Filed Pursuant to Rule 424(b)(5) Registration No. 333-249934

PROSPECTUS SUPPLEMENT (To prospectus dated November 16, 2020)

\$20,116,986



Pixelworks, Inc. Common Stock

On June 5, 2020, we entered into a sales agreement with Cowen and Company, LLC, or Cowen, relating to the sale of shares of our common stock offered by this prospectus supplement and the accompanying prospectus. In accordance with the terms of the sales agreement, under this prospectus supplement we may offer and sell shares of our common stock, par value \$0.001 per share, having an aggregate offering price of up to \$20,116,986 from time to time through Cowen, acting as our agent. In accordance with the terms of the sales agreement, we previously sold shares of our common stock, par value \$0.001 per share, with an aggregate offering price of \$4,883,014 pursuant to a prospectus supplement filed with the Securities and Exchange Commission on June 5, 2020 (File No. 333-221238).

Our common stock is traded on the Nasdaq Global Market under the symbol "PXLW." On September 2, 2021, the last reported sale price of our common stock was \$6.66 per share.

Sales of our common stock, if any, under this prospectus supplement and the accompanying prospectus will be made by any method permitted that is deemed an "at the market offering" as defined in Rule 415(a)(4) under the Securities Act of 1933, as amended, or the Securities Act, including sales made directly on or through the Nasdaq Global Market or any other existing trading market for our common stock. Cowen is not required to sell any specific amount, but will act as our sales agent using commercially reasonable efforts consistent with its normal trading and sales practices on mutually agreed terms between Cowen and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

The aggregate compensation payable to Cowen as sales agent equals 3.0% of the gross proceeds of the shares of our common stock sold through it pursuant to the sales agreement. See "Plan of Distribution" beginning on page S-17 for additional information regarding the compensation to be paid to Cowen. In connection with the sale of the common stock on our behalf, Cowen will be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of Cowen will be deemed to be underwriting commissions or discounts.

Investing in our common stock involves a high degree of risk. You should carefully review the risks and uncertainties referenced under the heading "Risk Factors" beginning on page S-8 of this prospectus supplement and in the accompanying prospectus and the documents that are incorporated by reference herein and therein.

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.

Cowen

September 3, 2021

TABLE OF CONTENTS

Prospectus Supplement	Page
About This Prospectus Supplement	S-1
Prospectus Supplement Summary	S-3
The Offering	S-7
Risk Factors	S-8
<u>Forward-Looking Statements</u>	S-13
<u>Use of Proceeds</u>	S-15
<u>Dilution</u>	S-16
<u>Plan of Distribution</u>	S-17
<u>Legal Matters</u>	S-19
<u>Experts</u>	S-19
Where You Can Find More Information	S-19
<u>Incorporation of Information by Reference</u>	S-19
Prospectus	Page
About This Prospectus	1
Risk Factors	2
Forward-Looking Statements	2
The Company	3
Use of Proceeds	4
Description of Capital Stock	4
Plan of Distribution	6
Experts	7
Legal Matters	7
Where You Can Find More Information	7

ABOUT THIS PROSPECTUS SUPPLEMENT

This document is part of a registration statement that was filed with the Securities and Exchange Commission, or the SEC, using a "shelf" registration process and consists of two parts. The first part is this prospectus supplement, which describes the specific terms of this offering and also supplements and updates information contained in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The second part is the accompanying prospectus, which provides more general information, some of which may not apply to this offering. This prospectus supplement may add, update or change information contained in the accompanying prospectus. If the information contained in this prospectus supplement differs or varies from, or is inconsistent with, the information contained in the accompanying prospectus, or the information contained in any document incorporated by reference that was filed with the SEC before the date of this prospectus supplement, you should rely on the information set forth in this prospectus supplement.

You should rely only on the information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus. We have not, and Cowen has not, authorized anyone else to provide you with information that is in addition to or different from that contained or incorporated by reference in this prospectus supplement and the accompanying prospectus, along with the information contained in any permitted free writing prospectuses we have authorized for use in connection with this offering. We and Cowen take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may provide.

The information contained in this prospectus supplement and the accompanying prospectus is accurate only as of the date of this prospectus supplement or the date of the accompanying prospectus, and the information in the documents incorporated by reference in this prospectus supplement and the accompanying prospectus is accurate only as of the date of those respective documents, regardless of the time of delivery of this prospectus supplement and the accompanying prospectus or of any sale of our common stock. Our business, financial condition, results of operations and prospects may have changed since those dates. It is important for you to read and consider all information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus in making your investment decision. You should read both this prospectus supplement and the accompanying prospectus and the additional information described under "Where You Can Find More Information" in this prospectus supplement and in the accompanying prospectus before investing in our common stock.

We further note that the representations, warranties, and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in this prospectus supplement and the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties, and covenants should not be relied on as accurately representing the current state of our affairs.

We use various trademarks and trade names in our business, including without limitation our corporate name and logo. All other trademarks or trade names referred to in this prospectus supplement and the accompanying prospectus and the documents incorporated by reference herein or therein are the property of their respective owners. Solely for convenience, the trademarks and trade names in this prospectus supplement and the accompanying prospectus and the documents incorporated by reference herein or therein may be referred to without the [®] and TM symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto.

You should not consider this prospectus supplement or the accompanying prospectus to be an offer or solicitation relating to the securities in any jurisdiction in which such an offer or solicitation relating to the securities is not authorized. Persons outside the United States who come into possession of this prospectus supplement and the accompanying prospectus must inform themselves about, and observe any restrictions relating to, the offering of the securities and the distribution of this prospectus supplement and the accompanying prospectus outside the United States. This prospectus supplement and the accompanying prospectus do not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement or the accompanying prospectus supplement by any person in any jurisdiction if the person making the offer or solicitation is not qualified to do so, or if it is unlawful for you to receive such an offer or solicitation.

Unless otherwise indicated, information contained in or incorporated by reference into this prospectus supplement and the accompanying prospectus concerning our business and the industry and markets in which we operate, including with respect to our business prospects, our market position and opportunity, and the competitive landscape, is based on information from our management's estimates, as well as from industry publications, surveys and studies conducted by third parties. Our management's estimates are derived from publicly available information, their knowledge of our business and industry, and assumptions based on such information and knowledge, which they believe to be reasonable. In addition, while we believe that information contained in the industry publications, surveys and studies has been obtained from reliable sources, we have not independently verified any of the data contained in these third-party sources, and the accuracy and completeness of the information contained in these sources is not guaranteed. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained this industry, business, market, and other data from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical, and general publications, government data and similar sources.

