products by our customers would not be significantly longer than nine months.

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. Additionally, 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, our provisions for obsolete inventory were $1.2 million, $1.5 million and $4.4 million in 2009, 2008 and 2007, respectively. Additionally, in 2007, we wrote off assets with a net book value of $6.9 million due to reductions in research and development personnel and changes in product development strategy.

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

We may determine that it is beneficial to increase our capacity to develop new and enhanced products in the future as the economy recovers. If we do not manage any internal expansion efforts effectively, our operating expenses could increase more rapidly than our revenue, adversely affecting our financial condition and results of operations. To manage any future expansion efforts 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 must also manage multiple relationships with customers, business partners, contract manufacturers, suppliers and other third parties. 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 or controls may not be adequate to support our operations and we may not be able to expand 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. Our operation of any acquired business would involve numerous risks, including, but not limited to:

- problems combining the acquired operations, technologies or products;
- unanticipated costs;

diversion of management s attention from existing operations;

adverse effects on existing business relationships with customers;

risks associated with entering markets in which we have no or limited prior experience;

Table of Contents

potential loss of key employees, particularly those of the acquired organizations; and

risks associated with implementing adequate internal control, management, financial and operating reporting systems.

Any future acquisitions and investments could also result in any of the following negative events, among others:

issuance of stock that dilutes current shareholders percentage ownership;

incurrence of debt;

assumption of liabilities;

amortization expenses related to acquired intangible assets;

impairment of goodwill;

large and immediate write-offs; and

decreases in cash and marketable securities that could otherwise serve as working capital.

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 35%, 32% and 33% of revenue in 2009, 2008 and 2007, respectively. Revenue attributable to our top five end customers represented 56%, 55% and 47% of revenue in 2009, 2008 and 2007, respectively. As of December 31, 2009 and 2008, we had three accounts that each represented 10% or more of accounts receivable. 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.

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 original equipment manufacturers (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. These arrangements make it difficult to monitor the financial condition and creditworthiness of our distributors, integrators and customers and to predict demand for our products. Our failure to manage one or more of these challenges 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 2009, 2008 and 2007. On the

Table of Contents

other hand, if we underestimate demand, or if sufficient manufacturing capacity is not available, we would forego revenue opportunities, lose market share and damage our customer relationships.

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

We contract with three third-party foundries for wafer fabrication and other manufacturers for packaging, assembly and testing of our products. We do not own or operate a semiconductor fabrication facility and do not have the resources to manufacture our products internally. The wafers used in each of our products are fabricated by only one of these manufacturers. 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. From time to time, our suppliers 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 are more likely to, and have in the past, reallocated capacity to other customers even during periods of high demand for our products. 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 with our current contract manufacturers would be costly and cumbersome. 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. 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, 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.

International sales account for almost all of our revenue, and if we do not successfully address the risks associated with international sales, our revenue could decrease.

Sales outside the U.S. accounted for approximately 97%, 95% and 96% of revenue in 2009, 2008 and 2007, respectively. We anticipate that sales outside the U.S. will continue to account for a substantial portion of our revenue in future periods. In addition, customers who incorporate our products into their products sell a substantial portion of their products outside of the U.S., and all of our products are manufactured outside of the U.S. We are, therefore, subject to many international risks, including, but not limited to:

- increased difficulties in managing international distributors and manufacturers due to varying time zones, languages and business customs;
- foreign currency exchange fluctuations in the currencies of Japan, the People s Republic of China (PRC), Taiwan or Korea;
- reduced or limited protection of our IP, particularly in software, which is more prone to design piracy;
- difficulties in collecting outstanding accounts receivable balances;

potentially adverse tax consequences;

difficulties regarding timing and availability of export and import licenses;

political and economic instability, particularly in the PRC, Japan, Taiwan, or Korea;

Table of Contents

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;

outbreaks of health epidemics in the PRC or other parts of Asia; and

increased transaction costs related to sales transactions conducted outside of the U.S., such as charges to secure letters of credit.

Our future success depends upon the continued services of key personnel, many of whom would be difficult to replace, and the loss of one or more of these employees could seriously harm our business by delaying product development.

We believe our success depends, in large part, upon our ability to identify, attract and retain qualified hardware and software engineers, sales, marketing, finance and managerial personnel. Competition for talented personnel is intense and we may not be able to retain our key personnel or identify, attract or retain other highly qualified personnel in the future. Because of the highly technical nature of our business, the loss of key engineering personnel could delay product introductions and significantly impair our ability to successfully create future products. If we do not succeed in hiring and retaining employees with appropriate qualifications, our product development efforts, revenue and business could be seriously harmed. We have experienced, and may continue to experience, difficulty in hiring and retaining employees with appropriate qualifications. In the last three years a significant portion of our executive management team has turned over, including the Chief Executive Officer, Chief Financial Officer, Vice President of Sales, Vice President of Marketing, Vice President of Business Operations and Vice President, Strategy and Market Development.

