Filed Pursuant to Rule 424(b)(3) and (c) Registration No. 333-118100

## PIXELWORKS, INC.

## \$150,000,000 PRINCIPAL AMOUNT 1.75% CONVERTIBLE SUBORDINATED DEBENTURES DUE 2024 and 6,159,405 SHARES OF COMMON STOCK ISSUABLE UPON CONVERSION OF THE DEBENTURES and 2,421,627 SHARES OF COMMON STOCK

This prospectus supplement relates to the resale by the selling securityholders of 1.75% Convertible Subordinated Debentures due 2024 issued by Pixelworks, Inc. and the shares of common stock issuable upon conversion of the debentures.

This prospectus supplement should be read in conjunction with the prospectus dated August 24, 2004, which is to be delivered with this prospectus supplement. This prospectus supplement is not complete without, and may not be delivered or utilized except in connection with, the prospectus, including any amendments or supplements to it. This prospectus supplement is qualified by reference to the prospectus, except to the extent that the information provided by this prospectus supplement supersedes the information contained in the prospectus.

Investing in the debentures or the common stock offered by the prospectus involves a high degree of risk. See "Risk Factors" beginning on page 5 of the prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement is truthful or complete. Any representation to the contrary is a criminal offense.

Pages 26-28 of the prospectus are amended and restated in their entirety to read as follows:

## **SELLING SECURITYHOLDERS**

We originally issued the debentures to Citigroup and D.A. Davidson & Co. (the "Initial Purchasers") in private placements in May and June 2004. Our net proceeds from the sale and issuance of the debentures to the Initial Purchasers was approximately \$145.0 million, after deducting the discount and estimated expenses of the offering. The debentures were immediately resold by the Initial Purchasers to persons reasonably believed by the Initial Purchasers to be qualified institutional buyers within the meaning of Rule 144A under the Securities Act in transactions exempt from registration under the Securities Act. Selling securityholders, including their transferees, pledgees or donees or their successors, may from time to time offer and sell the debentures and the common stock into which the debentures are convertible pursuant to this prospectus. Our registration of the debentures and the shares of common stock issuable upon conversion of the debentures does not necessarily mean that the selling securityholders will sell all or any of the debentures or the common stock. Unless set forth below, none of the selling securityholders has had within the past three years any material relationship with us or any of our predecessors or affiliates.

The following table sets forth certain information as of January 13, 2005, except where otherwise noted, concerning the principal amount of debentures beneficially owned by each selling securityholder and the number of shares of common stock that may be offered from time to time by each selling securityholder under this prospectus. The information is based on information provided by or on behalf of the selling securityholders. The number of shares of common stock issuable upon conversion of the debentures shown in the table below assumes conversion of the full amount of debentures held by each holder at an initial conversion rate of 41.0627 per \$1,000 of principal amount at maturity of debentures surrendered. This conversion rate is subject to adjustments in certain circumstances. Because the selling securityholders may offer all or some portion of the debentures or the common stock issuable upon conversion of the debentures, we have assumed for purposes of the table below that the selling securityholders will sell all of the debentures and all of the common stock issuable upon conversion of the debentures of the debentures offered by this prospectus. In addition, the selling securityholders identified below may have sold, transferred or otherwise disposed of all or a portion of their debentures since the date on which they provided the information regarding their debentures in transactions exempt from the registration requirements of the Securities Act. Information about the selling securityholders may change over time. Any changed information given to us by the selling securityholders will be set forth in prospectus supplements if and when necessary. As of December 31, 2004, we had \$150,000,000 in principal amount of the debentures and 46,937,205 shares of common stock outstanding. The common shares outstanding includes exchangeable shares which were issued on September 6, 2002 by Jaldi, our

Canadian subsidiary, to its shareholders in connection with our Jaldi asset acquisition. The exchangeable shares have characteristics essentially equivalent to Pixelworks common stock.

Name(1)	Principal Amount at Maturity of Debentures Beneficially Owned Prior to this Offering and Offered Hereby	Percentage of Outstanding Debentures	Shares of Common Stock Issuable Upon Conversion of the Debentures that May Be Sold(2)	Percentage of Shares of Common Stock Outstanding(3)(4)
Argent Classic Convertible Arbitrage Fund				
(Bermuda) Ltd.	\$ 3,390,000	2.26%	139,203	*
Argent LowLev Convertible Arbitrage Fund Ltd.	1,000,000	*	41,063	*
Front Point Partners LLC	2,000,000	1.33	82,125	*
Quattro Multistrategy Fund LP	287,000	*	11,785	*
Radcliffe SPC, Ltd.	10,000,000	6.67	410,627	*

Less than one percent (1%).

- (1) Information concerning the selling securityholders may change from time to time. Any such changed information will be set forth in amendments or supplements to the prospectus or to the registration statement of which the prospectus is a part, if and when required. A post-effective amendment will be filed to identify unknown securityholders who are not direct or indirect donees, pledgees, successors or transferees of the selling securityholders listed in the table.
- (2) Assumes conversion of all of the holder's debentures at a conversion rate of 41.0627 shares of common stock per \$1,000 principal amount at maturity of the debentures. This conversion rate is subject to adjustment as described in the prospectus under "Description of Debentures—Conversion Rights." As a result, the number of shares of common stock issuable upon conversion of the debentures may increase in the future. Excludes shares of common stock that may be issued by us upon the repurchase of the debentures and fractional shares. Holders will receive a cash adjustment for any fractional share amount resulting from conversion of the Debentures, as described in the prospectus under "Description of Debentures—Conversion rights."
- (3) Calculated using 46,937,205 shares of common stock outstanding as of December 31, 2004. In calculating this amount for each holder, we treated as outstanding the number of shares of common stock issuable upon conversion of all of that holder's debentures, but we did not assume conversion of any other holder's debentures.
- (4) Assumes that all holders of debentures, or any future transferees, pledgees, donees or successors of or from such holders of debentures, do not beneficially own any common stock other than the common stock issuable upon conversion of the debentures at the initial conversion rate.

Except as a selling securityholder, and as described above in this prospectus supplement, no selling securityholder listed in the above table has had any material relationship with us or any of our affiliates within the past three years.

The date of this Prospectus Supplement is January 18, 2005.

## QuickLinks

SELLING SECURITYHOLDERS