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The information contained in this preliminary prospectus supplement is not complete and may be changed. A registration statement relating to these securities has been declared effective by the Securities and Exchange Commission. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities, and we are not soliciting offers to buy these securities, in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED August 6, 2015

Preliminary Prospectus Supplement (to Prospectus dated September 17, 2014)

> shares pixelworks®

Common Stock

We are offering shares of our common stock. We have granted the underwriter an option, exercisable for up to 30 days from the date of this prospectus supplement, to purchase up to additional shares of our common stock to cover overallotments.

Our shares of common stock are listed on The NASDAQ Global Market under the symbol "PXLW." On August 5, 2015, the last reported sale price of our shares of common stock on The NASDAQ Global Market was \$5.78 per share.

Investing in our shares of common stock involves risks. See "Risk factors" beginning on page S-5 of this prospectus supplement.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

	Per Share	Total
Public Offering Price	\$	\$
Underwriting Discounts and Commissions(1)	\$	\$
Proceeds to Pixelworks (Before Expenses)	\$	\$

(1) The underwriter's discounts and commissions will be (i) 6.50% of the gross proceeds of this offering excluding sales to any of our employees, directors, other insiders, owners of at least 5% of our common stock, or a strategic investor to be identified by us, and (ii) 3.25% of the gross proceeds received from the sale of shares of our common stock to any of our employees, directors, other insiders, owners of at least 5% of our common stock, or a strategic investor to be identified by us, and (ii) 3.25% of the gross proceeds received from the sale of shares of our common stock to any of our employees, directors, other insiders, owners of at least 5% of our common stock, or a strategic investor to be identified by us. In addition to the underwriting discounts and commissions listed in the table above, we have agreed to reimburse the underwriter for all reasonable and documented out-of-pocket expenses incurred by the underwriter in connection with the offering, up to a maximum of \$30,000. See "Underwriting" for additional information regarding compensation payable to the underwriter.

If the underwriter exercises in full the overallotment option, the total underwriting discounts and commissions payable by us are expected to be \$ and the total net proceeds to us, before expenses payable by us, are expected be \$.

Delivery of our shares of common stock offered hereby is expected to be made on or about August , 2015.

Sole Book-Running Manager

Roth Capital Partners

Co-Manager

Dougherty & Company

Prospectus Supplement dated August , 2015

You should rely only upon the information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus. We have not authorized anyone to give any information or make any representation about us that is different from or in addition to, that contained in this prospectus supplement and the accompanying prospectus or in any of the materials that we have incorporated by reference into this prospectus supplement and the accompanying prospectus. See "Incorporation of Certain Documents by Reference." Therefore, if anyone gives you information of this sort, you should not rely on it as authorized by us. If you are in a jurisdiction where offers to sell, or solicitations of offers to purchase, the securities offered by this prospectus supplement and the accompanying prospectus are unlawful, or if you are a person to whom it is unlawful to direct these types of activities, then the offer presented in this prospectus supplement and the accompanying prospectus are unlawful, or if you are a person to whom it is unlawful to direct these types of activities, then the offer presented in this prospectus supplement and the accompanying prospectus does not extend to you.

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Neither the delivery of this prospectus supplement and the accompanying prospectus, nor any sale made hereunder, shall under any circumstances create any implication that there has been no change in our affairs since the date on the front cover of this prospectus supplement or that the information contained or incorporated by reference herein is correct as of any time subsequent to the date of such information.

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About This Prospectus Supplement

This document is in two parts. The first part is this prospectus supplement, which describes the terms of the offering of common stock and also adds to and updates information contained in the accompanying prospectus as well as the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The second part, the accompanying prospectus, gives more general information about securities we may offer from time to time, some of which does not apply to the common stock we are offering. To the extent any inconsistency or conflict exists between the information included in this prospectus supplement and the information included in the accompanying prospectus, the information included or incorporated by reference in this prospectus supplement updates and supersedes the information in the accompanying prospectus. This prospectus supplement incorporates by reference important business and financial information about us that is not included in or delivered with this prospectus supplement.

It is important for you to read and consider all information contained in this prospectus supplement and the accompanying prospectus in making your investment decision. You should also read and consider the information contained in the documents identified under the headings "Incorporation of Certain Documents by Reference" and "Where You Can Find More Information."

Unless otherwise indicated or the context otherwise requires, the terms the "we," "us," "our," the "Company" and "Pixelworks" and similar terms refer to Pixelworks, Inc., an Oregon corporation, and its consolidated subsidiaries.

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PROSPECTUS SUPPLEMENT SUMMARY

The following summary highlights selected information about us and the offering and does not contain all the information that may be important to you. We encourage you to read this prospectus supplement and the accompanying prospectus in its entirety, including the information set forth under "Risk Factors," and the documents incorporated by reference in this prospectus supplement under "Incorporation of Certain Documents by Reference." In addition, certain statements in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference in this prospectus supplement are forward-looking statements, which involve risks and uncertainties. See "Forward-Looking Statements." Unless the context otherwise requires, all information in this prospectus supplement assumes no exercise of the overallotment option to purchase additional shares of common stock we have granted to the underwriter.

The Company

Overview

Pixelworks designs, develops and markets video and pixel processing semiconductors, intellectual property cores, software and custom ASIC solutions for high-end digital video applications. Our products allow manufacturers and developers of digital display and projection devices to manufacture screens of all sizes that display the highest video quality with minimum power consumption. Our core video display processing technology intelligently processes video signals from a variety of sources and optimizes the image for the viewer. The continued advancement of display technology and rapid growth of video consumption on digital delivery systems and mobile applications has increased the demand for video display processing technology in recent years. Our products can be used in a range of devices from large flat panel displays to small low power mobile applications. Our products are designed to reduce overall system power requirements and reduce costs for our customers by minimizing bandwidth, reducing panel costs and optimizing the video display pipeline efficiency. Our primary target markets include digital projection systems, digital televisions, UltrabookTM devices, tablets, and smartphones.

We have an intellectual property portfolio of 132 patents related to the visual display of digital image data. We focus our research and development efforts on developing video enhancement solutions for our target markets that increase performance, video quality and device functionality while reducing power consumed. We seek to expand our technology portfolio through internal development and co-development with business partners, and we continually evaluate acquisition opportunities and other ways to leverage our technology into other high-value markets.

Our Core Technologies and Products

We have developed a portfolio of advanced video algorithms and IP to address a broad range of challenges in digital video. We believe our technologies can significantly improve video quality and will become increasingly important as the popularity of video content consumption grows, and pixel densities, screen size and image quality increase. Our products are designed with a flexible architecture that allows us to combine algorithms and functional blocks of digital and mixed signal circuitry. Accordingly, our technologies can be implemented across multiple products, in combinations within single products and can be applied to a broad range of applications including smartphones, tablets, UltrabookTM devices, televisions, monitors and projectors. The majority of our products include one or more technologies to provide optimal high-quality Video Display Processing solutions to our customers, regardless of screen size.

Our core Video Display Processing technologies include:

- *Halo Free MEMC*. Our proprietary Halo Free MEMC technology significantly improves the performance and viewing experience of any screen by addressing problems such as judder and motion blur. Unlike competitive solutions it also reduces halo effects that are a byproduct of MEMC. Halos are objectionable blurred regions that surround moving objects as the MEMC algorithms try to reconstruct missing image data caused by the concealing and revealing of objects as they pass over or behind one another. Removing halos drastically improves image quality and is of particular importance on high-resolution displays where artifacts become more visible.
- *Advanced Scaling.* As display resolutions continue to increase, there is a need to convert lower resolution content to higher resolution in order to display content properly. With the latest wave of high-resolution displays, the quality and quantity demands of scaling have increased significantly. Artifacts become more noticeable on these types of displays as they distract from the realism effect. In addition, with the availability of 4K content lagging behind the availability of 4K displays, high-quality scaling is required to ensure 4K displays do not suffer when compared to Full-HD displays of the same size. Our advanced scaling is designed to ensure that up-conversion of lower resolution content is of the highest quality in maintaining the fidelity of image.
- Mobile Video Display Processing. We have developed innovative Video Display Processing solutions, that are designed to optimize power
 consumption for mobile devices. Beyond MEMC and Advanced Scaling, these mobile solutions provide the kind of improvements in color,
 contrast, sharpness and de-blur that are currently only found in high quality televisions today. Furthermore, this technology can reduce system
 power consumption and extend battery life.
- *VueMagic and Networked Displays*. With the advent of mobile devices being used in business, education and consumer environments, we believe there is a growing need to connect to displays wirelessly for sharing and collaboration. VueMagic uses our networking technology to enable the same video stream to be networked across multiple displays for applications such as connected video projection and digital signage. VueMagic provides interactive features for annotation and display control, and unlike other solutions, is device and operating system independent.