If we engage in further restructuring efforts, we may be unable to successfully implement new products or enhancements to our current products, which will adversely affect our future sales and financial condition.

In 2006, we initiated restructuring plans aimed at returning the Company to profitability. In December 2008, we initiated an additional restructuring plan to reduce our operating expenses in response to decreases in current and forecasted revenue. The December 2008 plan reduced operations, research and development and administrative headcount in our San Jose, Taiwan and China offices and was completed during the second quarter of 2009. The restructuring plans and any additional reductions in headcount may slow our development of new or enhanced products by limiting our research and development and engineering activities. If we are unable to successfully introduce new or enhanced products, our sales and financial condition will be adversely affected.

The concentration of our manufacturers and customers in the PRC, Japan, Korea and Taiwan increases our risk that a natural disaster, work stoppages or economic or political instability in the region could disrupt our operations.

Most of our current manufacturers and customers are located in the PRC, Japan, Korea or Taiwan. In addition, a significant percentage of our employees are located in this region. Disruptions from natural disasters, health epidemics and political, social and economic instability may affect the region and would have a negative impact on our results of operations. In addition, the economy of the PRC differs from the economies of many countries in 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. Our results of operations and financial position may be harmed by changes in the PRC s political, economic or social conditions.

In addition, the risk of earthquakes in the Pacific Rim region is significant due to the proximity of major earthquake fault lines in the area. Common consequences of earthquakes include power outages and disruption or impairment of production capacity. Earthquakes, fire, flooding, power outages and other natural disasters in

Table of Contents

the Pacific Rim region, or political unrest, labor strikes or work stoppages in countries where our manufacturers and customers are located, would likely result in the disruption of our manufacturers and customers operations. Any disruption resulting from extraordinary events could cause significant delays in shipments of our products until we are able to shift our manufacturing from the affected contractor to another third-party vendor. There can be no assurance that alternative capacity could be obtained on favorable terms, or in a timely manner, if at all.

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 and the Sarbanes-Oxley Act of 2002, which requires management s annual review and evaluation of internal control over financial reporting. While we invest significant time and money in our effort to evaluate and test our internal control over financial reporting and assess our risk management strategies, there are inherent limitations to the effectiveness of any system of internal controls and procedures, including cost limitations, the possibility of human error, judgments and assumptions regarding the likelihood of future events, and the circumvention or overriding of the controls and procedures. Accordingly, even effective controls and procedures can provide only reasonable assurance of achieving their control objectives.

Additionally, one of the covenants of the indenture governing the debentures could possibly be interpreted such that if we are late with any of our required filings under the Securities Exchange Act of 1934, as amended (Exchange Act), and if we fail to affect a cure within 60 days, the holders of the debentures can put the debentures back to the Company, whereby the debentures become immediately due and payable. As a result of our restructuring efforts, we have fewer employees to perform day-to-day controls, processes and activities and, additionally, certain functions have been transferred to new employees who are not as familiar with our procedures. These changes increase the risk that we will be unable to make timely filings in accordance with the Exchange Act. Any resulting default under our debentures would have a material adverse effect on our cash position and operating results.

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 change 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 (benefit) 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 provision under U.S. generally accepted accounting principles. Income tax expense (benefit) for interim quarters is based on a forecast of our global 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 global tax rate may be materially different than our forecast.

Table of Contents

Company Risks Related to the Semiconductor Industry and Our Markets

Intense competition in our markets may reduce sales of our products, reduce our market share, decrease our gross profit and result in large losses.

Rapid technological change, evolving industry standards and customer requirements, compressed product life cycles and declining average selling prices are characteristics of our market and could have a material adverse effect on our business, financial condition and results of operations. As the overall price of digital projectors and advanced flat panel displays continues to fall, we may be required to offer our products to customers at discounted prices due to increased price competition. At the same time, new alternative technologies and industry standards may emerge that directly compete with technologies we offer. We may be required to increase our investment in research and development at the same time that product prices are falling. In addition, even after making this investment, we cannot assure you that our technologies will be superior to those of our competitors or that our products will achieve market acceptance, whether for performance or price reasons. Failure to effectively respond to these trends could reduce the demand for our products.

