

# New PW111 ImageProcessor IC Brings Pixelworks Performance to Mainstream LCD Monitors

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## PW111 Selected for Compaq 15-inch, XGA-resolution Flat Panel Monitor

Tualatin, Ore., January 22, 2001 — Pixelworks (Nasdaq:PXLW) announced today an innovative product line by unveiling the PW111 ImageProcessor IC, a single-chip display controller optimized for the highest volume segment of the flat panel monitor market. The PW111 raises the bar on display price-performance by bringing Pixelworks' award-winning image quality and ease of use to a new generation of affordable flat panel monitors capable of displaying computer graphics, Web information and even video.

The new PW111 extends the company's ImageProcessor Architecture, providing its existing and new customers with the ability to quickly bring stateof-the-art display products to rapidly growing segments of the market. According to DisplaySearch, XGA-resolution displays will maintain a dominant share of the LCD monitor market in 2001 accounting for approximately 80 percent of desktop LCD monitor units sold.

Compaq Computer Corporation, the largest supplier of computing systems in the world, is the first company to use the PW111 ImageProcessor IC to power the latest version of the TFT 5010 flat-panel monitor. "Compaq recognizes the value of Pixelworks' features to our customers, and has included this technology in the award-winning TFT 8020 18-inch LCD monitor. The PW111 brings Pixelworks' industry leading quality and performance to our mainstream 15-inch flat panel monitor product line," said Tad Bodeman, Director, Commercial Displays, Compaq Computer Corporation.

"The PW111 enables our customers to offer 'no-compromise' performance, features and ease-of-use while minimizing development and material costs," said Allen Alley, CEO, President and Chairman of Pixelworks. "We expect the new Compaq monitor to follow in the footsteps of our previous successful collaborations. Pixelworks ImageProcessor Architecture gives our customers a huge strategic advantage. They can quickly develop a differentiated product line reaching the most lucrative segments of the flat panel monitor market."

The PW111 is software compatible with the entire line of award-winning Pixelworks ImageProcessor ICs including the PW364, PW264 and PW164. The same Pixelworks ImageProcessor technology that earned the distinguished 1999 SID Information Display Magazine Display Material or Component of the Year Gold Award, the top annual recognition in the electronic display industry, is included in the new PW111 ImageProcessor IC.

#### **Pixelworks ImageProcessor Architecture Means Faster Time to Market**

Pixelworks' ImageProcessor Architecture features a true system-on-a-chip IC design containing all of the mission-critical components, including an on-board microprocessor, memory and proprietary digital signal processing circuits. The system-on-a-chip IC is coupled with a comprehensive software environment that uniquely streamlines the design process. With its innovative design architecture, Pixelworks has proven that manufacturers can bring monitors to market in a fraction of the time needed when using discrete components, which is a critical advantage in today's competitive market.

Monitor manufacturers can leverage their development efforts in previous monitors designed using Pixelworks ImageProcessor ICs and software. Using Pixelworks ImageProcessor Architecture, monitor designers and engineers are free to concentrate on product features and differentiation using timesaving Windows®-based tools rather than spending design cycles programming discrete components.

#### PW111 ImageProcessor IC Debuts New Features

The PW111 introduces the new Pixelworks' exclusive Fail-Safe™ mode designed to minimize user frustration while reducing support requirements and costs for monitor manufacturers. Fail-Safe mode is specifically targeted at low-priced monitors which do not use a full frame buffer memory. The patent-pending Fail-Safe mode ensures users can always see their computer desktop even when the graphic signals driving the monitor are set at resolutions or refresh rates beyond the monitor's capabilities.

In addition to Fail-Safe, following are key features of the PW111 ImageProcessor IC:

- ColorWarp<sup>™</sup> Technology Patent pending technique provides the ultimate in precise, yet flexible color compensation, enabling consistent color performance across many different LCD panels and color devices including printers, scanners and digital cameras.
- Image Scaling Second-generation up and down scaling with high-quality, independent horizontal and vertical DSP scalers that provide programmable sharpness, supporting input resolutions up to UXGA resolution (1,600 by 1,200 pixels) and output resolutions up to SXGA (1,280 by 1,024 pixels).
- Automatic Image Optimization Perfectly adjusted images with little or no user intervention, regardless of the input source.
- Video Interface Support Integrated YUV to RGB converter and on-chip deinterlacer gives manufacturers a low-cost option for video inputs, enabling feature-rich multimedia monitors.
- On-screen Display Manufacturer can implement a customized user interface with bitmap-based graphics using palette of 64,000 colors.
- On-chip Microprocessor and Memory The PW111 includes an x86-compatible microprocessor and up to 32K RAM.

Complete Software Development Environment – Pixelworks includes the embedded operating system, source code and
proprietary software tools needed to customize display devices.

The PW111 is available in two versions both in a 208-pin PQFP package: the PW111-10Q for XGA output and the PW111-20Q is for SXGA output. The PW111 is currently shipping in quantity. Prices are \$14 in quantities greater than 10,000 pieces.

# About Pixelworks, Inc.

Pixelworks, headquartered in Tualatin, Oregon, is the leading provider of system-on-a-chip ICs for the advanced display market. Pixelworks' solutions process and optimize video, computer graphics and Web information for display on a wide variety of devices used in business and consumer markets. For more information, please visit the company's Web site at www.pixelworks.com.