Pixelworks Debuts New Family of All-In-One ImageProcessor ICs Optimized for Mainstream Monitors and Smart Panels

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TUALATIN, Ore., Jan 24, 2002 (BUSINESS WIRE) --

World's First 0.18-Micron Fully Integrated ImageProcessor ICs Incorporate World-Leading Flat Panel Interface Technology from Analog Devices

Pixelworks, Inc. (Nasdaq:PXLW) debuted today a new family of ImageProcessor ICs that are the highest performing products designed specifically for rapidly growing smart panel applications and the mainstream LCD monitor market.

The highly integrated ImageProcessor ICs combine Pixelworks' award-winning image processing technology with world-leading, flat panel interface technology from Analog Devices to deliver a complete, low-cost flat panel monitor electronics solution on a single chip.

Using an advanced 0.18-micron CMOS process, the new family of `all-in-one' ImageProcessor ICs are architected to supply the flat panel monitor industry with competitively priced state-of-the-art products. This new system-on-a-chip ImageProcessor Architecture uses an embedded microprocessor, on-chip memory, digital signal processing circuitry and Pixelworks' unique Panel IQ technology that allows the ImageProcessor IC to connect directly to the LCD panel electronics. This innovation reduces costs by eliminating components and streamlining manufacturing.

Analog Devices provided the high-performance analog and mixed-signal design expertise required to implement a high-speed, triple 8-bit analog-to-digital converter, low-jitter PLL and DVI receiver in 0.18 micron CMOS that will operate up to 170 Mhz. The result is a series of fully integrated, pin-compatible system-on-a-chip ICs that deliver outstanding image quality up to UXGA-resolution (1,600 by 1,200 pixels), broad compatibility, ease of use and rapid time to market.

Ross Young, President and CEO of DisplaySearch, the worldwide leader in flat panel display market research, said: "The combination of Pixelworks and Analog Devices is a formidable team. This family of high performance chips is optimized for the rapidly growing LCD monitor market. We expect the LCD monitor market to exceed 27 million units in 2002. Monitors manufactured using the newer smart panel and smart integration model are expected to grow by 388 percent this year."

"Many of our customers already use Analog Devices' display interface chips together with our products, so integrating the technologies onto a single piece of silicon makes sense and allows us to extend our broadly adopted ImageProcessor Architecture into the mainstream monitor market," said Allen Alley, President, CEO and Chairman of Pixelworks. "We selected Analog Devices because of the company's number one share in the display interface marketplace and leadership in analog and mixed-signal technology."

New Family of ImageProcessor Chips Targeted for LCD Monitor Segments

The PW13X series features Analog Devices' state-of-the-art, high-speed triple 8-bit analog-to-digital converter that handles signals ranging up to UXGA resolution and their industry proven ADI DVI receiver.

The PW13X family of ImageProcessor ICs incorporates Pixelworks' unique Panel IQ technology, which allows direct connection to the display source and column drive electronics, thus reducing overall system cost. The Panel IQ suite of features combines an industry leading programmable TCON with advanced EMI reduction technologies as well as other features developed by Pixelworks supporting a broad range of LCD panels for smart panel and smart integration LCD monitor applications. The initial products in this family are as follows:

  -- PW135 ImageProcessor featuring integrated analog and digital
     interfaces and embedded Panel IQ technology;
  -- PW133 ImageProcessor featuring an integrated analog interface
     and embedded Panel IQ technology;
  -- PW131 ImageProcessor featuring integrated analog and digital
     interfaces; and
  -- PW130 ImageProcessor featuring an integrated analog interface.

All products are offered in speed-graded versions from XGA to UXGA input resolutions.

The PW13X family extends Pixelworks award-winning ImageProcessor Architecture into mainstream monitor applications with these key features:

  -- 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 and output resolutions up to
     UXGA;

- -- Automatic Image Optimization - Perfectly adjusted images with no user intervention, regardless of the input source;
- -- Enhanced Fail-Safe(TM) - Pixelworks expands its patent-pending Fail-Safe(TM) mode which extends monitor compatibility and is designed to minimize user frustration while reducing support requirements and costs for monitor manufacturers. The new Fail-Safe(TM) mode supports a full-color screen that 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;
- -- Video Interface Support - Integrated YUV to RGB converter and on-chip deinterlacer gives manufacturers a low-cost option for video inputs, enabling low-cost, feature-rich multimedia monitors;
- -- On-screen Display - Manufacturer can implement a customized user interface with bitmap graphics using a palette of 64,000 colors;
- -- On-chip Microprocessor and Memory - The PW13X series includes an x86-compatible microprocessor with integrated RAM; and
- -- Complete Software Development Environment - Pixelworks includes the embedded operating system, source code and proprietary software tools needed to customize display devices.

The PW13X chips will be sampling later in the first quarter of 2002 and will be available in a 208-pin PQFP package.

About Pixelworks, Inc.

Pixelworks, headquartered in Tualatin, Oregon, is a 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. Pixelworks ImageProcessor Architecture powers the world's most highly regarded flat panel display products, including monitors and projectors marketed by Compaq, Dell, NEC-Mitsubishi, Samsung, SANYO, Sharp, Sony and ViewSonic. For more information, please visit the company's Web site at www.pixelworks.com.

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This press release contains statements, including statements concerning the acceptance of the combined technologies by leading manufacturers, that are forward-looking statements within the meaning of the Securities Litigation Reform Act of 1995. Such statements are based on current expectations, estimates and projections about the company's business. These statements are not guarantees of future performance and involve certain risks, uncertainties and assumptions that are difficult to predict. Actual results could vary materially from the description contained herein due to many factors including the non-acceptance of the combined technologies by leading manufacturers as well as the risks detailed from time to time in the company's Securities and Exchange Commission filings. The forward-looking statements contained in this press release speak only as of the date on which they are made, and the company does not undertake any obligation to update any forward-looking statement to reflect events or circumstances after the date of this news release. If the company does update one or more forward-looking statements, investors and others should not conclude that the company will make additional updates with respect thereto or with respect to other forward-looking statements.

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