We compete with specialized and diversified electronics and semiconductor companies that offer display processors or scaling components. Some of these include Broadcom Corporation, i-Chips Technologies Inc., Integrated Device Technology, Inc., MediaTek Inc., MStar Semiconductor, Inc., Realtek Semiconductor Corp., Renesas Technology Corp., Sigma Designs, Inc., Silicon Image, Inc., STMicroelectronics N.V., Sunplus Technology Co., Ltd., Techwell, Inc., Trident Microsystems, Inc., Zoran Corporation and other companies. Potential and current competitors may include diversified semiconductor manufacturers and the semiconductor divisions or affiliates of some of our customers, including Intel Corporation, LG Electronics, Inc., Matsushita Electric Industrial Co., Ltd., Mitsubishi Digital Electronics America, Inc., National Semiconductor Corporation, NEC Corporation, NVIDIA Corporation, NXP Semiconductors, 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. We cannot assure you that we can compete successfully against current or potential competitors.

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

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 or may not be available on terms that are commercially reasonable. 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. We provide the computer programming code for our software to customers in connection with their product development

Table of Contents

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. As of December 31, 2009 we held 119 patents and had 40 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 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. In addition, it is possible that existing or future patents may be challenged, invalidated or circumvented.

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 IP rights. IP claims could subject us to significant liability for damages and invalidate our proprietary rights. In addition, IP claims may be brought against customers that incorporate our products in the design of their own products. These claims, regardless of their success or merit and regardless of whether we are named as defendants in a lawsuit, would likely be time consuming and expensive to resolve and would divert the time and attention of management and technical personnel. 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 reasonable terms 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.

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, faster screen refresh rates, the proliferation of new display devices and the drive to network display devices together. 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. As a result, a portion of our market would be eliminated, and our business would be harmed.

Table of Contents

We are dependent 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 are dependent 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 develop a new version of the part that can be manufactured with a newer process. 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 instance, a portion of our products use embedded dynamic random access memory (DRAM) technology, which requires manufacturing processes that are being phased out. We also utilize 0.18um and 0.15um standard logic processes, which may only be available for the next five to seven years.

Our software development tools 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 software development tools to help customers evaluate our products and bring them into production. 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. Existing or new software development tools could make our current products obsolete or hard to use. 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 may increase 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.

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 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. Therefore, identifying quality problems can occur 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.

Table of Contents

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 incurred warranty costs due to customers returning potentially affected products. Our customers have also experienced delays in receiving product shipments from us that resulted in the loss of revenue and profits. Shipments of defective products could cause us to lose customers or to incur significant replacement costs, either of which would harm our business.

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 are building most of our products on a customer owned tooling basis, also known in the semiconductor industry as COT, where we directly contract the manufacture of wafers and assume the responsibility for the assembly and testing of our products. 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.

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 design and manufacture of our and our customers products may occur. Such critical components and materials include semiconductor wafers and packages, display components, analog-to-digital converters, digital receivers and video decoders. 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.

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. The current crisis in global credit and financial markets may result in more rapid declines in average selling prices as our competitors reduce their prices in attempts to gain market share or as our potential customers have less cash available for purchases and operations and, in some instances, exit the market. 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 and North America. The current global economic crisis

has caused a slowdown in the demand for our products and other semiconductor products in general, and the slowdown may continue for an extended period of time. The cyclical nature of the semiconductor industry has also led to significant variances in product demand and production capacity. We

Table of Contents

have experienced, and may continue to experience, periodic fluctuations in our future financial results because of changes in industry-wide conditions.

Environmental laws and regulations have caused us to incur, and may cause us to continue to incur, significant expenditures to comply with applicable laws and regulations, and may cause us to incur significant 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. Current environmental laws and regulations could become more stringent over time, imposing even greater compliance costs and increasing risks and penalties associated with violations, which could seriously harm our business, financial condition and results of operations. There can be no assurance that violations of environmental laws or regulations will not occur in the future as a result of our inability to obtain permits, human error, equipment failure or other causes.

Table of Contents

Other Risks

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. 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. Additional 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 or acquisitions;
- the operating and stock price performance of other comparable companies;
- inconsistent trading volume levels of our common stock; 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 an investment in us, and adversely affect our business, financial condition and results of operations.

On June 4, 2008, we effected a one-for-three reverse split of our common stock. We effected the reverse split to regain compliance with NASDAQ Marketplace Rules, particularly the minimum $1.00 per share requirement for continued inclusion on the NASDAQ Global Market. Though the per share price of our common stock increased to over $2.00 per share immediately following the reverse split, the price has fluctuated significantly and was below $1.00 as recently as May 6, 2009. We cannot guarantee that it 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 again, and we may seek shareholder approval for an additional reverse split.