Unless otherwise indicated or the context otherwise requires, references in this prospectus supplement and the accompanying prospectus to "Pixelworks," "company," "we," "us" and "our" refer to Pixelworks, Inc. and its subsidiaries.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information about us and this offering. Because it is a summary, it does not contain all of the information that you should consider before investing. Before investing in our common stock, you should read this entire prospectus supplement and the accompanying prospectus carefully, including the "Risk Factors," and the financial statements and accompanying notes and other information incorporated by reference in this prospectus supplement and the accompanying prospectus.

Overview

Pixelworks is a leading provider of high-performance and power-efficient visual processing solutions that bridge the gap between video content formats and rapidly advancing display capabilities. We develop and market semiconductor and software solutions that enable consistently high-quality, authentic viewing experiences in a wide variety of applications from cinema to smartphones. Our primary target markets include Mobile (smartphone, gaming and tablet), Home Entertainment (TV, personal video recorder ("PVR"), over-the-air ("OTA") and projector), Content (creation, remastering and delivery), and Business & Education (projector).

We were one of the first companies to commercially launch a video System on Chip ("SoC") capable of deinterlacing 1080i HDTV signals and one of the first companies with a commercial dual-channel 1080i deinterlacer integrated circuit. Our Topaz product line was one of the industry's first single-chip SoC for digital projection. We first introduced our motion estimation / motion compensation technology ("MEMC") for TVs and in recent years introduced a mobile-optimized MEMC solution for smartphones, one of several unique features in our mobile-optimized X5 visual processor. In 2019, we introduced our Hollywood award-winning TrueCut® video platform, the industry's first motion grading technology that allows fine tuning of motion appearance in cinematic content for a wide range of frame rates, shutter angles and display types.

Our solutions enable worldwide manufacturers to offer leading-edge consumer electronics and professional display products, as well as video delivery and streaming solutions for content service providers. Our core visual display processing technology intelligently processes digital images and video from a variety of sources and optimizes the content for a superior viewing experience. Our video coding technology reduces storage requirements, significantly reduces bandwidth constraint issues and converts content between multiple formats to enable seamless delivery of video, including OTA streaming, while also maintaining end-to-end content security.

Rapid growth in video and gaming consumption, combined with the move towards high frame rate /refresh rate displays, especially in mobile, is increasing the demand for our visual processing and video delivery solutions. Our technologies can be applied to a wide range of devices from large-screen projectors to cinematic big screens, low-power mobile tablets, smartphones, high-quality video infrastructure equipment and streaming devices. Our products are architected and optimized for power, cost, bandwidth, and overall system performance, according to the requirements of the specific application. On occasion, we have also licensed our technology.

We have engaged in a strategic plan to re-align our mobile, projector, and video delivery businesses to improve their focus on the Asia-centered customers and employee stakeholders of those businesses. The global center of the mobile, projector, and video delivery businesses continues to be in Asia, and the steps we have taken to date and intend to take going forward are intended to improve our ability to access capital, customers, and talent. We have operated our primary R&D center in Asia for over 15 years and feel that the time is right to take advantage of that existing footprint and develop our subsidiary, Pixelworks Semiconductor Technology (Shanghai) Co., Ltd. (or "PWSH"), as a full profit-and-loss center underneath Pixelworks, Inc. for the mobile, projector, and video delivery businesses. Most of these steps have been completed or will be completed before the end of 2021.

This plan will further enable PWSH to seek qualification to file an application for an initial public offering on the Shanghai Stock Exchange's Sci-Tech innovAtion boaRd, known as the STAR Market (the "Listing"). We believe that the Listing will have many benefits, including improved access to new capital markets and the funding of our growth worldwide. We presently intend to qualify PWSH to apply for the Listing so that the Listing is consummated in the first half of 2023. The process of going public on the STAR Market includes several periods of review and, therefore, is a lengthy process. There is no guarantee that PWSH will be approved for a Listing at any point in the future.

As of June 30, 2021, we had an intellectual property portfolio of 335 patents related to the visual display of digital image data. We focus our research and development efforts on developing video algorithms that improve quality, and architectures that reduce system power, cost, bandwidth and increase overall system performance and device functionality. 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 product development strategy is to leverage our expertise in video display processing to address the evolving needs of our target markets. We plan to continue to focus our development resources to maintain our position in these markets by providing leading edge solutions for the advanced digital projection and video delivery markets and to enhance our video processing solutions for mobile markets. 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.

We generated revenue of \$14.1 million and \$23.3 million, and gross profit margin of 51% and 47% in the three months ended June 30, 2021 and six months ended June 30, 2021, respectively. We incurred a net loss of \$4.4 million and \$12.5 million in the three months ended June 30, 2021 and the six months ended June 30, 2021, respectively. We sell our products worldwide through a direct sales force, distributors and manufacturers' representatives. We sell to distributors in China, Europe, Japan, Korea, Southeast Asia, Taiwan and the United States. Significant portions of our products are sold overseas. Sales outside the United States accounted for approximately 97% and 95%, of revenue for the three months ended June 30, 2021 and the six months ended June 30, 2021, respectively. Revenue attributable to our top five end customers together represented 79% and 76% of revenue in the three months ended June 30, 2021 and the six months ended June 30, 2021, respectively. End customers include customers who purchase directly from us as well as customers who purchase products indirectly through distributors.

Risk Factor Summary

Our business is subject to varying degrees of risk and uncertainty. Investors should consider the risks and uncertainties summarized below, as well as the risks and uncertainties discussed in the "Risk Factors" section of this prospectus supplement. Investors should also refer to the other information contained or incorporated by reference in this prospectus supplement, including our consolidated financial statements and related notes, and our other filings made from time to time with the Securities and Exchange Commission. Our business operations could also be affected by factors that we currently consider to be immaterial or that are unknown to us at the present time. If any of these risks occur, our business, financial condition, and results of operations could be materially and adversely affected, and the trading price of our common stock could decline.

Our business is subject to the following principal risks and uncertainties:

- The ongoing effects of the COVID-19 pandemic could disrupt our business or the business of our customers or suppliers, and as such, may adversely affect our financial condition.
- The continued uncertain global economic environment and volatility in global credit and financial markets could materially and adversely affect our business and results of operations.

