UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-3 REGISTRATION STATEMENT

UNDER
THE SECURITIES ACT OF 1933

PIXELWORKS, INC.

(Exact name of Registrant as specified in its charter)

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

224 Airport Parkway, Suite 400
San Jose, California 95110
(408) 200-9200
(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Bruce A. Walicek
President and Chief Executive Officer
Pixelworks, Inc.
224 Airport Parkway, Suite 400
San Jose, California 95110
(408) 200-9200

(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

Copies to:

Jorge del Calvo, Esq. Davina K. Kaile, Esq. Pillsbury Winthrop Shaw Pittman LLP 2550 Hanover St. Palo Alto, California 94304 (650) 233-4500

Approximate date of commencement of proposed sale to the public: From time to time after this Registration Statement becomes effective.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. \Box

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, please check the following box.

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement from the same offering. \Box

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing

with the Commission p	ursuant to Rule 462(e) under the Securities Act, check the following box.			
	ost-effective amendment to a registration statement filed pursuant to Gencurities pursuant to Rule 413(b) under the Securities Act, check the follow		ditional securities	or
2	c mark whether the registrant is a large accelerated filer, an accelerated file large accelerated filer," "accelerated filer" and "smaller reporting compan		1 0 1	y.
Large accelerated filer		Accelerated	filer	
Non-accelerated filer	☐ (Do not check if a smaller reporting company)	Smaller repo	orting company	X
	CALCULATION OF REGISTRATION	FEE		
	Title of Securities To Be Registered	Proposed Maximum Aggregate Offering Price (1)	Amount Of Registration Fo	-
Common Stock, \$0.001	par value per share	\$50,000,000	\$6,440	
initial offering pr	egistered under this Registration Statement an indeterminate number of slice not to exceed \$50,000,000. ant to Rule 457(o) under the Securities Act.	nares of common stock of the Registra	nt with an aggrega	ate
shall file a further ame of the Securities Act of	nereby amends this Registration Statement on such date or dates as may endment which specifically states that this Registration Statement shall 1933, as amended, or until the Registration Statement shall become effursuant to said Section 8(a), may determine.	thereafter become effective in accor	dance with Section	

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 "Risk Factors" 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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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.

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, including the expected transitions to new technologies; changes in customer ordering patterns or lead times; seasonality in the consumer electronics market; insufficient, excess or obsolete inventory and variations in inventory valuation; litigation related to our intellectual property rights; our limited financial resources; economic and political challenges due to operations in Asia; failure to retain or attract qualified employees; 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 application-specific 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 a portion of the underwriting discount received by it because the underwriters have repurchased common stock sold by or for the account of that underwriter 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.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth all expenses payable by us in connection with the offering of our common stock being registered hereby.

SEC Registration Fee	\$ 6,440
NASDAQ Listing Fee	*
Printing Expenses	\$ 5,000*
Legal Fees and Expenses	\$30,000*
Accounting Fees and Expenses	\$10,000*
Miscellaneous	<u>\$ 3,560</u> *
Total	\$55,000

^{*} Except for the SEC registration fee to be paid upon filing of this registration statement, the expenses set forth above are estimates only or cannot be estimated, and such amounts will depend on the amount of securities offered, the number of issuances and the nature of the offerings. The expenses set forth above also do not include the expense of preparing prospectus supplements and other expenses relating to offerings of common stock.

Item 15. Indemnification of Directors and Officers

As an Oregon corporation the Company is subject to the Oregon Business Corporation Act (the "OBCA") and the exculpation from liability and indemnification provisions contained therein. Pursuant to Section 60.047(2) of the OBCA, Article V of the Company's Sixth Amended and Restated Articles of Incorporation, as amended, eliminates the liability of the Company's directors to the Company or its shareholders, except for any liability related to breach of the duty of loyalty, actions not in good faith and certain other liabilities.

Section 60.387 et seq. of the OBCA allows corporations to indemnify their directors and officers against liability where the director or officer has acted in good faith and with a reasonable belief that actions taken were in the best interests of the corporation or at least not adverse to the corporation's best interests and, if in a criminal proceeding, the individual had no reasonable cause to believe the conduct in question was unlawful. Under the OBCA, corporations may not indemnify against liability in connection with a claim by or in the right of the corporation but may indemnify against the reasonable expenses associated with such claims. Corporations may not indemnify against breaches of the duty of loyalty. The OBCA mandates indemnifications against all reasonable expenses incurred in the successful defense of any claim made or threatened whether or not such claim was by or in the right of the corporation. Finally, a court may order indemnification if it determines that the director or officer is fairly and reasonably entitled to indemnification in view of all the relevant circumstances, whether or not the director or officer met the good faith and reasonable belief standards of conduct set forth in the statute.