A second reverse split could produce negative effects. We could not guarantee that an additional reverse split would result in a long-term or permanent increase in the price of our common stock. The market might perceive a decision to effect an additional reverse split as a negative indicator of our future prospects, and as a result, the price of our common stock might decline after such a reverse split (perhaps by an even greater percentage than would have occurred in the absence of such a reverse split). An additional reverse split could also make it more difficult for us to meet certain other requirements for continued listing on the NASDAQ Global Market, including rules related to the minimum number of shares that must be in the public float, the minimum market value of the public float and the

minimum number of round lot holders. Investors might consider the increased proportion of unissued authorized shares to issued shares to have an anti-takeover effect under certain circumstances by allowing for dilutive issuances which could prevent certain shareholders from changing the composition of the board, or could render tender offers for a combination with another entity more difficult to complete successfully. Additionally, customers, suppliers or employees might consider a company with low trading volume risky and might be less likely to transact business with us.

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, such as the Pink Sheets or the OTC Bulletin Board. 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

Table of Contents

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. In addition, as a delisted security, our common stock would be subject to SEC rules regarding penny stock, which impose additional disclosure requirements on broker-dealers. The regulations relating to penny stocks, coupled with the typically higher cost per trade to investors in penny stocks due to factors such as broker commissions generally representing a higher percentage of the price of a penny stock than of a higher priced stock, would further limit the ability and willingness of investors to trade in our common stock. 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, including our ability to attract and retain qualified executives and employees and to raise capital.

The anti-takeover provisions of Oregon law and in our articles of incorporation could adversely affect the rights of the holders of our common stock 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 in our articles of incorporation or bylaws:

- our board of directors is authorized, without prior shareholder approval, to change the size of the board (our articles of incorporation provide that if the board is increased to eight or more members, the board will be divided into three classes serving staggered terms, which would make it more difficult for a group of shareholders to quickly change the composition of our board);

- 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.

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. As a result of the restructuring plan we initiated in

Table of Contents

2006 and completed in 2008, we have consolidated office space and sublease portions of our facilities. At December 31, 2009, our major facilities consisted of the following:

Location	Function(s)	Total Square Feet Leased	Square Feet Utilized	Square Feet Subleased	Lease Expiration	Sublease Expiration
China	Engineering; sales; customer support	46,000	46,000		November 2011	
California	Administration; engineering; sales	37,000	23,000	14,000	June 2013	May 2010
Taiwan	Customer support; sales; operations	22,000	22,000		Various dates through November 2011	
Oregon	Administration	5,000	5,000		November 2013	
Japan	Sales; customer support	4,000	4,000		January 2011	
Washington	None; fully subleased	10,000		10,000	October 2011	Various dates through October 2011

Item 3. Legal Proceedings.

On February 26, 2010, we filed an action against Intersil Corporation (Intersil) in the Superior Court of the State of California for the County of Santa Clara, Case No. 1-10-CV-164894. The Complaint filed by the Company alleges breach by Intersil of a license agreement between Intersil and the Company, as well as causes of action for breach of the implied covenant of good faith and fair dealing and declaratory relief. The Complaint alleges that the technology provided by Intersil under the license agreement is defective, and as a result the Company was entitled to stop making payments under the agreement. Payments not made under the agreement will total $1.25 million as of the end of the second quarter of 2010. Intersil contends that the technology provided is not defective, that it is entitled to the additional payments of $1.25 million, and that it had the right to terminate the license agreement for the Company s failure to make the additional payments. The Company believes that it is not obligated to make the payments due to breach of the license agreement by Intersil, and seeks declaratory relief from the Court that the payments are not due. The first Case Management Conference in the case is scheduled for July 20, 2010. As the Complaint was just recently filed, no discovery has yet been taken, and Intersil has not yet responded to the Complaint. The Company intends to vigorously prosecute the action to enforce its rights under the license agreement.

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

Item 4. (Removed and Reserved).

Table of Contents

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 . The 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 2009	High	Low
Fourth Quarter	$ 4.09	$ 2.15
Third Quarter	4.06	1.25
Second Quarter	1.97	0.56
First Quarter	0.84	0.37

Fiscal 2008	High	Low
Fourth Quarter	$ 1.45	$ 0.55
Third Quarter	1.90	1.08
Second Quarter	2.95	1.53
First Quarter	2.64	1.50

As of February 26, 2010, there were 69 shareholders of record and the last per share sales price of the common stock on that date was $4.01. The number of beneficial owners is substantially greater than the number of shareholders of record because a significant portion of our outstanding common stock is held in broker street name for the benefit of individual investors.

The payment of dividends is within the discretion of our board of directors and will depend on our earnings, capital requirements and operating and financial condition, among other factors. To date, we have not declared any cash dividends and we currently expect to retain any earnings to finance the expansion and development of our business.