- If we fail to meet the evolving needs of our markets, identify new products, services or technologies, or successfully compete in our target markets, our revenue and financial results will be adversely impacted.
- Our product strategy may not address the demands of our target customers and may not lead to increased revenue in a timely manner or at all, which could materially adversely affect our results of operations and limit our ability to grow.
- Achieving design wins involves lengthy competitive selection processes that require us to incur significant expenditures prior to
 generating any revenue or without any guarantee of any revenue related to this business. If we fail to generate revenue after incurring
 substantial expenses to develop our products, our business and operating results would suffer.
- If we fail to retain or attract the specialized technical and management personnel required to successfully operate our business, it could harm our business and may result in lost sales and diversion of management resources.
- We have significantly fewer financial resources than most of our competitors, which limits our ability to implement new products or enhancements to our current products, which in turn could adversely affect our future sales and financial condition.
- If we are not profitable in the future, we may be unable to continue our operations.
- A significant amount of our revenue comes from a limited number of customers and distributors, exposing us to increased credit risk and subjecting our cash flow to the risk that any of our customers or distributors could decrease or cancel its orders.
- We generally do not have long-term purchase commitments from our customers and if our customers cancel or change their purchase commitments, our revenue and operating results could suffer.
- Our revenue and operating results can fluctuate from period to period, which could cause our share price to decline.
- If we are unable to generate sufficient cash from operations and are forced to seek additional financing alternatives our working capital may be adversely affected and our shareholders may experience dilution or our operations may be impaired.
- We license our intellectual property, which exposes us to risks of infringement or misappropriation, and may cause fluctuations in our operating results.
- We face a number of risks as a result of the concentration of our operations and customers in Asia.
- Our operations in Asia expose us to heightened risks due to natural disasters.
- We face additional risks associated with our operations in China and our results of operations and financial position may be harmed by changes in China's political, economic or social conditions or changes in U.S.-China relations.
- Our international operations expose us to risks resulting from the fluctuations of foreign currencies.

- If we are unable to maintain effective disclosure controls and internal controls over financial reporting, investors may lose confidence in the accuracy and completeness of our financial reports, and the market price of our common stock may be materially and adversely affected
- Our dependence on selling to distributors and integrators increases the complexity of managing our supply chain and may result in
 excess inventory or inventory shortages.
- We may be unable to successfully manage any future growth, including the integration of any acquisition or equity investment, which could disrupt our business and severely harm our financial condition.
- Continued compliance with regulatory and accounting requirements will be challenging and will require significant resources.
- Regulations related to conflict minerals may adversely impact our business.
- Dependence on a limited number of sole-source, third-party manufacturers for our products exposes us to possible shortages based on low manufacturing yield, errors in manufacturing, uncontrollable lead-times for manufacturing, capacity allocation, price increases with little notice, volatile inventory levels and delays in product delivery, any of which could result in delays in satisfying customer demand, increased costs and loss of revenue.

Corporate Information

We were incorporated in Oregon in 1997. Our principal executive offices are located at 16760 SW Upper Boones Ferry Road, Suite 101, Portland, Oregon 97224, and our telephone number is (503) 601-4545. Our website address is www.pixelworks.com. We do not incorporate the information on, or accessible through, our website into this prospectus supplement and the accompanying prospectus, and you should not consider any information on, or accessible through, our website as part of this prospectus supplement and the accompanying prospectus.

THE OFFERING

Common stock offered by us Shares of our common stock having an aggregate offering price of up to \$20,116,986.

Common stock outstanding after this offering

Up to 3,020,568 shares, assuming sales at a price of \$6.66 per share, which was the closing price of our common stock on the Nasdaq Global Market on September 2, 2021. The actual

number of shares issued will vary depending on the sales price under this offering.

Manner of offering "At the market offering" that may be made from time to time on the Nasdaq Global Market or other existing trading market for our common stock through our agent, Cowen. See the

section entitled "Plan of Distribution" on page S-17 of this prospectus supplement.

Use of proceeds We currently intend to use the net proceeds from this offering for working capital and other

general corporate purposes. We may also use a portion of the net proceeds from this offering to acquire or invest in complementary businesses, assets or technologies, although we have no present commitments or agreements to do so. See "Use of Proceeds" on

page S-15 of this prospectus supplement.

Risk factors Investing in our common stock involves significant risks. See "Risk Factors" on page S-8

of this prospectus supplement and under similar headings in the documents incorporated by reference into this prospectus supplement and the accompanying prospectus for a discussion of the factors you should carefully consider before deciding to invest in our

common stock.

Nasdaq Global Market symbol "PXLW"

The number of shares of common stock to be outstanding immediately after this offering is based on 52,352,564 shares outstanding as of June 30, 2021, which excludes:

- 104,753 shares of common stock issuable upon the exercise of outstanding stock options as of June 30, 2021, with a weighted-average exercise price of \$3.44 per share;
- 3,330,627 unvested restricted stock units ("RSUs") as of June 30, 2021;
- 2,859,737 shares of common stock reserved for future issuance under our 2006 Stock Incentive Plan (the "2006 Plan"); and
- 1,847,756 shares of common stock reserved for future issuance under our 2010 Employee Stock Purchase Plan (the "ESPP").

Unless otherwise indicated, all information contained in this prospectus supplement assumes no exercise of the outstanding options or vesting of the RSUs described above.

RISK FACTORS

Investing in our common stock involves a high degree of risk. Before making an investment decision, you should carefully consider the risks described below and in our most recent Annual Report on Form 10-K and subsequent Quarterly Reports on Form 10-Q or Current Reports on Form 8-K, as well as any amendments thereto reflected in subsequent filings, each of which are incorporated by reference in this prospectus supplement and the accompanying prospectus, and all of the other information in this prospectus supplement and the accompanying prospectus, including our financial statements and related notes incorporated by reference in this prospectus supplement and the accompanying prospectus. If any of these risks is realized, our business, financial condition, results of operations and prospects could be materially and adversely affected. In that event, the trading price of our common stock could decline and you could lose part or all of your investment. Additional risks and uncertainties that are not yet identified or that we think are immaterial may also materially harm our business, operating results and financial condition and could result in a complete loss of your investment.

Risks Related to our Common Stock and this Offering

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

Our stock price and the stock prices of technology companies similar to Pixelworks have been highly volatile. The price of our common stock may decline and the value of our shareholders' investment may be reduced regardless of our performance. Additionally, market fluctuations, as well as general economic and political conditions, including recessions, interest rate changes or international currency fluctuations, may negatively impact the market price of our common stock. Other factors that could negatively impact our stock price include:

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

Any inability or perceived inability of investors to realize a gain on an investment in our common stock could have an adverse effect on our business, financial condition and results of operations by potentially limiting our ability to retain our customers, to attract and retain qualified employees and to raise capital. In addition, in the past, following periods of volatility in the overall market and the market price of a particular company's securities, securities class action litigation has often been instituted against these companies. This litigation, if instituted against us, could result in substantial costs and a diversion of our management's attention and resources.