Our product development strategy is to leverage our expertise in Video Display 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 position in the market and provide leading edge solutions for the advanced 3LCD and DLP digital projection markets and to enhance our video processing solutions for advanced flat panel displays and other emerging markets. Additionally, we plan to leverage our research and development investment into products that address high-value markets, such as mobile, where our innovative proprietary technology provides differentiation and system power saving benefits. We deliver our technology in a variety of offerings, which take the form of single-purpose chips, highly integrated SoCs that incorporate specialized software, full solutions incorporating software and other tools and IP cores that allow our technology to be incorporated into third party solutions.

Our primary video display processor product categories include the following:

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



- *Video Co-Processor ICs.* Products in this category work with an image processor to post-process video signals 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.

Corporate Information

Pixelworks was founded in 1997 and is incorporated under the laws of the state of Oregon. Our executive offices are located at 224 Airport Parkway, Suite 400, San Jose, California 95110, our telephone number is (408) 200-9200 and our website is www.pixelworks.com. Our website, and the information contained therein, is not a part of this prospectus supplement or the accompanying prospectus.

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THE OFFERING

The following summary contains basic information about this offering and our shares of common stock. It does not contain all the information that is important to you. For a more complete understanding of our shares of common stock, please refer to the section of the accompanying prospectus entitled "Description of Capital Stock" and our amended and restated articles of incorporation, as amended, and amended and restated bylaws, copies of which have been filed with the Securities and Exchange Commission, or SEC, and are available upon request.

Issuer	Pixelworks, Inc.	
Shares of Common Stock Offered	shares	
Option to Purchase Additional Shares of Common Stock	We have granted the underwriter an option, exercisable for up to 30 days from the date of this prospectus supplement, to purchase up to additional shares of our common stock to cover overallotments.	
Shares of Common Stock Outstanding Immediately Following this Offering(1)	shares	
Dividends	To date, we have never declared a dividend and our board of directors does not have any plans to do so in the future. In addition, financial covenants under our outstanding debt may limit our ability to pay dividends.	
Use of proceeds	We estimate that the net proceeds from the sale of the shares of our common stock in this offering will be approximately \$ million (or approximately \$ million if the overallotment option to purchase additional shares of common stock we have granted to the underwriter is exercised in full), after deducting underwriting discounts and commissions and the estimated expenses payable by us related to this offering.	
	We intend to use the net proceeds from this offering for general corporate purposes, which may include, among other things, increasing our working capital, financing of ongoing operating expenses and overhead, and funding of capital expenditures, such as the continued development of solutions for the digital projector, digital television, and mobile device markets. Pending the application of the net proceeds, we may invest the proceeds in marketable securities and short-term investments. See "Use of Proceeds."	
NASDAQ Global Market Symbol	PXLW	
Risk factors	Investing in our securities involves risks. See "Risk Factors" and other information included in, or incorporated by reference into, this prospectus supplement and the accompanying prospectus, including our Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, for a discussion of factors you should carefully consider before deciding to invest in our shares of common stock.	
(1) The number of shares outstanding immediately follows	lowing the offering is based on the number of shares of our common stock outstanding as of	

(1) The number of shares outstanding immediately following the offering is based on the number of shares of our common stock outstanding as of August 3, 2015. It does not include any shares issuable pursuant to unexercised options or restricted stock units, nor does it include any shares otherwise issued or issuable after August 3, 2015.

RISK FACTORS

Investing in shares of our common stock involves risk. Before making any investment decision, you should carefully consider the risk factors set forth below, under the caption "Risk Factors" in the accompanying prospectus and under the caption "Risk Factors" in our Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, which are incorporated by reference in this prospectus supplement and the accompanying prospectus. See "Incorporation of Certain Documents by Reference" and "Where You Can Find More Information." It is not possible to predict or identify all such risks. Consequently, we could also be affected by additional factors that are not presently known to us or that we currently consider to be immaterial to our operations.

The risks we have identified and the risks that remain unknown could materially affect our business, results of operations or financial condition and affect the value of our common stock. You could lose all or part of your investment.

Our ability to use net operating losses to reduce future tax payments may be limited by provisions of the Internal Revenue Code, and may be subject to further limitation as a result of future transactions.

Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, contain rules that limit the ability of a company that undergoes an ownership change, which is generally any cumulative change in ownership of more than 50% of its stock over a three-year period, to utilize its net operating loss and tax credit carryforwards and certain built-in losses recognized in the years after the ownership change. These rules generally operate by focusing on ownership changes involving stockholders who directly or indirectly own 5% or more of the stock of a company and any change in ownership arising from a new issuance of stock by the company. Generally, if an ownership change occurs, the yearly taxable income limitation on the use of net operating loss and tax credit carryforwards is equal to the product of the applicable long-term tax exempt rate and the value of the company's stock immediately before the ownership change. As a result, we may be unable to offset our taxable income with net operating losses, or our tax liability with credits, before these losses and credits expire.

In addition, it is possible that future transactions (including issuances of new shares of our common stock and sales of shares of our common stock) will cause us to undergo one or more additional ownership changes. In that event, we generally would not be able to use our net operating losses from periods prior to this ownership change to offset future taxable income in excess of the annual limitations imposed by Sections 382 and 383 and those attributes that are already subject to limitations (as a result of our prior ownership changes) may be subject to more stringent limitations.

As disclosed in our most recent 10-Q filing, as we do not believe that it is more likely than not that we will realize a benefit from our U.S. net deferred tax assets, including our U.S. net operating losses, we continue to provide a full valuation allowance against essentially all of those assets.

FORWARD-LOOKING STATEMENTS

Some of the statements contained or incorporated by reference in this prospectus supplement and the accompanying prospectus may be "forwardlooking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, and may involve material risks, assumptions and uncertainties. Forward-looking statements typically are identified by the use of terms such as "may," "will," "should," "might," "expect," "anticipate," "intend," "plan," "estimate" and similar words, although some forward-looking statements are expressed differently. These statements are not guarantees of future performance and involve certain risks and uncertainties that are difficult to predict and which may cause actual outcomes and results to differ materially from what is expressed or forecasted in such forward-looking statements. These forwardlooking statements speak only as of the date on which they are made and except as required by law, we undertake no obligation to publicly release the results of any revision or update of these forward-looking statements, whether as a result of new information, future events or otherwise. 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.

A detailed discussion of risks and uncertainties that could cause actual results and events to differ materially from our forward-looking statements is included in our periodic reports filed with the SEC, including our Quarterly Report on Form 10-Q for the quarter ended June 30, 2015 and in the "Risk Factors" section of this prospectus supplement and the accompanying prospectus.

USE OF PROCEEDS

We estimate that the net proceeds from the sale of the shares of our common stock in this offering will be approximately \$ million (or approximately \$ million if the overallotment option to purchase additional shares of common stock we have granted to the underwriter is exercised in full), after deducting underwriting discounts and commissions and the estimated expenses payable by us related to this offering.

We intend to use the net proceeds from this offering for general corporate purposes, which may include, among other things, increasing our working capital, financing of ongoing operating expenses and overhead, and funding of capital expenditures, such as the continued development of solutions for the digital projector, digital television, and mobile device markets. Pending the application of the net proceeds, we may invest the proceeds in marketable securities and short-term investments.