Securities Authorized for Issuance Under Equity Compensation Plans

Information regarding our equity compensation plans as of December 31, 2009 is disclosed in Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters of this Annual Report on Form 10-K and is incorporated herein by reference from the section titled Information About Our Equity Compensation Plans in our Proxy Statement for our 2010 Annual Meeting of Shareholders to be filed with the SEC pursuant to Regulation 14A not later than 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

Table of Contents

Performance Graph

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

Set forth below is a graph that compares the cumulative total shareholder return on our common stock with the cumulative total return on the NASDAQ Stock Market (U.S.) Index and the NASDAQ Electronics Components Index over the five-year period ended December 31, 2009. Measurement points are the market close on the last trading day of each of our fiscal years ended December 31, 2004, December 31, 2005, December 31, 2006, December 31, 2007, December 31, 2008 and December 31, 2009. The graph assumes that $100 was invested on December 31, 2004 in our common stock, the NASDAQ Stock Market (U.S.) Index and the NASDAQ Electronics Components Index. In accordance with guidelines of the Securities and Exchange Commission, the shareholder return for each entity in the peer group index has been weighted on the basis of market capitalization. The stock price performance in the graph is not intended to forecast or indicate future stock price performance.

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

Table of Contents

Item 6. Selected Financial Data.

The following consolidated selected financial data should be read in conjunction with Item 7. Management s Discussion and Analysis of Financial Condition and Results of Operation and Item 8. Financial Statements and Supplementary Data.

Statement of Operations Data

	Year Ended December 31,				
	2009	2008	2007	2006	2005
	(In thousands, except per share data)				
Revenue, net	$ 61,093	$ 85,164	$ 105,980	$ 133,607	$ 171,704
Cost of revenue	33,798	42,963	59,273	107,506	108,748
Gross profit	27,295	42,201	46,707	26,101	62,956
Operating expenses:					
Research and development	20,075	26,512	38,792	57,019	51,814
Selling, general and administrative	13,745	17,945	25,437	35,053	30,616
Restructuring	235	1,589	13,285	13,316	1,162
Amortization of acquired intangible assets		164	359	602	1,084
Impairment loss on goodwill				133,739	
Impairment loss on acquired intangible assets				1,753	
Total operating expenses	34,055	46,210	77,873	241,482	84,676
Loss from operations	(6,760)	(4,009)	(31,166)	(215,381)	(21,720)
Interest and other income, net	12,338	11,979	2,483	10,254	1,532
Income (loss) before income taxes	5,578	7,970	(28,683)	(205,127)	(20,188)
Provision (benefit) for income taxes	(877)	(8)	2,237	(949)	22,422
Net income (loss)	$ 6,455	$ 7,978	$ (30,920)	$ (204,178)	$ (42,610)
Net income (loss) per share:					
Basic	$ 0.48	$ 0.55	$ (1.92)	$ (12.69)	$ (2.70)
Diluted	$ 0.47	$ 0.55	$ (1.92)	$ (12.69)	$ (2.70)
Weighted average shares outstanding:					
Basic	13,318	14,399	16,069	16,096	15,779

Diluted	13,687	14,410	16,069	16,096	15,779

Table of Contents

Balance Sheet Data

	December 31,				
	2009	2008	2007	2006	2005
	(In thousands)				
Cash and cash equivalents	$ 17,797	$ 53,149	$ 74,572	$ 63,095	$ 68,604
Short- and long-term marketable securities	13,062	10,168	44,385	71,489	77,033
Working capital	25,359	61,947	112,360	108,169	139,291
Total assets	56,078	91,732	161,916	207,771	421,556
Long-term liabilities, net of current portion	26,703	73,250	151,871	147,414	163,357
Total shareholders equity (deficit)	13,073	4,711	(8,027)	21,948	215,217

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

Overview

We are an innovative designer, developer and marketer of video and pixel processing semiconductors and software for high-end digital video applications and hold 119 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 displays and digital front projectors, to differentiate 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 digital front projectors, however we also target other segments within the flat panel display market, including digital signage.

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

Historically, significant portions of our revenue have been generated by sales to a relatively small number of end customers and distributors. We sell our products worldwide through a direct sales force, distributors and manufacturers representatives. We sell to distributors in Japan, Taiwan, China, Korea, Europe, Southeast Asia and the U.S, and our manufacturers representatives support some of our U.S., Korean and European sales. Our distributors typically provide engineering support to our end customers and often have valuable and established relationships with

our end customers. In certain countries it is customary to sell to distributors. While distributor payment to us is not dependent upon the distributor s ability to resell the product or to collect from the end customer, the distributors may provide longer payment terms to end customers than those we would offer.