Purchasers in this offering will experience immediate and substantial dilution in the book value of their investment.

The price per share of our common stock being offered may be higher than the net tangible book value per share of our outstanding common stock prior to this offering. Assuming that an aggregate of 3,020,568 shares of our common stock are sold at a price of \$6.66 per share, the last reported sale price of our common stock on the Nasdaq Global Market on September 2, 2021, for aggregate net proceeds after deducting commissions and estimated offering expenses of \$19,396,976, new investors in this offering will incur immediate dilution of \$5.85 per share. For a more detailed discussion of the foregoing, see "Dilution" in this prospectus supplement. To the extent outstanding stock options or RSUs are exercised or vested, as applicable, there will be further dilution to new investors. In addition, to the extent

we need to raise additional capital in the future and we issue additional shares of common stock or securities convertible or exchangeable for our common stock, our then existing shareholders may experience dilution and the new securities may have rights senior to those of our common stock offered in this offering.

We will have broad discretion in how we use the net proceeds of this offering. We may not use these proceeds effectively, which could affect our results of operations and cause our stock price to decline.

Although we currently intend to use the net proceeds from this offering in the manner described in the section entitled "Use of Proceeds" in this prospectus supplement, we will have considerable discretion in the application of the net proceeds of this offering. We may use the net proceeds for purposes that do not yield a significant return or any return at all for our shareholders. In addition, pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value. If we do not invest or apply the net proceeds from this offering in ways that enhance shareholder value, we may fail to achieve expected financial results, which could cause our stock price to decline.

The sale or availability for sale of a substantial number of shares of our common stock could adversely affect the market price of such shares.

Sales of a substantial number of shares of our common stock in the public market, including sales by any of our affiliates, or the perception or indication that these sales could occur, could adversely affect the market price of such shares and materially impair our ability to raise capital through equity offerings in the future. For example, a number of shareholders own significant blocks of our common stock, and we have issued approximately 3.7 million shares of our common stock to the former holders of ViXS in August 2017 in connection with the acquisition, such shares which were freely tradeable upon issuance. If one or more of these large shareholders were to sell large portions of their holdings in a relatively short time, or if the former holders of ViXS were to collectively sell large portions of the stock issued as consideration in the acquisition in a relatively short time, for liquidity or other reasons, the prevailing market price of our common stock could be negatively affected. This could result in further potential dilution to our existing shareholders and the impairment of our ability to raise capital through the sale of equity, debt, or other securities. We are unable to predict what effect, if any, sales of securities held by our significant shareholders, directors or officers, or the availability of these securities for future sale, will have on the market price of our common stock.

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

It is likely that we will need to seek additional capital in the future and from time to time. If any future financing is obtained through the issuance of equity securities, debt convertible into equity securities, options or warrants to acquire equity securities or similar instruments or securities, our existing shareholders will experience dilution in their ownership percentage upon the issuance, conversion or exercise of such securities and such dilution could be significant. For example, on December 7, 2020, we completed a private placement of 724,288 shares of common stock to a certain accredited investor at a purchase price of \$2.071 per share. On December 15, 2020, we completed a private placement of 2,475,712 shares of common stock to a certain accredited investor at a purchase price of \$2.071. The issuance and sale of the shares in the private placement had a dilutive impact on our existing stockholders. Additionally, on December 14, 2020, we completed the sale of 4,900,000 shares of common stock in an underwritten registered offering. On December 16, 2020, an additional 735,000 shares were issued pursuant to the 30-day over-allotment option exercised by the underwriter. With the over-allotment shares, a total of 5,635,000 shares of common stock were sold in the offering at a price to the public of \$2.45 per share. Additionally, any new equity securities issued by us could have rights, preferences or privileges senior to those of our common stock. In addition, any such issuance by us, or the perception that such issuances could occur, could negatively impact the market price of our securities.

The interests of our current or potential significant shareholders may conflict with other shareholders and they may attempt to effect changes or acquire control, which could adversely affect our results of operations and financial condition.

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

The anti-takeover provisions of Oregon law and in our articles of incorporation could adversely affect the rights of the holders of our common stock, including by preventing a sale or takeover of us at a price or prices favorable to the holders of our common stock.

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

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

The actual number of shares we will issue under the sales agreement, at any one time or in total, is uncertain.

Subject to certain limitations in the sales agreement and compliance with applicable law, we have the discretion to deliver a placement notice to Cowen at any time throughout the term of the sales agreement. The number of shares that are sold by Cowen after delivering a placement notice will fluctuate based on the market price of our common stock during the sales period and limits we set with Cowen. Because the price per share of each share sold will fluctuate based on the market price of our common stock during the sales period, it is not possible at this stage to predict the number of shares that will be ultimately issued.

The common stock offered hereby will be sold in "at the market offerings," and investors who buy shares at different times will likely pay different prices.

Investors who purchase shares in this offering at different times will likely pay different prices, and so may experience different outcomes in their investment results. We will have discretion, subject to market demand, to vary the timing, prices, and numbers of shares sold, and there is no minimum or maximum sales price. Investors may experience a decline in the value of their shares as a result of share sales made at prices lower than the prices they paid.

Risks Related to COVID-19

The ongoing effects of the COVID-19 pandemic could disrupt our business or the business of our customers or suppliers, and as such, may adversely affect our financial condition.

Our businesse, the businesses of our customers, and the businesses of our suppliers have been and could continue to be materially and adversely affected by the effects of the COVID-19 pandemic and the related governmental, business and community responses to it. Additionally, the economies and financial markets of many countries have been impacted by the pandemic, and the longevity and significance of the resulting economic impact is currently unknown. A significant economic downturn could materially and adversely affect our end customers, and thus could negatively impact demand for our products and our operating results.

In response to the COVID-19 pandemic, many state governments in the U.S. issued restrictive orders, including "shelter in place" or "stay at home" orders, that restricted residents from leaving their homes or returning to work. At Pixelworks, our offices in Japan and North America are currently operating in office and remotely. The potential future impact of any "stay at home" orders or other similar COVID-related restraints on movement, may adversely impact the efficiency and effectiveness of our organization, as well as the operations of our suppliers and customers. We face additional risks and challenges related to having a portion of our workforce working from home, including added pressure on our IT systems and the security of our network, and new challenges as our team adjusts to online collaboration. Additionally, our sales team may not be able to make sales calls to current and potential customers at the same volume as they did prior to the outbreak of the pandemic as they juggle varying competing interests. Also, our ability to make in-person sales calls may be affected in areas with stay at home orders or other restrictions in place, which may, in turn, affect our revenues.