The OBCA also provides that the statutory indemnification provisions are not deemed exclusive of any other rights to which directors or officers may be entitled under a corporation's articles of incorporation or bylaws, any agreement, general or specific action of the board of directors, vote of shareholders or otherwise.

Additionally, we have entered into indemnity agreements with certain of our officers and directors. The indemnity agreements require us to, among other things, indemnify the officer or director against all expenses incurred by such officer or director as a result of being named or threatened to be named as a party to any proceeding as a result of such officer or director's service in such capacity, provided that such officer or director acted in good faith and in a manner reasonably believed to be in or not opposed to the best interests of the Company, and in the case of a criminal proceeding, that such officer or director had no reasonable cause to believe that his or her conduct was unlawful. The indemnity agreements also require us to indemnify the officer or director to the fullest extent permitted by law, provided that no indemnification will be provided if such officer or director's conduct constitutes a breach of the duty of loyalty to the Company or is an act or omission not in good faith or involves intentional misconduct or a knowing violation of the law.

Item 16. Exhibits and Financial Schedule

Exhibit Number	Description
1.1*	Form of Underwriting Agreement
4.1	Sixth Amended and Restated Articles of Incorporation of Pixelworks, Inc., As Amended (incorporated by reference to Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q filed on August 9, 2004).
4.2	Third Amendment to Sixth Amended and Restated Articles of Incorporation of Pixelworks, Inc. (incorporated by reference to Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q filed on August 11, 2008).
4.3	Second Amended and Restated Bylaws of Pixelworks, Inc. (incorporated by reference to Exhibit 3.3 to the Company's Annual Report on Form 10-K filed on March 10, 2010).
4.4	Form of Common Stock Certificate (incorporated by reference to Exhibit 4.4 to the Company's Registration Statement on Form S-3 filed on November 22, 2010).
5.1	Opinion of Alto Law Group LLC.
23.1	Consent of KPMG LLP, Independent Registered Public Accounting Firm.
23.2	Consent of Alto Law Group LLC (included in legal opinion filed as Exhibit 5.1).
24.1	Powers of Attorney (included on signature pages of this registration statement).

^{*} To be filed by amendment hereto or pursuant to Section 13 or 14(d) of the Securities Exchange Act of 1934, if applicable, and incorporated herein by reference.

Item 17. Undertakings

- (a) The undersigned registrant hereby undertakes:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

Provided, however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
 - (4) That, for purposes of determining liability under the Securities Act of 1933 to any purchaser:
- (i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
- (ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5) or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.
- (5) That, for purposes of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be sellers to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424:
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or their securities provided by or on behalf of the undersigned registrant; and
 - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the undersigned registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions described in Item 15, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant, Pixelworks, Inc., certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3, and has duly caused this registration statement to be signed on their behalf by the undersigned, thereunto duly authorized, in the City of San Jose, State of California on August 29, 2014.

PIXELWORKS, INC.	
By:	/s/ Bruce A. Walicek
	Bruce A. Walicek
	President and Chief Executive Officer
	(Principal Executive Officer)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below does hereby constitute and appoint Bruce A. Walicek and Steven L. Moore, and each of them, with full power of substitution and full power to act without the other, his or her true and lawful attorney-in-fact and agent to act for him or her in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement and any subsequent registration statement the Registrant may hereafter file with the Securities and Exchange Commission pursuant to Rule 462 under the Securities Act to register additional securities in connection with this registration statement, and to file this registration statement, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in order to effectuate the same as fully, to all intents and purposes, as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed below by the following persons in the capacities indicated below and on the dates indicated.

/s/ Bruce A. Walicek Bruce A. Walicek	President, Chief Executive Officer (Principal Executive Officer), and Director	August 29, 2014
/s/ Steven L. Moore Steven L. Moore	Vice President, Chief Financial Officer, Secretary and Treasurer (Principal Financial Officer and Principal Accounting Officer)	August 29, 2014
/s/ Richard L. Sanquini Richard L. Sanquini	_ Chairman of the Board	August 29, 2014
/s/ Mark A. Christensen Mark A. Christensen	Director	August 29, 2014
/s/ Barry L. Cox Barry L. Cox	Director	August 29, 2014
/s/ Stephen L. Domenik Stephen L. Domenik	Director	August 29, 2014
/s/ C. Scott Gibson C. Scott Gibson	Director	August 29, 2014
/s/ Daniel J. Heneghan Daniel J. Heneghan	Director	August 29, 2014
/s/ David J. Tupman David J. Tupman	_ Director	August 29, 2014

EXHIBIT INDEX

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^{*} To be filed by amendment hereto or pursuant to Section 13 or 14(d) of the Securities Exchange Act of 1934, if applicable, and incorporated herein by reference.