Table of Contents

Significant portions of our products are sold overseas. Sales outside the U.S. accounted for approximately 97%, 95% and 96% of revenue in 2009, 2008 and 2007, respectively. Our integrators, branded manufacturers and branded suppliers incorporate our products into systems that are sold worldwide. All of our revenue to date has been denominated in U.S. dollars.

Factors Affecting Results of Operations and Financial Condition

General Market Conditions

Financial, commercial and consumer markets experienced significant disruption during the last quarter of 2008 and throughout 2009 and adversely affected our results of operations during 2009. We experienced a significant decrease in revenue during the first and second quarters of 2009 as consumer demand decreased and our customers reduced their inventory levels in response to general economic uncertainty and lack of visibility regarding expected future sales. We responded to the economic downturn by initiating a restructuring plan in December 2008 to reduce our operating expenses by reducing operations, research and development and administrative headcount in our San Jose, Taiwan and China offices as well as implementing other cost reduction efforts, including company-wide salary reductions during the second and third quarters of 2009. Although the macroeconomic environment and our business appear to have stabilized during the second half of 2009, consumer confidence and spending are still down significantly and we are unable to predict how the challenging global economic environment may impact our future results of operations and financial position.

Restructuring Plan Initiated in November 2006

In November 2006, we initiated a restructuring plan to reduce operating expenses and continued to implement this plan throughout 2007 and 2008. As part of this plan we closed certain offices and consolidated our operations and research and development activities. We also narrowed and redefined our product development strategy which resulted in the write-off of intellectual property (IP) assets, tooling, software development tools and charges for related non-cancelable contracts. This plan significantly decreased our expenses for compensation, software amortization and maintenance, equipment depreciation, information technology, facilities and stock compensation and was completed during the fourth quarter of 2008. Accordingly, 2009 is the first year that fully reflects the cost reductions attributable to the plan initiated in November 2006.

Results of Operations

Year ended December 31, 2009 compared with year ended December 31, 2008, and year ended December 31, 2008 compared with year ended December 31, 2007.

Revenue, net

Net revenue was as follows (in thousands):

	Year ended December 31,			2009 v. 2008		2008 v. 2007	
	2009	2008	2007	$ change	% change	$ change	% change
Revenue, net	$ 61,093	$ 85,164	$ 105,980	$ (24,071)	(28)%	$ (20,816)	(20)%

2009 v. 2008

Net revenue decreased $24.1 million, or 28%, from 2008 to 2009 as the result of a 30% decrease in units sold, partially offset by a 3% increase in average selling price (ASP). The decrease in units sold during 2009 compared to 2008 resulted primarily from weakened customer demand due to the worldwide economic downturn, particularly during the first half of 2009. Decreased revenue also resulted from lower sales of our legacy products, including those we acquired in our acquisition of Equator Technologies, Inc. (Equator) in June 2005, and lower sales into markets which we no longer pursue. These decreases were partially offset by an increase in sales of our Motion Estimation Motion Compensation (MEMC) co-processor ICs, and sales of our next generation projector image processors.

Table of Contents

We did experience some recovery in revenue levels in the second half of 2009 compared to the first half of 2009 as the worldwide economy strengthened. Our most significant recovery was in digital projector market sales which were up slightly from the second half of 2008 to the second half of 2009, compared with a decrease of 50% from the first half of 2008 to the first half of 2009. Revenue from our advanced television market, which includes the panel market and our MEMC co-processor ICs, was approximately flat from the second half of 2008 to the second half of 2009, an improvement over the 24% decrease from the first half of 2008 to the first half of 2009. Our revenue from other markets did not experience a recovery during the second half of 2009, compared to the second half of 2008, primarily due to consistent decreases in sales of legacy products in markets which we no longer pursue.

2008 v. 2007

Net revenue decreased $20.8 million, or 20%, from 2007 to 2008 as the result of a 26% decrease in units sold, partially offset by a 9% increase in ASP. The increase in ASP from 2007 to 2008 was primarily the result of an increase in the percentage of total revenue from the digital projector market, which generally has higher ASPs than our other products. The decrease in units sold during 2008 compared to 2007 resulted from decreases in revenue across all of our markets. Digital projector and advanced television market sales decreased due to a general weakening of the market, particularly during the fourth quarter of 2008 as our customers decreased their inventory levels due to macroeconomic uncertainty. Additionally, advanced television market sales decreased due to our decision to shift our focus away from the commoditized SoC segment of the market to focus on our line of MEMC co-processor ICs. Sales of legacy products acquired in the Equator acquisition also decreased as we discontinued our development efforts related to these parts and existing customers switched to next generation designs from other suppliers.