PRICE RANGE OF SHARES OF COMMON STOCK AND DIVIDEND POLICY

Our shares of common stock are listed on The NASDAQ Global Market under the symbol "PXLW." The following table sets forth, for the fiscal quarters indicated, the reported high and low closing sales prices per share of our shares of common stock as reported by The NASDAQ Global Market.

	High	Low
Year ended December 31, 2013:		
First quarter	\$ 2.70	\$2.16
Second quarter	\$ 4.95	\$2.11
Third quarter	\$ 5.30	\$3.14
Fourth quarter	\$ 5.55	\$3.66
Year ended December 31, 2014:		
First quarter	\$ 9.05	\$4.62
Second quarter	\$ 7.98	\$4.68
Third quarter	\$ 9.83	\$ 5.75
Fourth quarter	\$ 6.63	\$3.86
Year ended December 31, 2015:		
First quarter	\$ 6.18	\$4.30
Second quarter	\$ 7.13	\$4.12
Third quarter (through August 5, 2015)	\$ 6.33	\$4.93

On August 5, 2015, the last reported sale price of our common stock on The NASDAQ Global Market was \$5.78 per share.

As of August 3, 2015, the number of record holders of our shares of common stock was 71.

To date, we have never declared a dividend and our board of directors does not have any plans to do so in the future. In addition, financial covenants under our outstanding debt may limit our ability to pay dividends. Accordingly, our shareholders may not realize a return on their investment unless the trading price of our common stock appreciates.

MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS

The following summary describes certain material U.S. federal income tax consequences of the purchase, ownership and disposition of shares of our common stock acquired in this offering by Non-U.S. Holders (as defined below). The discussion below is based upon the provisions of the Code, and Treasury regulations, rulings and judicial decisions thereunder as of the date hereof, and such authorities may be repealed, revoked or modified, perhaps retroactively, so as to result in U.S. federal income tax consequences different from those discussed below. We have not requested a ruling from the U.S. Internal Revenue Service, or IRS, with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS will agree with such statements and conclusions. This discussion does not address all aspects of U.S. federal income taxes and does not deal with foreign, state and local consequences that may be relevant to Non-U.S. Holders in light of their particular circumstances, nor does it address U.S. federal tax consequences other than income taxes. Special rules different from those described below may apply to certain Non-U.S. Holders that are subject to special treatment under the Internal Revenue Code of 1986, as amended, or the Code, such as financial institutions, insurance companies, tax-exempt organizations, broker-dealers and traders in securities, U.S. expatriates, "controlled foreign corporations," "passive foreign investment companies," corporations that accumulate earnings to avoid U.S. federal income tax, persons that hold shares of our common stock as part of a "straddle," "hedge," "conversion transaction," "synthetic security" or integrated investment or other risk reduction strategy, persons that acquire shares of our common stock as compensation for services, or persons subject to the alternative minimum tax or Medicare contribution tax. Such Non-U.S. Holders are urged to consult their own tax advisors to determine the U.S. federal, state, local and other tax consequences that may be relevant to them. In addition, if a partnership, including any entity or arrangement classified as a partnership for U.S. federal income tax purposes, holds shares of our common stock, the tax treatment of a partner generally will depend on the status of the partner and upon the activities of the partnership. Accordingly, partnerships that hold shares of our common stock, and partners in such partnerships, should consult their tax advisors. This discussion assumes that the Non-U.S. Holder holds shares of our common stock as a "capital asset" within the meaning of Section 1221 of the Code (generally, property held for investment).

Persons considering the purchase of shares of our common stock pursuant to this offering should consult their own tax advisors with respect to the application of the U.S. federal income tax laws to their particular situation, as well as any tax consequences of the acquisition, ownership and disposition of shares of shares of our common stock arising under the U.S. federal estate, generation-skipping or gift tax rules as well as any consequences arising under the laws of any other taxing jurisdiction, including any state, local or foreign tax consequences or under any applicable tax treaty.

For the purposes of this discussion, a "Non-U.S. Holder" is, for U.S. federal income tax purposes, a beneficial owner of shares of our common stock that is neither a U.S. Holder, nor a partnership (or other entity treated as a partnership for U.S. federal income tax purposes regardless of its place of organization or formation). A "U.S. Holder" means a beneficial owner of shares of our common stock that is for U.S. federal income tax purposes (a) an individual who is a citizen or resident of the United States, (b) a corporation or other entity treated as a corporation created or organized in or under the laws of the United States, any state thereof or the District of Columbia, (c) an estate the income of which is subject to U.S. federal income taxation regardless of its source or (d) a trust if it (1) is subject to the primary supervision of a court within the United States and one or more U.S. persons have the authority to control all substantial decisions of the trust or (2) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

Distributions

Subject to the discussion below, distributions, if any, made on shares of our common stock to a Non-U.S. Holder of shares of our common stock to the extent made out of our current or accumulated earnings and profits (as determined under U.S. federal income tax principles) generally will constitute dividends for U.S. tax purposes and will be subject to withholding tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. To obtain a reduced rate of withholding under a treaty, a Non-U.S. Holder generally will be required to

provide us or our paying agent with a properly executed IRS Form W-8BEN (in the case of an individual), IRS Form W-8BEN-E (in the case of an entity), or other appropriate form, certifying the Non-U.S. Holder's entitlement to benefits under that treaty. In the case of a Non-U.S. Holder that is an entity, Treasury Regulations and the relevant tax treaty provide rules to determine whether, for purposes of determining the applicability of a tax treaty, dividends will be treated as paid to the entity or to those holding an interest in that entity. If a Non-U.S. Holder holds shares of our common stock through a financial institution or other agent acting on the holder's behalf, the holder will be required to provide appropriate documentation to such agent. The Non-U.S. Holder's agent will then be required to provide certification to us or our paying agent, either directly or through other intermediaries. If you are eligible for a reduced rate of U.S. federal withholding tax under an income tax treaty, you may be able to obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim for a refund with the IRS.

We generally are not required to withhold tax on dividends paid to a Non-U.S. Holder that are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, are attributable to a permanent establishment that such holder maintains in the United States) if a properly executed IRS Form W-8ECI, stating that the dividends are so connected, is furnished to us or our paying agent (or, if shares of our common stock are held through a financial institution or other agent, to such agent). In general, such effectively connected dividends will be subject to U.S. federal income tax, on a net income basis at the regular graduated rates. A corporate Non-U.S. Holder receiving effectively connected dividends may also be subject to a "branch profits tax," which is imposed, under certain circumstances, at a rate of 30% (or such lower rate as may be specified by an applicable treaty) on the corporate Non-U.S. Holder's effectively connected earnings and profits, subject to certain adjustments. To the extent distributions on shares of our common stock, but not below zero, and then will be treated as gain to the extent of any excess, and taxed in the same manner as gain realized from a sale or other disposition of shares of our common stock as described in the next section.

Non-U.S. Holders may be required to periodically update their IRS Form W-8.

Gain on Disposition of our Common Stock

Subject to the discussion below regarding backup withholding and FATCA, a Non-U.S. Holder generally will not be subject to U.S. federal income tax with respect to gain realized on a sale or other disposition of shares of our common stock unless (a) the gain is effectively connected with a trade or business of such holder in the United States (and, if required by an applicable income tax treaty, is attributable to a permanent establishment that such holder maintains in the United States), (b) the Non-U.S. Holder is a nonresident alien individual and is present in the U.S. for 183 or more days in the taxable year of the disposition and certain other conditions are met or (c) we are or have been a "U.S. real property holding corporation", or a USRPHC, within the meaning of Code Section 897(c)(2) at any time within the shorter of the five-year period preceding such disposition or such holder's holding period. In general, we would be a U.S. real property holding corporation if interests in U.S. real estate comprised (by fair market value) at least half of our business assets. We believe that we are not, and do not anticipate becoming, a USRPHC. However, because the determination of whether we are a USRPHC depends on the fair market value of our U.S. real property relative to the fair market value of our other business assets, there can be no assurance that we will not become a USRPHC in the future. Even if we are treated as a USRPHC, however, gain realized by a Non-U.S. Holder on a disposition of shares of our common stock will qualify or will continue to qualify as regularly traded on an established securities market. There can be no assurance that shares of our common stock will qualify or will continue to qualify as regularly traded on an established securities market.