The outbreak of COVID-19 may put additional pressures on our supply chain, including temporary or long-term disruption or delays. If the impact of an outbreak continues for an extended period, it could adversely impact our supply chain and the growth of our revenues. COVID-19 may result in supply shortages of our products or our ability to import, export or sell product to customers in both the U.S. and international markets. Any decrease, limitations or delays on our ability to import, export, or sell our products would harm our business.

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

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

FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents we have filed with the SEC that are incorporated by reference in this prospectus supplement and the accompanying prospectus contain forward-looking statements that involve risks and uncertainties. These statements relate to future periods, future events or our future operating or financial plans or performance. All statements other than statements of fact, including statements identified by words such as "believe," "may," "will," "estimate," "continue," "anticipate," "plan," "intend," "expect" and similar expressions are forward-looking statements, and include, but are not limited to, statements regarding the following:

- the anticipated features, benefits and applications of our technologies and products;
- market trends and changes, including in the video consumption, mobile, video and digital projection markets;
- our strategy, including our products, technology, research and development, sales and marketing and acquisition and other growth opportunities;
- our strategic plan of re-aligning our mobile, projector, and video delivery businesses and timing and expectations related thereto;
- the sufficiency of our working capital and need for, or ability to secure, additional financing;
- the success of our products in expanded markets;
- customer and distributor concentration;
- global economic challenges;
- competition, including our ability to compete and our belief as to our competitive advantages;
- · levels of inventory at distributors and customers;
- changes in customer ordering patterns or lead times and seasonality;
- backlog;
- future contractual obligations;
- · our ability to manage our expenditures and estimate future expenses, revenue, and operational requirements;
- the effect of changes to management judgments and estimates;
- · our beliefs regarding our international operations;
- our ability to take adequate precautions against claims or lawsuits made by third parties, including alleged infringement of proprietary rights;
- the potential impact of foreign currency exchange rate fluctuations;
- the impact of accounting pronouncements and our critical accounting policies, judgments, estimates, models and assumptions on our financial results; and
- our expectations with respect to revenue, cost of revenue, expenses and other financial metrics.

We have based these forward-looking statements on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, strategy, short- and long-term business operations and objectives, and financial requirements. These statements are subject to known and unknown risks, uncertainties and assumptions that could cause actual results to differ materially from those projected or otherwise implied by the forward-looking statements. Factors which may cause actual results to vary materially from those contained in the forward-looking statements include, without limitation: our ability to deliver new products in a timely fashion; our new product yield rates; changes in estimated product costs; product mix; restructuring charges; 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; litigation related to our intellectual property rights; our limited financial resources; economic and political challenges due to operations in Asia; exchange rate fluctuations; failure to retain or attract qualified employees; the sufficiency of our intellectual property and patent portfolio; fluctuations in foreign currencies; natural disasters; the need for additional income tax valuation allowances; limitations on net operating losses; and other risks described herein or in the accompanying prospectus or documents incorporated by reference herein or therein. You should not place undue reliance on these forward-looking statements. We discuss in greater detail, and incorporate by reference into this prospectus supplement and the accompanying prospectus, many of these risks, uncertainties and assumptions under the heading "Risk Factors." Additional cautionary statements or discussions of risks, uncertainties and assumptions that could affect our results or the achievement of the expectations described in forward-looking statements are also contained in the documents we incorporate by reference into this prospectus supplement and the accompanying prospectus. Any forward-looking statement made by us in this prospectus supplement, the accompanying prospectus, or any of the documents incorporated by reference in this prospectus supplement and the accompanying prospectus speaks only as of the date on which it was made. We do not intend to update or revise any forward-looking statements contained herein to reflect any change in our expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based, except as required by law. You should, however, review additional disclosures we make in our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K filed with the SEC.

You should read this prospectus supplement, the accompanying prospectus, and the documents that we incorporated by reference in this prospectus supplement and the accompanying prospectus completely and with the understanding that our actual future results, levels of activity and performance as well as other events and circumstances may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

USE OF PROCEEDS

We may issue and sell shares of our common stock having aggregate sales proceeds of up to \$20,116,986 from time to time. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time.

We currently intend to use the net proceeds of this offering for working capital and other general corporate purposes. We may also use a portion of the net proceeds from this offering to acquire or invest in complementary businesses, assets or technologies, although we have no present commitments or agreements to do so. Accordingly, we will retain broad discretion over the use of these proceeds. Pending application of the net proceeds as described above, we intend to invest the net proceeds in short- and intermediate-term, interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government.

DILUTION

If you invest in our common stock, your interest will be diluted to the extent of the difference between the price per share you pay in this offering and the net tangible book value per share of our common stock immediately after this offering. Our net tangible book value of our common stock as of June 30, 2021 was \$25.4 million, or \$0.49 per share of common stock based upon 52,352,564 shares outstanding. Net tangible book value per share is equal to our total tangible assets, less our total liabilities, divided by the total number of shares outstanding as of June 30, 2021.

After giving effect to the sale of our common stock in the aggregate amount of \$20,116,986 at an assumed offering price of \$6.66 per share, the last reported sale price of our common stock on the Nasdaq Global Market on September 2, 2021, and after deducting commissions and estimated offering expenses payable by us, our as adjusted net tangible book value as of June 30, 2021 would have been \$44.8 million, or \$0.81 per share of common stock. This represents an immediate increase in net tangible book value of \$0.32 per share to our existing shareholders and an immediate dilution in net tangible book value of \$5.85 per share to new investors in this offering.

The following table illustrates this calculation on a per share basis. The as adjusted information is illustrative only and will change based on the actual price to the public, the actual number of shares sold and other terms of the offering determined at the time shares of our common stock are sold pursuant to this prospectus supplement. The as adjusted information assumes that all of our common stock in the aggregate amount of \$20,116,986 is sold at the assumed offering price of \$6.66 per share, the last reported sale price of our common stock on the Nasdaq Global Market on September 2, 2021. The shares sold in this offering, if any, will be sold from time to time at various prices.