Cost of revenue and gross profit

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

	Year ended December 31,					
	2009	% of revenue	2008	% of revenue	2007	% of revenue
Direct product costs and related overhead [1]	$ 30,630	50%	$ 39,362	46%	$ 53,807	51%
Amortization of acquired intangible assets	2,336	4	2,820	3	2,820	3
Provision for obsolete inventory, net of usage	518	1	488	1	2,376	2
Other [2]	314	0	293	0	270	0
Total cost of revenue	$ 33,798	55%	$ 42,963	50%	$ 59,273	56%
Gross profit	$ 27,295	45%	$ 42,201	50%	$ 46,707	44%

[1] Includes purchased materials, assembly, test, labor, employee benefits, warranty expense and royalties.

[2] Includes restructuring, stock-based compensation and additional amortization of non-cancelable prepaid royalty.

2009 v. 2008

Total cost of revenue increased to 55% of revenue in 2009 from 50% of revenue in 2008. The increase was primarily attributable to an increase in direct product costs due to changes in the mix of products sold, including increased sales of our MEMC products and next generation projector processors and decreased sales of our legacy Equator products. Gross profit margins also decreased due to the impact of lower overhead cost absorption due to decreased revenue without corresponding reductions in our fixed costs.

We expect future cost improvements on our MEMC products and next generation projector processors as we continue to ramp production and begin to realize production efficiencies, however we are unable to predict the timing and extent of these improvements. Additionally, our acquired developed technology asset will be fully amortized by June 30, 2010 and amortization of acquired intangible assets recorded in cost of goods sold is expected to decrease from $2.3 million in 2009 to $1.1 million in 2010.

Table of Contents

2008 v. 2007

Total cost of revenue decreased to 50% of revenue in 2008 from 56% of revenue in 2007. The decrease was primarily attributable to a more favorable mix of products sold, lower pricing obtained from vendors, and increases in production yields. The net provision for obsolete inventory decreased to 1% of revenue in 2008 from 2% in 2007 as a result of our increased focus on inventory management.

Research and development

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

As further described below, we reduced our research and development expense significantly during 2009 and 2008 as the result of restructuring plans initiated in November 2006 and December 2008. As part of these restructuring plans and other on-going initiatives, we also increased the efficiency of our research and development programs by more closely aligning our product development efforts with those of our customers and by implementing improved engineering design methodologies and practices. As a result of these changes, we have improved our ability to develop new and innovative products while reducing our related expenses.

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

	Year ended December 31,			2009 v. 2008		2008 v. 2007	
	2009	2008	2007	$ change	% change	$ change	% change
Research and development	$ 20,075	$ 26,512	$ 38,792	$ (6,437)	(24)%	$ (12,280)	(32)%

2009 v. 2008

Research and development expense decreased $6.4 million, or 24%, from 2008 to 2009. This decrease is primarily attributable to the restructuring efforts that we initiated in November 2006 and December 2008, and which were completed in the fourth quarter of 2008 and second quarter of 2009, respectively. These efforts resulted in the following reductions in research and development expenses:

Depreciation and amortization expense, software maintenance expense and expensed equipment and software decreased $2.7 million. This decrease resulted from fewer engineering software tools due to changes in product development strategy as well as decreased amortization from certain licensed technology which became fully amortized during the first and second quarters of 2009.

Compensation expense decreased $1.9 million as a result of:

a company-wide 10% salary reduction that was in effect during the second and third quarters of 2009;

a reduced senior management bonus for 2009 compared to 2008; and

continuous improvement in our engineering practices to lower costs and improve efficiency.

Stock-based compensation expense decreased $786,000 due to personnel reductions and reduced valuation of our stock options.

Facilities and information technology expense allocations decreased $748,000, primarily due to reductions in rent and decreased depreciation of equipment and leasehold improvements.

Table of Contents

2008 v. 2007

Research and development expense decreased $12.3 million, or 32%, from 2007 to 2008. This decrease is directly attributable to the restructuring efforts that we initiated in 2006 and completed in the fourth quarter of 2008. These efforts resulted in the following reductions in research and development expenses:

Depreciation and amortization expense, software maintenance expense and expensed equipment and software decreased $6.4 million. This decrease is primarily due to the December 31, 2007 write-off of engineering software tools, which we are no longer using due to reductions in research and development personnel and changes in product development strategy.

Compensation expense decreased $2.6 million. The decrease in compensation expense in 2008 is primarily due to headcount reductions that occurred in the second half of 2007.

Facilities and information technology expense allocations decreased $1.7 million, primarily due to reductions in headcount, outsourced IT support, lower rent and decreased equipment depreciation.