August 29, 2014

Board of Directors Pixelworks, Inc. 224 Airport Parkway, Suite 400 San Jose, CA 95110

RE: Registration Statement on Form S-3

Gentlemen:

We have acted as special counsel for Pixelworks, Inc. (the "Company") in connection with the Company's filing of a Registration Statement on Form S-3 (as amended or supplemented, the "Registration Statement") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), relating to the registration of up to \$50,000,000 of common stock, par value \$0.001 per share ("Common Stock"). The Common Stock may be issued in an unspecified number. The Registration Statement provides that the Securities may be offered separately or together, in amounts, at prices and on terms to be set forth in one or more prospectus supplements (each a "Prospectus Supplement") to the prospectus contained in the Registration Statement.

In connection with this opinion, we have examined originals, or copies certified or otherwise identified to our satisfaction, of such documents, corporate records, certificates, including certificates of public officials and officers of the Company, and other instruments as we have deemed necessary or advisable for purposes of rendering this opinion. As to issues of fact, we have relied, without independent investigation, upon the above documents, certificates and statements.

We have assumed the genuineness of all signatures and the capacity of the persons so signing (other than signatures by or on behalf of the Company), the authenticity of all documents submitted to us as originals, the conformity to the original documents of all copies submitted to us as certified or photostatic copies, and the authenticity of the originals of such latter documents. Nothing contained herein shall be deemed as an admission that we are "experts" within the meaning of Section 11 of the Securities Act.

For purposes of the opinions expressed below, without limiting any other exceptions or qualifications set forth herein, we have assumed that, after the issuance of the Common Stock offered pursuant to the Registration Statement, the total number of issued shares of Common Stock, together with the total number of shares of Common Stock and all shares of Common Stock reserved for issuance upon the exercise, exchange, conversion or settlement, as the case may be, of any exercisable, exchangeable or convertible security, as the case may be, then outstanding, will not exceed the total number of authorized shares of Common Stock, under the Company's articles of incorporation, as amended and then in effect (the "Articles").

August 29, 2014 Page **2** of **2**

Based upon the foregoing, and subject to the additional qualifications set forth below, it is our opinion that:

With respect to the shares of Common Stock offered by the Company, when (i) the Registration Statement (including all necessary post-effective amendments) has become effective under the Securities Act; (ii) an appropriate prospectus supplement or term sheet with respect to the Common Stock has been prepared, delivered and filed in compliance with the Securities Act and the applicable rules and regulations thereunder; (iii) if the Common Stock is to be sold pursuant to a firm commitment underwritten offering, the underwriting agreement with respect to the Common Stock has been duly authorized, executed and delivered by the Company and the other parties thereto; (iv) the Board of Directors of the Company, including any appropriate committee appointed thereby, and appropriate officers of the Company have taken all necessary corporate action to approve the issuance of the Common Stock and related matters; and (v) shares are delivered upon payment of the agreed upon consideration therefor, the shares of Common Stock when issued and sold in accordance with the applicable underwriting agreement, if any, or any other duly authorized, executed and delivered valid and binding purchase or agency agreement, will be duly authorized, validly issued, fully paid and non-assessable, provided that the consideration therefore is not less than \$0.001 per share of Common Stock.

We are members of the Bar of the State of Oregon and our opinions expressed herein are limited to the laws of the State of Oregon and the federal laws of the United States, and we do not express any opinion herein concerning the laws of any other jurisdiction.

We do not assume any responsibility for the accuracy, completeness or fairness of the statements contained in the Registration Statement or Prospectus.

Neither this opinion nor any extract of this opinion or reference to this opinion may be furnished to, quoted from or relied upon by any other person, firm, or corporation without our express written permission. This opinion is provided to you as a legal opinion only, and not as a guaranty or warranty of the matters expressed herein. No opinions may be inferred or implied beyond the matters expressly stated herein. No qualification limitation or exception contained herein shall be construed in any way to limit the scope of the other qualifications, limitations and exceptions. We expressly disclaim any obligation to advise you of any developments in areas covered by this opinion that occur after the date of this opinion. We hereby consent to the filing of this opinion as an exhibit to the above-mentioned Registration Statement.

Very truly yours,

/s/ Alto Law Group

Alto Law Group LLC

Consent of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders Pixelworks, Inc.:

We consent to the use of our reports with respect to the consolidated financial statements and the effectiveness of internal control over financial reporting incorporated by reference herein and to the reference to our firm under the heading "Experts" in the prospectus.

/s/ KPMG LLP

Portland, Oregon August 29, 2014