Assumed public offering price per share		\$6.66
Net tangible book value per share as of June 30, 2021	\$0.49	
Increase in net tangible book value per share attributable to this offering	\$0.32	
As adjusted net tangible book value per share after giving effect to this offering		\$0.81
Dilution per share to investors in this offering		\$5.85

The above table is based on 52,352,564 shares of common stock outstanding as of June 30, 2021, which excludes:

- 104,753 shares of common stock issuable upon the exercise of outstanding stock options as of June 30, 2021, with a weighted-average exercise price of \$3.44 per share;
- 3,330,627 unvested RSUs as of June 30, 2021;
- 2,859,737 shares of common stock reserved for future issuance under our 2006 Plan; and
- 1,847,756 shares of common stock reserved for future issuance under our ESPP.

To the extent any options are exercised or restricted stock units vest, new options, restricted stock awards or restricted stock units are issued under our equity incentive plans, shares are purchased pursuant to our ESPP, or we otherwise issue additional shares of common stock in the future, there will be further dilution to new investors.

In addition, we may choose to raise additional capital due to market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or debt securities, the issuance of these securities could result in further dilution to our shareholders.

PLAN OF DISTRIBUTION

On June 5, 2020, we entered into a sales agreement with Cowen, under which we may issue and sell from time to time up to \$25.0 million of our common stock through Cowen as our sales agent. In accordance with the terms of the sales agreement, we previously sold shares of our common stock, with an aggregate offering price of \$4,883,014 pursuant to a prospectus supplement filed with the Securities and Exchange Commission on June 5, 2020 (File No. 333-221238). In accordance with the terms of the sales agreement, under this prospectus supplement we may offer and sell shares of our common stock having an aggregate offering price of up to \$20,116,986 from time to time through Cowen, acting as our agent. Sales of our common stock, if any, will be made at market prices by any method that is deemed to be an "at the market" offering as defined in Rule 415 under the Securities Act, including sales made directly on the Nasdaq Global Market or any other trading market for our common stock. If authorized by us in writing, Cowen may purchase shares of our common stock as principal.

Cowen will offer our common stock subject to the terms and conditions of the sales agreement on a daily basis or as otherwise agreed upon by us and Cowen. We will designate the maximum amount of common stock to be sold through Cowen on a daily basis or otherwise determine such maximum amount together with Cowen. Subject to the terms and conditions of the sales agreement, Cowen will use its commercially reasonable efforts to sell on our behalf all of the shares of common stock requested to be sold by us. We may instruct Cowen not to sell common stock if the sales cannot be effected at or above the price designated by us in any such instruction. Cowen or we may suspend the offering of our common stock being made through Cowen under the sales agreement upon proper notice to the other party. Cowen and we each have the right, by giving written notice as specified in the sales agreement, to terminate the sales agreement in each party's sole discretion at any time.

The aggregate compensation payable to Cowen as sales agent equals 3.0% of the gross sales price of the shares sold through it pursuant to the sales agreement. We have also agreed to reimburse Cowen up to \$60,000 of Cowen's expenses, including actual outside legal expenses incurred by Cowen in connection with this offering (inclusive of up to \$10,000 for associated legal expenses of Cowen's outside counsel for filings with the Financial Industry Regulatory Authority, Inc.). We estimate that the total expenses of the offering payable by us, excluding commissions payable to Cowen under the sales agreement, will be approximately \$0.1 million.

The remaining sales proceeds, after deducting any expenses payable by us and any transaction fees imposed by any governmental, regulatory, or self-regulatory organization in connection with the sales, will equal our net proceeds for the sale of such common stock.

Cowen will provide written confirmation to us following the close of trading on the Nasdaq Global Market on each day in which common stock is sold through it as sales agent under the sales agreement. Each confirmation will include the number of shares of common stock sold through it as sales agent on that day, the volume weighted average price of the shares sold, the percentage of the daily trading volume and the net proceeds to us.

We will report at least quarterly the number of shares of common stock sold through Cowen under the sales agreement, the net proceeds to us and the compensation paid by us to Cowen in connection with the sales of common stock.

Settlement for sales of common stock will occur, unless the parties agree otherwise, on the second business day that is also a trading day following the date on which any sales were made in return for payment of the net proceeds to us. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

In connection with the sales of our common stock on our behalf, Cowen will be deemed to be an "underwriter" within the meaning of the Securities Act, and the compensation paid to Cowen will be deemed to be underwriting commissions or discounts. We have agreed in the sales agreement to provide indemnification and contribution to Cowen against certain liabilities, including liabilities under the Securities Act. As sales agent, Cowen will not engage in any transactions that stabilizes our common stock.

Our common stock is listed on the Nasdaq Global Market and trades under the symbol "PXLW." The transfer agent of our common stock is Broadridge Corporate Issuer Solutions, Inc.

Cowen and/or its affiliates have provided, and may in the future provide, various investment banking and other financial services for us for which services they have received, and may in the future receive, customary fees.

LEGAL MATTERS

The validity of the shares of common stock being offered hereby will be passed upon for us by Tonkon Torp LLP, Portland, Oregon. Certain legal matters in connection with this offering will be passed upon for Cowen by Nelson Mullins Riley & Scarborough LLP, Washington, DC.

EXPERTS

The consolidated financial statements of Pixelworks, Inc. and its subsidiaries at December 31, 2020 and for the year then ended have been audited by Armanino LLP, independent registered public accounting firm, as set forth in their report thereon and are included in reliance on such report given on the authority of such firm as an expert in auditing and accounting.

The financial statements incorporated in this prospectus supplement by reference from the Company's Annual Report on Form 10-K for the year ended December 31, 2019 have been audited by KPMG LLP, an independent registered public accounting firm, as stated in their reports, which are incorporated herein by reference.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the shares of common stock offered by this prospectus supplement. This prospectus supplement and the accompanying prospectus are part of the registration statement but the registration statement includes and incorporates by reference additional information and exhibits. This prospectus supplement does not contain all the information set forth in the registration statement and its exhibits and schedules, portions of which have been omitted by the rules and regulations of the SEC. For further information about us, we refer you to the registration statement and to its exhibits and schedules. Certain information in the registration statement has been omitted from this prospectus supplement and the accompanying prospectus in accordance with the rules of the SEC. We file annual, quarterly and current reports, proxy statements and other information with the SEC. The SEC maintains a website that contains reports, proxy and information statements and other information regarding companies, such as ours, that file documents electronically with the SEC. The address of that site is http://www.sec.gov. You may also access the documents we file with the SEC on our website at www.pixelworks.com. The information on the SEC's website and on our website are not part of this prospectus supplement or the accompanying prospectus, and any references to these websites or any other website are inactive textual references only.