Stock-based compensation expense decreased $1.1 million due to personnel reductions and reduced valuation of our stock options.

Travel and related expenses decreased $656,000.

Selling, general and administrative

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

	Year ended December 31,			2009 v. 2008		2008 v. 2007	
	2009	2008	2007	$ change	% change	$ change	% change
Selling, general and administrative	$ 13,745	$ 17,945	$ 25,437	$ (4,200)	(23)%	$ (7,492)	(29)%

2009 v. 2008

Selling, general and administrative expense decreased $4.2 million, or 23%, from 2008 to 2009. The decrease in selling, general and administrative expense from 2008 to 2009 is primarily attributable to the restructuring efforts that we initiated in November 2006 and December 2008, and which were completed in the fourth quarter of 2008 and second quarter of 2009, respectively. These efforts resulted in the following reductions in selling, general and administrative expenses:

Compensation expense decreased $1.6 million as a result of:

a company-wide 10% salary reduction that was in effect during the second and third quarters of 2009;

a reduced senior management bonus for 2009 compared to 2008; and

headcount reductions during 2009.

Stock-based compensation expense decreased $658,000 due to personnel reductions and reduced valuation of our stock options.

Facilities and information technology allocations decreased $525,000, primarily due to reductions in headcount, outsourced IT support, lower rent and decreased equipment depreciation.

Sales commissions decreased $520,000 primarily due to lower sales volume.

Table of Contents

2008 v. 2007

Selling, general and administrative expense decreased $7.5 million, or 29%, from 2007 to 2008. The decrease in selling, general and administrative expense from 2007 to 2008 is primarily attributable to the restructuring efforts that we initiated in 2006 and completed in the fourth quarter of 2008. These efforts resulted in the following reductions in selling, general and administrative expenses:

Compensation expense decreased $3.3 million. The decrease in compensation expense in 2008 is primarily due to significant headcount reductions that occurred in the second half of 2007, partially off-set by headcount increases in the second half of 2008.

Stock-based compensation expense decreased $2.3 million due to personnel reductions and reduced valuation of our stock options.

Facilities and information technology allocations decreased $689,000, primarily due to reductions in headcount, outsourced IT support, lower rent and decreased equipment depreciation.

Travel and related expenses decreased $530,000.

Restructuring

Years Ended December 31, 2009 and 2008

Restructuring expense was comprised of the following amounts (in thousands):

	Year ended December 31, 2009			Year ended December 31, 2008		
	Dec. 08 Plan	Nov. 06 Plan	Total	Dec. 08 Plan	Nov. 06 Plan	Total
Termination and retention benefits [1]	$ 118	$	$ 118	$ 666	$ 506	$ 1,172
Consolidation of leased space [2]		160	160		508	508
Total restructuring expenses	$ 118	$ 160	$ 278	$ 666	$ 1,014	$ 1,680
Included in cost of sales	$ 43	$	$ 43	$ 91	$	$ 91
Included in operating expenses	75	160	235	575	1,014	1,589

[1] Includes severance payments for terminated employees in 2009 and 2008 and retention payments for certain continuing employees in 2008.

[2] Expenses related to the consolidation of leased space included future non-cancelable rent payments due for vacated space (net of estimated sublease income) and moving expenses.

In December 2008, we initiated a restructuring plan to reduce our operating expenses in response to decreases in current and forecasted revenue which resulted from global economic uncertainty. The plan reduced operations, research and development and administrative headcount in our San Jose, Taiwan and China offices, and was completed during the second quarter of 2009.

In November 2006, we initiated a restructuring plan that included consolidation of our operations in order to reduce compensation and rent expense, while at the same time making critical infrastructure investments in people, processes and information systems to improve our operating efficiency. During 2008, we incurred additional expenses for termination benefits and consolidation of leased space related to specific actions initiated in prior years and also incurred expenses related to the closure of our Toronto office. Although this plan was completed in the fourth quarter of 2008, lease termination costs were recorded in 2009 due to decreases in estimated future sublease income related to accruals made under the plan initiated in November 2006.

Table of Contents

Year Ended December 31, 2007

Restructuring expense was comprised of the following amounts (in thousands):

		Nov. 06 Plan
Termination and retention benefits [1]	$	5,420
Net write-off of assets and reversal of related liabilities [2]		3,905
Contract termination fee [3]		1,693
Consolidation of leased space [4]		1,524
Payments, non-cancelable contracts [5]		827
Other		88
Total restructuring expenses	$	13,457
Included in cost of sales	$	172
Included in operating expenses		13,285

[1] Termination and retention benefits included severance and retention payments for terminated employees and retention payments for certain continuing employees.

[2]