If you are a Non-U.S. Holder described in (a) above, you will be required to pay tax on the net gain derived from the sale at regular graduated U.S. federal income tax rates, and corporate Non-U.S. Holders described in

(a) above may also be subject to a branch profits tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. If you are an individual Non-U.S. Holder described in (b) above, you will be required to pay a flat 30% tax on the gain derived from the sale, which gain may be offset by U.S. source capital losses (even though you are not considered a resident of the United States).

Information Reporting Requirements and Backup Withholding

Generally, we must report information to the IRS with respect to any distributions we make on shares of our common stock (whether or not the distribution represents a taxable dividend income) including the amount of any dividends, the name and address of the recipient, and the amount of any tax withheld. A similar report is sent to the holder to whom any such dividends are paid. Pursuant to tax treaties or certain other agreements, the IRS may make its reports available to tax authorities in the recipient's country of residence.

Payments of dividends or of proceeds on the disposition of shares of our common stock made to a Non-U.S. Holder may be subject to additional information reporting and backup withholding at a current rate of 28% unless the Non-U.S. Holder establishes an exemption, for example by properly certifying the holder's non-U.S. status on an IRS Form W-8BEN, IRS Form W-8BEN-E or another appropriate version of IRS Form W-8 (or a successor form). Notwithstanding the foregoing, backup withholding and information reporting may apply if either we or our paying agent has actual knowledge, or reason to know, that you are a U.S. person.

Any amounts of tax withheld under the backup withholding rules may be credited against the tax liability of persons subject to backup withholding, provided that the required information is timely furnished to the IRS.

FATCA

Provisions of the Code, Treasury regulations and related guidance commonly referred to as "FATCA" may impose withholding tax on certain types of payments made to "foreign financial institutions" and certain other non-U.S. entities. The legislation imposes a 30% withholding tax on dividends on, and gross proceeds from the sale or other disposition of, our common stock paid to a foreign financial institution or to certain non-financial foreign entities, unless (i) the foreign financial institution undertakes certain diligence and reporting obligations, (ii) the non-financial foreign entity either certifies it does not have any substantial U.S. owners or furnishes identifying information regarding each substantial U.S. owner and such entity meets certain other specified requirements, or (iii) an exception applies. If the payee is a foreign financial institution and an exception does not apply, it must enter into an agreement with the U.S. Treasury requiring, among other things, that it undertake to identify accounts held by certain U.S. persons or U.S.-owned foreign entities, annually report certain information about such accounts, and withhold 30% on payments to account holders whose actions prevent it from complying with these regarding FATCA, that agreement may permit the payee to report to that country rather than to the U.S. Treasury. Under final regulations and published guidance, any obligation to withhold from payments made to a foreign financial institution or a non-financial foreign entity under FATCA with respect to dividends on shares of our common stock began on July 1, 2014, but with respect to the gross proceeds of a sale or other disposition of shares of our common stock will not begin until January 1, 2017. Prospective investors should consult their tax advisors regarding FATCA

EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS OWN TAX ADVISOR REGARDING THE TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF SHARES OF OUR COMMON STOCK, INCLUDING THE CONSEQUENCES OF ANY PROPOSED CHANGE IN APPLICABLE LAW.

UNDERWRITING

We have entered into an underwriting agreement with Roth Capital Partners, LLC with respect to the shares of common stock being offered hereby. Subject to certain conditions, we have agreed to sell to the underwriter, and the underwriter has agreed to purchase from us, shares of our common stock. Our common stock trades on The NASDAQ Global Market under the symbol "PXLW."

The underwriting agreement provides that the obligation of the underwriter to purchase the shares of common stock offered by this prospectus supplement and the accompanying base prospectus is subject to the approval of certain legal matters by its counsel and to certain other conditions. The underwriter is obligated to purchase all of the shares of common stock offered hereby if any of the shares are purchased.

If the underwriter sells more shares than the above number, the underwriter has an option for 30 days from the date of this prospectus supplement to buy up to an additional shares of our common stock from us at the public offering price, less the applicable underwriting discounts and commissions to cover these sales. The underwriter may exercise this option at any time, in whole or in part, within 30 days after the date of this prospectus supplement; however, the underwriter may only exercise the option once.

Commissions and Expenses

The underwriter proposes to offer the shares of common stock purchased pursuant to the underwriting agreement to the public at the public offering price set forth on the cover page of this prospectus supplement and to certain dealers at that price less a concession not in excess of \$ per share. After this offering, the public offering price and concession may be changed by the underwriter. No such change shall change the amount of proceeds to be received by us as set forth on the cover page of this prospectus supplement. In connection with the sale of the common stock to be purchased by the underwriter, the underwriter will be deemed to have received compensation in the form of underwriting commissions and discounts. The underwriter's commissions and discounts will be (i) 6.50% of the gross proceeds of this offering, or \$ per share of common stock, excluding the Directed Securities (defined below), or (ii) 3.25% of the gross proceeds from the sale of our common stock to any of our employees, directors, other insiders, owners of at least 5% of our common stock, or a strategic investor to be identified by us (such shares described in this clause (ii) the "Directed Securities"), based on the public offering price per share set forth on the cover page of this prospectus supplement. Pursuant to a requirement by the Financial Industry Regulatory Authority, or FINRA, the maximum compensation to be received by any FINRA member or independent broker/dealer generally, as calculated consistent with FINRA's rules, may not be greater than 8.0% of the gross proceeds received by us from the sale of any securities registered pursuant to Rule 415 under the Securities Act of 1933, as amended, or the Securities Act.

In addition, we have agreed to reimburse the underwriter for all reasonable and documented out-of-pocket expenses incurred by the underwriter in connection with the offering, up to a maximum of \$30,000. We estimate that expenses payable by us in connection with this offering of our common stock, other than the underwriting discounts and commissions and the expense reimbursement referred to above, will be approximately \$

The following table shows the underwriting discounts and commissions payable to the underwriter by us in connection with this offering (assuming both the exercise and non-exercise of the overallotment option to purchase additional shares of common stock we have granted to the underwriter):

Without Overallottent Overallottent	With	Without	With
Option	Overallotment Option	Overallotment Option	Overallotment Option
Public offering price \$	\$	\$	\$

Underwriting discounts and commissions paid by us(1)

(1) The underwriter will receive a discount of 3.25% of the gross proceeds from the sale of the Directed Securities.

Indemnification

Pursuant to the underwriting agreement, we have agreed to indemnify the underwriter against certain liabilities, including liabilities under the Securities Act, or to contribute to payments that the underwriter or such other indemnified parties may be required to make in respect of those liabilities.

Restrictions on Future Sales

We have agreed not to (i) offer, pledge, issue, sell, contract to sell, lend or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for our common stock (ii) enter into any swap or other arrangement that transfers, in whole or in part, any of the economic consequences of ownership of shares of common stock; or (iii) file any registration statement with the SEC relating to the offering of any shares of our common stock or any securities convertible into or exercisable or exchangeable for shares of our common stock, without the prior written consent of the underwriter for a period of 90 days, subject to an 18 day extension under certain circumstances (the "Lock-up Period"), following the date of this prospectus supplement. This consent may be given at any time without public notice. These restrictions on future issuances are subject to exceptions for (i) the issuance of shares of our common stock awards or units, (iii) the issuance of employee stock options and the grant of restricted stock awards or restricted stock units pursuant to our equity incentive plans and (iv) the issuance of shares of our common stock pursuant to an employee stock purchase plan of ours.