INCORPORATION OF INFORMATION BY REFERENCE

The SEC permits us to "incorporate by reference" the information contained in documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents rather than by including them in this prospectus supplement or the accompanying prospectus. Information that is incorporated by reference is considered to be part of this prospectus supplement and the accompanying prospectus and you should read it with the same care that you read this prospectus supplement and the accompanying prospectus. Later information that we file with the SEC will automatically update and supersede the information that is either contained, or incorporated by reference, in this prospectus supplement and the accompanying prospectus, and will be considered to be a part of this prospectus supplement and the accompanying prospectus from the date those documents are filed. We have filed with the SEC, and incorporate by reference in this prospectus supplement and the accompanying prospectus:

our Annual Report on Form 10-K for the fiscal year ended December 31, 2020 filed with the SEC on March 10, 2021;

- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2021 and June 30, 2021 filed with the SEC on May 7, 2021 and August 11, 2021, respectively;
- our Current Reports on Form 8-K filed with the SEC on April 13, 2021, May 11, 2021, July 28, 2021 and August 9, 2021; and
- the description of our common stock contained in our Registration Statement on Form 8-A filed on <u>April 10, 2000</u>, including any
 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 Securities Exchange Act of 1934, as amended, that are made after the initial filing date of the registration statement of which this prospectus supplement and the accompanying prospectus is a part and the effectiveness of the registration statement, as well as between the date of this prospectus supplement and the termination of any offering of securities offered by this prospectus supplement and the accompanying 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.

Upon request, we will provide, without charge, to each person, including any beneficial owner, to whom a copy of this prospectus is delivered, a copy of any or all of the documents incorporated by reference into this prospectus but not delivered herewith. You may request a copy of these filings, any exhibits we have specifically incorporated by reference as an exhibit in this prospectus, at no cost by writing us at the following address: 16760 SW Upper Boones Ferry Road, Suite 101, Portland, Oregon 97224, or telephoning us at (503) 601-4545. You may also access these documents, free of charge on the SEC's website at www.sec.gov or on our website at www.pixelworks.com. Information contained on our website and on the SEC's website is not incorporated by reference into this prospectus supplement or the accompanying prospectus and you should not consider any information on, or that can be accessed from, our website or the SEC's website as part of this prospectus supplement or the accompanying prospectus.

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 November 5, 2020, the last reported sale price of our common stock on the Nasdaq Global Market was \$2.00 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 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" on page 2 of this prospectus, in documents we incorporate by reference into this prospectus and included in or incorporated by reference into the accompanying prospectus supplement.

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 November 16, 2020.

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS	1
RISK FACTORS	2
FORWARD-LOOKING STATEMENTS	2
THE COMPANY	3
<u>USE OF PROCEEDS</u>	4
DESCRIPTION OF CAPITAL STOCK	4
PLAN OF DISTRIBUTION	6
<u>EXPERTS</u>	7
LEGAL MATTERS	7
WHERE YOU CAN FIND MORE INFORMATION	7

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 such documents or that any information we have incorporated by reference is correct on any date subsequent to the date of such 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.

"PIXELWORKS," "TrueCut" and the Pixelworks logo are our trademarks. This prospectus and the documents incorporated by reference into this prospectus may also contain trademarks and trade names that are the property of their respective owners. We do not intend our use or display of other companies' trade names, trademarks or service marks to imply relationships with, or endorsements or sponsorship of us by, these other companies.

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. Our principal executive offices are located at 226 Airport Parkway, Suite 595, San Jose, California 95110 and our telephone number is (408) 200-9200. Our website address is https://www.pixelworks.com. We do not incorporate the information on, or accessible through, our website as part of this prospectus.

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, or 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, or the Securities Act, and Section 21E of the Exchange Act and may involve material risks, assumptions and uncertainties. Given these risks and uncertainties you should not place undue reliance on these forward-looking statements. Forward-looking statements typically are identified by the use of terms such as "may," "will," "should," "could," "might," "expect," "believe," "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. 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. Additional cautionary statements or discussions of risks and uncertainties that could affect our results or the achievement of the expectations described in forward-looking statements may also be contained in the documents we incorporate by reference into 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: competitive factors, such as rival chip architectures, introduction or traction by competing designs, or pricing pressures; the success of our products in expanded markets; current global economic challenges; changes in the digital display, projection, and smartphone markets; seasonality in the consumer electronics market; our efforts to achieve profitability from operations; our limited financial resources; our ability to attract and retain key personnel; and the impact of the COVID-19 pandemic on our business and on our suppliers and customers. You should, however, review additional disclosures we make in our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K filed with the Securities and Exchange Commission, or the SEC.

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.

THE COMPANY

Pixelworks is a leading provider of high-performance and power-efficient visual processing solutions that bridge the gap between video content formats and rapidly advancing display capabilities. We develop and market semiconductor and software solutions that enable consistently high-quality, authentic viewing experiences in a wide variety of applications from cinema to smartphones. Our primary target markets include Mobile (smartphone, gaming and tablet), Home Entertainment (TV, personal video recorder, or PVR, over-the-air, or OTA, and projector), Content (creation, remastering and delivery), and Business & Education (projector).

We were one of the first companies to commercially launch a video System on Chip, or SoC, capable of deinterlacing 1080i HDTV signals and one of the first companies with a commercial dual-channel 1080i deinterlacer integrated circuit. Our Topaz product line was one of the industry's first single-chip SoC for digital projection. We introduced many of our visual processing technologies optimized for use in a smartphone in our I-Series visual processors, and further introduced our motion estimation / motion compensation technology, or MEMC, in our mobile-optimized X-series visual processors. In 2019, we introduced our Hollywood award-winning TrueCut® video platform, which includes the industry's first motion grading technology that allows fine tuning of motion appearance in cinematic content for a wide range of frame rates, shutter angles and display types.

Our solutions enable worldwide manufacturers to offer leading-edge consumer electronics and professional display products, as well as video delivery and streaming solutions for content service providers. Our core visual display processing technology intelligently processes digital images and video from a variety of sources and optimizes the content for a superior viewing experience. Our video coding technology reduces storage requirements, significantly reduces bandwidth constraint issues and converts content between multiple formats to enable seamless delivery of video, including OTA streaming, while also maintaining end-to-end content security.

Rapid growth in video consumption, combined with the move towards high frame rate / refresh rate displays, especially in mobile, is increasing the demand for our visual processing and video delivery solutions. Our technologies can be applied to a wide range of devices from large-screen projectors to cinematic big screens, to low-power mobile tablets, smartphones, high-quality video infrastructure equipment and streaming devices. Our products are architected and optimized for power, cost, bandwidth, and overall system performance, according to the requirements of the specific application. On occasion, we have also licensed our technology.

Pixelworks was founded in 1997 and is incorporated under the laws of the state of Oregon. Our executive offices are located at 226 Airport Parkway, Suite 595, San Jose, California 95110, our telephone number is (408) 200-9200 and our website is www.pixelworks.com. We do not incorporate the information on, or accessible through, our website into this prospectus, and you should not consider any information on, or accessible through, our website as 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, repayment of indebtedness, future acquisitions and strategic investment opportunities, and funding of capital expenditures and research and product development, such as the continued development of solutions for the advanced digital projection market and video transcoding solutions for the OTA market, as well as the enhancement of our video processing solutions for mobile markets. 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, as amended, 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. See "Where You Can Find More Information." Our authorized capital stock consists of 250,000,000 shares of common stock, par value \$0.001 per share, and 50,000,000 shares of preferred stock, par value \$0.001 per share. The preferred stock is undesignated as to series, rights, preferences, privileges or restrictions.

Common Stock

We have one existing class of common stock. As of November 5, 2020, there were 42,036,203 shares of common stock issued and outstanding. 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, subject to the preferential rights of the holders of any shares of preferred stock that may be issued in the future. To date, we have never declared a dividend and our board of directors does not have any plans to do so in the future. The holders of shares of our common stock are entitled to one vote per share on any matter to be voted upon by Pixelworks shareholders. Our amended and restated articles of incorporation, as amended, do not provide for cumulative voting in connection with the election of directors. Accordingly, directors are elected by a plurality of the shares of common stock voting once a quorum is present. 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

As of November 5, 2020, no shares of preferred stock were outstanding. Under our amended and restated articles of incorporation, as amended, 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.

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

Provisions of our amended and restated articles of incorporation, as amended, and amended and restated 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 authorized, without prior shareholder approval, to change the size of the board of directors (our amended and restated articles of incorporation, as amended, provide that if the board of directors is fixed at seven members or less, the directors shall hold office until the next annual meeting of shareholders and if the board of directors is fixed at eight or more members, the board of directors 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 of directors and this provision may not be amended or repealed unless approved by the holders of not less than seventy-five percent (75%) of the votes then entitled to be cast for the election of directors);
- 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 shares of preferred stock pursuant to our board of directors' authority described above could decrease the amount of earnings and assets available for distribution to holders of shares of our common stock and adversely affect the rights and powers, including voting rights, of such holders and may have the effect of delaying, deferring or preventing a change in control;
- members of our board of directors can only be removed for cause and at a meeting of the shareholders called expressly for that purpose, by the vote of seventy-five percent (75%) of the votes then entitled to be cast for the election of directors. Cause for removal shall be deemed to exist only if the director whose removal is proposed has engaged in criminal conduct or has engaged in fraudulent or dishonest conduct or gross abuse of authority or discretion with respect to Pixelworks;
- our board of directors may alter our amended and restated bylaws without obtaining shareholder approval, and our amended and restated bylaws
 establish advance notice procedures with regard to all shareholder proposals to be brought before meetings of Pixelworks shareholders. These
 procedures provide that notice of such stockholder proposals must be timely given in writing to the Pixelworks Secretary prior to the meeting. The
 notice must contain certain information specified in our amended and restated bylaws;
- no shareholder is permitted to cumulate votes at any election of directors;
- Oregon law permits our board of directors to consider other factors beyond shareholder value in evaluating any acquisition offer (so-called "expanded constituency" provisions); and
- a super-majority vote by sixty-seven (67%) of our shareholders is required to approve (i) any agreements of merger or consolidation which require shareholder approval under the Oregon Business Corporation Act, (ii) any sale, lease or exchange of all or substantially all of Pixelworks' property and assets and (iii) and dissolution or liquidation of the corporation.

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 commissions from securities purchasers for whom they may act as agent. Underwriters may sell the shares to or through dealers, and the dealers 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.

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.

Our common stock is currently listed on the Nasdaq Global Market, but any other securities 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, 2019 and 2018, and for each of the years in the three-year period ended December 31, 2019, and management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2019, 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. The reports of KPMG LLP refer to a change in the method of accounting for leases and a change in the method of accounting for revenue.

LEGAL MATTERS

The validity of the shares of common stock offered by this prospectus will be passed upon for us by Tonkon Torp LLP, Portland, Oregon.

WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement on Form S-3 with the SEC under the Securities Act of 1933. This prospectus is part of the registration statement. The registration statement also includes and incorporates by reference additional information and exhibits. We file annual, quarterly and current reports, proxy statements and other information with the SEC. The SEC maintains a website that contains reports, proxy and information statements and other information regarding companies, such as ours, that file documents electronically with the SEC. The address of that website is http://www.sec.gov. The information on the SEC's website is not part of this prospectus, and any references to this website or any other website are inactive textual references only.

The SEC permits us to "incorporate by reference" the information contained in documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents rather than by including them in this prospectus. Information that is incorporated by reference is considered to be part of this prospectus and you should read it with the same care that you read this prospectus. Later information that we file with the SEC will automatically update and supersede the information that is either contained, or incorporated by reference, in this prospectus, and will be considered to be a part of this prospectus from the date those documents are filed. We have filed with the SEC, and incorporate by reference in this prospectus:

- our Annual Report on Form 10-K for the year ended December 31, 2019;
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2020, June 30, 2020 and September 30, 2020;

- our Current Reports on Form 8-K filed on <u>January 7, 2020</u>, <u>March 20, 2020</u>, <u>April 30, 2020</u>, <u>May 18, 2020</u>, <u>June 5, 2020</u>, <u>August 10, 2020</u> (to the extent filed under Item 2.05) and <u>October 22, 2020</u>; and
- the description of our common stock contained in the Registration Statement on Form 8-A filed with the SEC on <u>April 10, 2000</u>, 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.

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:

Corporate Secretary Pixelworks, Inc. 226 Airport Parkway, Suite 595 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.

We make available free of charge on our website our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports, as soon as reasonably practicable after we electronically file or furnish such materials to the SEC. You may also obtain a free copy of these reports in the Investors section of our website, https://www.pixelworks.com.

\$20,116,986



Common Stock
PROSPECTUS SUPPLEMENT
Cowen

September 3, 2021