In addition, each of our directors and executive officers has entered into a lock-up agreement with the underwriter. Under the lock-up agreements, the directors and executive officers may not, directly or indirectly, sell, offer to sell, contract to sell, or grant any option for the sale (including any short sale), grant any security interest in, pledge, hypothecate, hedge, establish an open "put equivalent position" (within the meaning of Rule 16a-1(h) under the Securities Exchange Act of 1934, as amended, the "Exchange Act"), or otherwise dispose of, or enter into any transaction which is designed to or could be expected to result in the disposition of, any shares of our common stock or securities convertible into or exchangeable for shares of our common stock, or publicly announce any intention to do any of the foregoing, without the prior written consent of the underwriter, for a period of 60 days, subject to an 17 day extension under certain circumstances, from the closing date of this offering. This consent may be given at any time without public notice. These restrictions on future dispositions by our directors and executive officers are subject to exceptions for (i) one or more gift transfers of securities to immediate family members who agree to be bound by these restrictions, (ii) transfers of securities by will or the laws of descent and distribution or to one or more trusts for bona fide estate planning purposes or (iii) transfers of securities to us or as may be required under any of our benefit plans. In addition, our directors and executive officers and executive of Rule 10b5-1 under the Securities Exchange Act of 1934, as amended, relating to the sale of our securities, if then permitted by us, provided that the securities subject to such plan may not be sold or otherwise transferred pursuant to the plan before January 2, 2016. Certain of our directors and executive officers have indicted an intention to enter into such a plan.

Electronic Distribution

This prospectus supplement and the accompanying prospectus may be made available in electronic format on websites or through other online services maintained by the underwriter or by its affiliates. In those cases, prospective investors may view offering terms online and prospective investors may be allowed to place orders online. Other than this prospectus supplement and the accompanying prospectus in electronic format, the information on the underwriter's website or our website and any information contained in any other website maintained by the underwriter or by us is not part of this prospectus supplement, the accompanying prospectus or the registration statement of which this prospectus supplement and the accompanying prospectus forms a part, has not been approved and/or endorsed by us or the underwriter in its capacity as underwriter, and should not be relied upon by investors.

Price Stabilization, Short Positions and Penalty Bids

Until the distribution of our shares of common stock offered hereby is completed, SEC rules may limit the underwriter from bidding for and purchasing our shares of common stock.

In connection with the offering the underwriter may engage in stabilizing transactions, overallotment transactions, syndicate covering transactions and penalty bids in accordance with Regulation M under the Exchange Act.

- Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum.
- Overallotment involves sales by the underwriter of shares in excess of the number of shares the underwriter is obligated to purchase, which creates
 a syndicate short position. The short position may be either a covered short position or a naked short position. In a covered short position, the
 number of shares overallotted by the underwriter is not greater than the number of shares that it may purchase in the overallotment option. In a
 naked short position, the number of shares involved is greater than the number of shares in the overallotment option. The underwriter may close
 out any covered short position by either exercising its overallotment option and/or purchasing shares in the open market.
- Syndicate covering transactions involve purchases of the common stock in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares to close out the short position, the underwriter will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which it may purchase shares through the overallotment option. A naked short position occurs if the underwriter sells more shares than could be covered by the overallotment option. This position can only be closed out by buying shares in the open market. A naked short position is more likely to be created if the underwriter is concerned that there could be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.
- Penalty bids permit the underwriter to reclaim a selling concession from a syndicate member when the common stock originally sold by the syndicate member is purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of the common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. These transactions may be discontinued at any time.

Neither we nor the underwriter make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our shares of common stock. In addition, neither we nor the underwriter make any representation that the underwriter will engage in these transactions or that any transaction, if commenced, will not be discontinued without notice.

Affiliations

The underwriter and/or its affiliates have provided, and may in the future provide, various investment banking and other financial services for us for which services it has received and, may in the future receive, customary fees. Except for services provided in connection with this offering, the underwriter has not provided any investment banking or other financial services during the 180-day period preceding the date of this prospectus supplement and we do not expect to retain the underwriter to perform any investment banking or other financial services for at least 90 days after the date of this prospectus supplement.

Selling Restrictions

European Economic Area

This prospectus supplement and the accompanying prospectus does not constitute an approved prospectus under Directive 2003/71/EC and no such prospectus is intended to be prepared and approved in connection with this offering. Accordingly, in relation to each Member State of the European Economic Area which has implemented Directive 2003/71/EC (each, a "Relevant Member State") an offer to the public of any shares of common stock which are the subject of the offering contemplated by this prospectus supplement and the accompanying prospectus may not be made in that Relevant Member State of any shares of common stock may be made at any time under the following exemptions under the Prospectus Directive, if and to the extent that they have been implemented in that Relevant Member State:

(a) to any legal entity which is a qualified investor as defined in the Prospectus Directive authorized or regulated, whose corporate purpose is solely to invest in securities;

(b) to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive), subject to obtaining the prior consent of the representatives of the underwriter for any such offer; or

(c) in any other circumstances which do not require any person to publish a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer to the public" in relation to any shares of common stock in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares of common stock to be offered so as to enable an investor to decide to purchase any shares of common stock, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State and the expression "Prospectus Directive" means Directive 2003/71/EC (and any amendments thereto including the 2010 PD Amending Directive to the extent implemented in each Relevant Member State) and includes any relevant implementing measure in each Relevant Member State and the expression "2010 PD Amending Directive" means Directive 2010/73/EU.

United Kingdom

This prospectus supplement and the accompanying prospectus are not an approved prospectus for purposes of the UK Prospectus Rules, as implemented under the EU Prospectus Directive (2003/71/EC), and have not been approved under section 21 of the Financial Services and Markets Act 2000 (as amended) (the "FSMA") by a person authorized under FSMA. The financial promotions contained in this prospectus supplement and the accompanying prospectus are only being distributed to, (1) persons who receive this prospectus supplement and the accompanying prospectus are only being distributed to, (1) persons who receive this prospectus supplement and the accompanying prospectus are only being distributed to, (1) persons who receive this prospectus supplement and the accompanying prospectus are only being distributed to, (1) persons who receive this prospectus supplement and the accompanying prospectus outside of the United Kingdom, and (2) persons in the United Kingdom who fall within the exemptions under articles 19 (investment professionals) and 49 (high net worth companies, unincorporated associations, etc.) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (all such persons together being referred to as "Relevant Persons"). This prospectus supplement and the accompanying prospectus relate is available only to Relevant Persons and will be engaged in only with Relevant Persons.

The underwriter has represented, warranted and agreed that:

(a) it has only communicated or caused to be communicated and will only communicate or cause to be communicated any invitation or inducement to engage in investment activity (within the meaning of

section 21 of the FSMA in connection with the issue or sale of any of the shares of common stock in circumstances in which section 21(1) of the FSMA does not apply to the issuer; and

(b) it has complied with and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the shares of common stock in, from or otherwise involving the United Kingdom.

EXPERTS

The consolidated financial statements of Pixelworks, Inc. and its subsidiaries as of December 31, 2014 and 2013, and for each of the years in the threeyear period ended December 31, 2014, and management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2014 have been incorporated by reference herein and in the registration statement in reliance upon the reports of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

LEGAL MATTERS

The validity of the shares of common stock we are offering will be passed upon by the Alto Law Group LLC, Portland, Oregon. Certain legal matters will be passed upon for us by Pillsbury Winthrop Shaw Pittman LLP, Palo Alto, California. The underwriter has been represented in connection with this offering by K&L Gates LLP, Los Angeles, California.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with it into this prospectus supplement and the accompanying prospectus. This means that we can disclose important information about us and our financial condition to you by referring you to another document filed separately with the SEC instead of having to repeat the information in this prospectus supplement. The information incorporated by reference is considered to be part of this prospectus supplement and later information that we file with the SEC will automatically update and supersede this information. This prospectus supplement incorporates by reference the documents listed below that we have previously filed with the SEC:

- our Annual Report on Form 10-K for the year ended December 31, 2014;
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2015 and June 30, 2015;
- our Current Report on Form 8-K filed on May 18, 2015;
- the description of our common stock contained in the Registration Statement on Form 8-A filed with the SEC on April 10, 2000, and any other amendment or report filed for the purpose of updating such description.

We also incorporate by reference all documents that we file with the SEC on or after the date of this prospectus supplement pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act and prior to the sale of all shares of common stock offered hereunder or termination of the offering of our shares of common stock described in this prospectus supplement. Nothing in this prospectus supplement shall be deemed to incorporate information furnished but not filed with the SEC.

Any statement contained in this prospectus supplement or in a document incorporated or deemed to be incorporated by reference in this prospectus supplement shall be deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference modifies or supersedes the statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement.

You may request a copy of the filings incorporated herein by reference, including exhibits to such documents that are specifically incorporated by reference, at no cost, by writing or calling us at the following address or telephone number:

Steven Moore, Corporate Secretary Pixelworks, Inc. 224 Airport Parkway, Suite 400 San Jose, CA 95110 (408) 200-9200

Statements contained in this prospectus supplement as to the contents of any contract or other documents are not necessarily complete, and in each instance you are referred to the copy of the contract or other document filed as an exhibit to the registration statement, each such statement being qualified in all respects by such reference and the exhibits and schedules thereto.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any document we file with the SEC at the SEC's Public Reference Room located at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. Our filings with the SEC are also available to the public at the SEC's website at www.sec.gov. You may also obtain copies of the documents at prescribed rates by writing to the SEC's Public Reference Section at 100 F Street, N.E., Washington, D.C. 20549.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion; Dated August 29, 2014

PROSPECTUS



\$50,000,000

Common Stock

This prospectus relates to shares of Pixelworks, Inc. common stock which may be offered and sold from time to time. The aggregate initial offering price of all common stock sold under this prospectus will not exceed \$50,000,000. The common stock of Pixelworks, Inc. is listed on the NASDAQ Global Market under the symbol "PXLW." On August 26, 2014, the last reported sale price of our common stock on the NASDAQ Global Market was \$6.65 per share.

Each time we sell shares of our common stock hereunder, we will attach a supplement to this prospectus that contains specific information about the terms of the offering, including the price at which we are offering the shares to the public. The prospectus supplement may also add, update or change information contained or incorporated in this prospectus. You should read this prospectus and the applicable prospectus supplement carefully before you invest in shares of our common stock.

The shares of our common stock may be offered directly by us, through agents designated from time to time by us or to or through underwriters or dealers. If any agents, dealers or underwriters are involved in the sale of any of shares of our common stock, their names, and any applicable purchase price, fee, commission or discount arrangement between or among them will be set forth, or will be calculable from the information set forth, in the applicable prospectus supplement. See the section entitled "About This Prospectus" for more information.

Investing in shares of our common stock involves risks. See the section entitled "<u>Risk Factors</u>" beginning on page 2 of this prospectus. You should carefully read and consider these risk factors before you invest in shares of our common stock.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is , 2014.

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ABOUT THIS PROSPECTUS RISK FACTORS FORWARD-LOOKING STATEMENTS THE COMPANY USE OF PROCEEDS DESCRIPTION OF CAPITAL STOCK PLAN OF DISTRIBUTION EXPERTS LEGAL MATTERS WHERE YOU CAN FIND MORE INFORMATION

The distribution of this prospectus may be restricted by law in certain jurisdictions. You should inform yourself about and observe any of these restrictions. If you are in a jurisdiction where offers to sell, or solicitations of offers to purchase, the securities offered by this document are unlawful, or if you are a person to whom it is unlawful to direct these types of activities, then the offer presented in this prospectus does not extend to you.

This prospectus and any accompanying supplement to this prospectus do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered shares of our common stock to which they relate.

We have not authorized anyone to give any information or make any representation about us that is different from, or in addition to, that contained in this prospectus, including in any of the materials that we have incorporated by reference into this prospectus, any accompanying prospectus supplement, and any free writing prospectus prepared or authorized by us. Therefore, if anyone does give you information of this sort, you should not rely on it as authorized by us. You should rely only on the information contained or incorporated by reference in this prospectus and any accompanying prospectus supplement.

You should not assume that the information contained in this prospectus and any accompanying supplement to this prospectus is accurate on any date subsequent to the date set forth on the front of the document or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus and any accompanying supplement to this prospectus is delivered or securities are sold on a later date. Neither the delivery of this prospectus, nor any sale made hereunder, shall under any circumstances create any implication that there has been no change in our affairs since the date hereof or that the information incorporated by reference herein is correct as of any time subsequent to the date of such information.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, using a "shelf" registration process. Under this shelf registration process, we may, from time to time, offer and sell the shares of our common stock described in this prospectus in one or more offerings. The aggregate initial offering price of all the shares of our common stock sold under this prospectus will not exceed \$50,000,000.

This prospectus provides certain general information about the shares of our common stock that we may offer hereunder. Each time we offer shares of our common stock hereunder, we will attach a prospectus supplement to this prospectus. The prospectus supplement will contain the specific information about the terms of the offering. In each prospectus supplement, we will include the following information:

- the number of shares of common stock that we propose to sell;
- the public offering price per share of the common stock;
- the names of any underwriters, agents or dealers through or to which the shares of the common stock will be sold;
- any compensation of those underwriters, agents or dealers;
- any additional risk factors applicable to the shares of our common stock or our business and operations; and
- any other material information about the offering and sale of the shares of common stock.

In addition, the prospectus supplement may also add, update or change the information contained or incorporated in this prospectus. The prospectus supplement will supersede this prospectus to the extent it contains information that is different from, or that conflicts with, the information contained or incorporated in this prospectus. The registration statement we filed with the SEC includes exhibits that provide more detail of the matters discussed in this prospectus. You should read and consider all information contained in this prospectus and the related exhibits filed with the SEC and any accompanying prospectus supplement in making your investment decision. You should also read and consider the information contained in the documents identified under the heading "Where You Can Find More Information" in this prospectus.

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Unless otherwise indicated or the context otherwise requires, the terms "we," "us," "our," the "Company," "Pixelworks" and similar terms refer to Pixelworks, Inc., an Oregon corporation, and its consolidated subsidiaries.

RISK FACTORS

Investing in shares of our common stock involves risk. Before making any investment decision, you should carefully consider the risk factors set forth under the caption "Risk Factors" in the applicable prospectus supplement and under the caption "Risk Factors" in our most recent annual report on Form 10-K and our subsequent quarterly reports on Form 10-Q, which are incorporated by reference in this prospectus, as well as in any applicable prospectus supplement, as updated by our subsequent filings under the Securities Exchange Act of 1934, as amended (the "Exchange Act").

These risks could materially affect our business, results of operation or financial condition and affect the value of our common stock. You could lose all or part of your investment. For more information, see "Where You Can Find More Information."

FORWARD-LOOKING STATEMENTS

Some of the statements contained or incorporated by reference in this prospectus may be "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Exchange Act and may involve material risks, assumptions and uncertainties. Forward-looking statements typically are identified by the use of terms such as "may," "will," "should," "might," "expect," "anticipate," "estimate" and similar words, although some forward-looking statements are expressed differently. These statements are not guarantees of future performance and involve certain risks and uncertainties that are difficult to predict and which may cause actual outcomes and results to differ materially from what is expressed or forecasted in such forward-looking statements. These forward-looking statements speak only as of the date on which they are made and except as required by law, we undertake no obligation to publicly release the results of any revision or update of these forward-looking statements, whether as a result of new information, future events or otherwise. 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.

A detailed discussion of risks and uncertainties that could cause actual results and events to differ materially from our forward-looking statements is included in our periodic reports filed with the SEC and in the "Risk Factors" section of this prospectus. In addition, the following factors, among others, could cause actual results and future events to differ materially from those set forth or contemplated in the forward-looking statements: our ability to deliver new products in a timely fashion; our new product yield rates; changes in estimated product costs; product mix; the growth of the markets we serve; supply of products from third-party foundries; failure or difficulty in achieving design wins; timely customer transition to new product designs; competitive factors, such as rival chip architectures, introduction or traction by competing designs, or pricing pressures; the sufficiency of our working capital and need for, or ability to secure, additional financing; the success of our products in expanded markets; current global economic challenges; our competitive advantages in research and development; levels of inventory at distributors and customers; changes in the digital display and projection markets; insufficient, excess or obsolete inventory and variations in inventory valuation; litigation related to our intellectual property rights; our limited financial resources; economic and political challenges due to operations in Asia; failure to retain or attract qualified employees; the sufficiency of our intellectual property and patent portfolio; fluctuations in foreign currencies; and natural disasters.

THE COMPANY

Pixelworks designs, develops and markets video and pixel processing semiconductors, intellectual property cores, software and custom applicationspecific integrated circuit (ASIC) solutions for high-end digital video applications. Our products allow manufacturers and developers of digital display and projection devices to manufacture screens of all sizes that display the highest video quality with minimum power consumption. Our core video display processing technology intelligently processes video signals from a variety of sources and optimizes the image for the viewer. The continued advancement of display technology and rapid growth of video consumption on digital delivery systems and mobile applications has increased the demand for video display processing technology in recent years. Our products are used in a range of devices from large flat panel displays to small low power mobile applications. Our products are designed to reduce overall system power requirements and reduce costs for our customers by minimizing bandwidth. Our primary target markets include digital projection systems, digital televisions, UltrabookTM devices, tablets, and smartphones.

As of August 29, 2014, we had an intellectual property portfolio of 128 patents related to the visual display of digital image data. We focus our research and development efforts on developing video enhancement solutions for our target markets that increase performance, video quality and device functionality while reducing power consumed. We seek to expand our technology portfolio through internal development and co-development with business partners, and we continually evaluate acquisition opportunities and other ways to leverage our technology into other high-value markets.

We have developed a portfolio of advanced video algorithms and IP to address a broad range of challenges in digital video. We believe our technologies can significantly improve video quality and will become increasingly important as the popularity of video content consumption grows, and pixel densities, screen size and image quality increase. Our products are designed with a flexible architecture that allows us to combine algorithms and functional blocks of digital and mixed signal circuitry. Accordingly, our technologies can be implemented across multiple products, in combinations within single products and can be applied to a broad range of applications including smartphones, tablets, UltrabookTM devices, televisions, monitors and projectors. The majority of our products include one or more technologies to provide optimized high-quality Video Display Processing solutions to our customers, regardless of screen size.

Our product development strategy is to leverage our expertise in Video Display 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 position in the market and provide leading edge solutions for the advanced 3LCD and DLP digital projection markets and to enhance our video processing solutions for advanced flat panel displays and other emerging markets. Additionally, we plan to leverage our research and development investment into products that address high-value markets, such as mobile, where our innovative proprietary technology provides differentiation and system power saving benefits. We deliver our technology in a variety of offerings, which take the form of single-purpose chips, highly integrated system on chips (SoCs) that incorporate specialized software, full solutions incorporating software and other tools and IP cores that allow our technology to be incorporated into third party solutions.

Pixelworks was founded in 1997 and is incorporated under the laws of the state of Oregon. Our executive offices are located at 224 Airport Parkway, Suite 400, San Jose, California 95110, our telephone number is (408) 200-9200 and our website is www.pixelworks.com. Our website, and the information contained therein, is not a part of this prospectus.

USE OF PROCEEDS

Except as may be stated in the applicable prospectus supplement, we intend to use the net proceeds we receive from the sale of the shares of our common stock offered by this prospectus for general corporate purposes, which may include, among other things, increasing our working capital, financing of ongoing operating expenses and overhead, and funding of capital expenditures and research and product development, such as the continued development of solutions for mobile devices and large screen display applications. Pending the application of the net proceeds, we may invest the proceeds in marketable securities and short-term investments.

DESCRIPTION OF CAPITAL STOCK

This section describes the general terms and provisions of the shares of our capital stock. Our amended and restated articles of incorporation and our amended and restated bylaws have been filed as exhibits to our periodic reports filed with the SEC, which are incorporated by reference in this prospectus. You should read our articles of incorporation and our bylaws for additional information before you buy any of our common stock. See "Where You Can Find More Information." Our authorized capital stock consists of 250,000,000 shares of common stock, par value \$0.001, and 50,000,000 shares of preferred stock, par value \$0.001. The preferred stock is undesignated as to series, rights, preferences, privileges or restrictions.

Common Stock

We have one existing class of common stock. Holders of our voting common stock are entitled to one vote per share for each share held of record on all matters submitted to a vote of common shareholders. Holders of common stock do not have cumulative voting rights.

The holders of shares of our common stock are entitled to participate ratably in dividends as may be declared from time to time by our board of directors out of funds legally available for dividend payments. To date, we have never declared a dividend and our board of directors does not have any plans to do so in the future. In the event of our liquidation, dissolution or winding up, after full payment of all debts and other liabilities and liquidation preferences of any other series of common stock and any preferred stock, the holders of shares of our existing common stock are entitled to share ratably in all remaining assets. Our common stock has no preemptive subscription or conversion rights.

Our common stock is listed on the NASDAQ Global Market under the symbol "PXLW."

Broadridge Financial Solutions, Inc. is the Transfer Agent and Registrar for our common stock.

Preferred Stock

Our board of directors is authorized to issue from time to time, without further vote or action by the shareholders, up to an aggregate of 50,000,000 shares of preferred stock in one or more series and to determine or alter the rights, preferences, privileges and restrictions granted to or imposed on any wholly unissued series of preferred stock, including:

- the distinctive designation of each series and the number of shares that will constitute the series;
- the voting rights, if any, of shares of the series and the terms and conditions of the voting rights;
- the dividend rate on the shares of the series, the dates on which dividends are payable, any restriction, limitation or condition upon the payment of dividends, whether dividends will be cumulative, and the dates from and after which dividends shall accumulate;
- the prices at which, and the terms and conditions on which, the shares of the series may be redeemed, if the shares are redeemable;
- the terms and conditions of a sinking or purchase fund for the purchase or redemption of shares of the series, if such a fund is provided;

- any preferential amount payable upon shares of the series in the event of our liquidation, dissolution or winding up, or upon the distribution of any of our assets; and
- the prices or rates of conversion or exchange at which, and the terms and conditions on which, the shares of the series may be converted or exchanged into other securities, if the shares are convertible or exchangeable.

The issuance of preferred stock could decrease the amount of earnings and assets available for distribution to the holders of common stock or adversely affect the rights and powers, including voting rights, of the holders of common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in control of our company, which could depress the market price of our common stock.

The preferred stock is undesignated as to series, rights, preferences, privileges or restrictions. No shares of preferred stock are currently outstanding, however, and we currently have no plans to designate any series of preferred stock or issue any shares of preferred stock. However, we may elect to do so in the future.

Anti-takeover Effects of Oregon Law and Our Articles of Incorporation and Bylaws

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

- our board of directors is currently divided into three classes serving staggered terms, which would make it more difficult for a group of shareholders to quickly replace a majority of directors;
- our board of directors is authorized, without prior shareholder approval, to change the size of the board (our articles of incorporation provide that if
 the board is fixed at seven members or less, the directors shall hold office until the next annual meeting of shareholders and if the board is fixed at
 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 may approve the issuance, without further action by the shareholders, of shares of our preferred stock, and to fix the rights
 and preferences thereof. The issuance of preferred stock with dividend and liquidation rights senior to our common stock or convertible into a
 large number of shares of our common stock could prevent a potential acquiror from gaining effective economic or voting control;
- 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% 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;
- specify that no shareholder is permitted to cumulate votes at any election of directors;
- Oregon law permits our board to consider other factors beyond shareholder value in evaluating any acquisition offer (so-called "expanded constituency" provisions); and;
- a super-majority vote by 67% of our shareholders is required to approve mergers involving us.

See "Where You Can Find More Information" elsewhere in this prospectus for information on where you can obtain copies of our articles of incorporation and bylaws, which have been filed with and are publicly available from the SEC.

PLAN OF DISTRIBUTION

We may sell the shares of common stock offered by this prospectus to one or more underwriters or dealers for public offering and sale by them or to investors directly or through agents. The accompanying prospectus supplement will set forth the terms of the offering and the method of distribution and will identify any firms acting as underwriters, dealers or agents in connection with the offering, including:

- the name or names of any underwriters, dealers or agents;
- the purchase price of the shares and the proceeds to us from the sale;
- any underwriting discounts and other items constituting compensation to underwriters, dealers or agents;
- any public offering price;
- any discounts, commissions or concessions allowed or reallowed or paid to dealers from us, from the purchasers of the shares of common stock or from both us and the purchasers; and
- any securities exchange or market on which the shares offered in the prospectus supplement may be listed.

Only those underwriters identified in such prospectus supplement are deemed to be underwriters in connection with the shares of common stock offered in the prospectus supplement.

The distribution of the shares of common stock may be effected from time to time in one or more transactions at a fixed price or prices, which may be changed, or at prices determined as the applicable prospectus supplement specifies, including at market prices prevailing at the time of sale or at prices related to such prevailing market prices. The shares of common stock may be sold through a rights offering, forward contracts or similar arrangements, and cross or block trades. Additionally, the shares of our common stock may also be sold in "at the market offerings" within the meaning of Rule 415 of the Securities Act, including sales made directly on the NASDAQ Global Market or sales made to or through a market maker or into an existing trading market, on an exchange, or otherwise, in negotiated transactions, at market prices prevailing at the time of sale or at prices related to such prevailing market prices, and/or any other method permitted by law. In connection with the sale of the shares, underwriters, dealers or agents may be deemed to have received compensation from us in the form of underwriting discounts or commissions and also may receive compensation in the form of discounts, concessions or commissions from the underwriters or commissions from the purchasers for whom they may act as agent. Some of the underwriters, dealers or agents who participate in the share distribution may engage in other transactions with, and perform other services for, us or our subsidiaries in the ordinary course of business.

We will provide in the applicable prospectus supplement information regarding any underwriting discounts or other compensation that we pay to underwriters or agents in connection with the securities offering, and any discounts, concessions or commissions which underwriters allow to dealers. Underwriters, dealers and agents participating in the securities distribution may be deemed to be underwriters, and any discounts and commissions they receive and any profit they realize on the resale of the shares may be deemed to be underwriting discounts and commissions under the Securities Act of 1933. Underwriters and their controlling persons, dealers and agents may be entitled, under agreements entered into with us, to indemnification against and contribution toward specific civil liabilities, including liabilities under the Securities Act.

In compliance with the guidelines of the Financial Industry Regulatory Authority, or FINRA, the aggregate maximum discount, commission or agency fees or other items constituting underwriting compensation to be received by any FINRA member or independent broker-dealer will not exceed 8% of the offering proceeds from any offering pursuant to this prospectus and any applicable prospectus supplement.

To comply with the securities laws of certain states, if applicable, the shares of common stock offered by this prospectus will be offered and sold in those states only through registered or licensed brokers or dealers.

Agents, underwriters and dealers may be entitled under agreements entered into with us to indemnification by us against specified liabilities, including liabilities incurred under the Securities Act, or to contribution by us to payments they may be required to make in respect of such liabilities. The prospectus supplement will describe the terms and conditions of such indemnification or contribution. Some of the agents, underwriters or dealers, or their respective affiliates may be customers of, engage in transactions with or perform services for us in the ordinary course of business. We will describe in the prospectus supplement, naming the underwriter, agent or dealer, the nature of any such relationship.

Any person participating in the distribution of common stock registered under the registration statement that includes this prospectus will be subject to the applicable provisions of the Exchange Act, and the applicable SEC rules and regulations, including Regulation M, which may limit the timing of purchases and sales of any shares of our common stock to any such person. Regulation M may also restrict the ability of any person engaged in the distribution of our common stock to engage in market-making activities with respect to our common stock. These restrictions may affect the marketability of our common stock and the ability of any person or entity to engage in market-making activities with respect to our common stock.

The shares may or may not be listed on a national securities exchange. Certain persons participating in the offering may engage in over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M. In addition, in connection with an offering, the underwriters may purchase and sell shares of our common stock in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in an offering. Stabilizing transactions consist of bids or purchases made for the purpose of preventing or retarding a decline in the market price of the common stock while an offering is in progress. The underwriters also may impose a penalty bid. This occurs when a particular underwriter repays to the underwriters in stabilizing or short-covering transactions. These activities by the underwriters may stabilize, maintain or otherwise affect the market price of our common stock. As a result, the price of our common stock may be higher than the price that otherwise might exist in the open market. If these activities are commenced, they may be discontinued by the underwriters at any time.

EXPERTS

The consolidated financial statements of Pixelworks, Inc. and subsidiaries as of December 31, 2013 and 2012, and for each of the years in the three-year period ended December 31, 2013, and management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2013, have been incorporated by reference herein and in the registration statement in reliance upon the reports of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

LEGAL MATTERS

The validity of the shares of common stock offered by this prospectus will be passed upon for us by Alto Law Group LLC, Portland, Oregon.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus is part of a registration statement on Form S-3 that we filed with the SEC registering the shares of common stock that may be offered and sold hereunder. The registration statement, including exhibits thereto, contains additional relevant information about us and these shares of common stock that, as permitted by the rules and regulations of the SEC, we have not included in this prospectus. A copy of the registration statement can be obtained at the address set forth below or at the SEC's website as noted below. You should read the registration statement, including any applicable prospectus supplement, for further information about us and these shares of common stock.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any document we file with the SEC at the SEC's Public Reference Room located at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains a website that contains reports, proxy statements, information statements and other information about issuers, like Pixelworks, Inc., that file electronically with the SEC. The address of that website is www.sec.gov. The website, and, except as expressly incorporated herein, the information contained therein, is not a part of this prospectus, and any references to this web site or any other web site are inactive textual references only. You may also obtain copies of the documents at prescribed rates by writing to the SEC's Public Reference Section at 100 F Street, N.E., Washington, D.C. 20549.

The SEC allows us to "incorporate by reference" the information we file with them into this prospectus. This means that we can disclose important information about us and our financial condition to you by referring you to another document filed separately with the SEC instead of having to repeat the information in this prospectus. The information incorporated by reference is considered to be part of this prospectus and later information that we file with the SEC will automatically update and supersede this information. This prospectus incorporates by reference any future filings made with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Securities Exchange Act, between the date of the initial registration statement and prior to effectiveness of the registration statement and the documents listed below that we have previously filed with the SEC:

- our Annual Report on Form 10-K for the year ended December 31, 2013;
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2014 and June 30, 2014;
- our Current Reports on Form 8-K filed on March 5, 2014, March 7, 2014, April 4, 2014, May 20, 2014 and May 23, 2014;
- the portions of our Definitive Proxy Statement on Schedule 14A filed on April 17, 2014 that were incorporated by reference in our Annual Report on Form 10-K for the year ended December 31, 2013 indicated therein; and
- the description of our common stock contained in the Registration Statement on Form 8-A filed with the SEC on April 10, 2000, and any other amendment or report filed for the purpose of updating such description.

We also incorporate by reference all additional documents that we file with the SEC under the terms of Section 13(a), 13(c), 14 or 15(d) of the Exchange Act that are made after the initial filing date of the registration statement of which this prospectus is a part and the effectiveness of the registration statement, as well as between the date of this prospectus and the termination of any offering of securities offered by this prospectus. We are not, however, incorporating, in each case, any documents or information that we are deemed to furnish and not file in accordance with SEC rules.

Any statement contained in this prospectus or in a document incorporated or deemed to be incorporated by reference in this prospectus shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained herein or in the applicable prospectus supplement or in any other subsequently filed document which also is or is deemed to be incorporated by reference modifies or supersedes the statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

You may request a copy of any or all of the documents incorporated by reference but not delivered with this prospectus, at no cost, by writing or telephoning us at the following address and telephone number:

Steven Moore, Corporate Secretary Pixelworks, Inc. 224 Airport Parkway, Suite 400 San Jose, CA 95110 (408) 200-9200

We will not, however, send exhibits to those documents, unless the exhibits are specifically incorporated by reference in those documents.

Statements contained in this prospectus as to the contents of any contract or other documents are not necessarily complete, and in each instance you are referred to the copy of the contract or other document filed as an exhibit to the registration statement, each such statement being qualified in all respects by such reference and the exhibits and schedules thereto.