



Pixelworks Introduces White Paper Series to Examine the Limits and Perceptivity of High Resolution Video Displays

July 17, 2014

- *Is higher resolution needed to convey true realism in video displays?*

SAN JOSE, Calif.--(BUSINESS WIRE)--Jul. 17, 2014-- Pixelworks (NASDAQ: PXLW), an innovative provider of video display processing technology, today announced a series of white papers that examines the dynamics of how individuals perceive high resolution on video displays. The first paper in the series, "High Resolution Displays and Moving Images," is now available on the company's website, www.pixelworks.com. The next papers in the series will be released in the coming months.

The white paper series is a compilation of independent research conducted by Pixelworks, as well as third party research and articles that collectively advance the knowledge of how high resolution, or more accurately pixel density, is perceived. In particular, the first paper analyzes how moving images are captured and displayed, the ideal resolution on various screens from smartphones to UHD TVs, and how individuals perceive changes in the quality of moving images. Most interestingly, in order to convey images that look realistic, moving images must be displayed at a higher resolution. Unlike still images where the objects have a fixed relationship with the pixel grid, the introduction of motion creates distortion caused by objects transitioning from one pixel to the next. The resulting artifacts highlight the display's pixelated nature, which ultimately impairs realism.

Future papers in the series will highlight unexpected consequences of the transition to higher resolutions. For example, when displaying video in higher resolutions artifacts such as judder, motion blur and halos caused by one object moving in front of another are actually more perceptible to the viewer. This issue is particularly acute on the displays of mobile devices, almost all of which lack the comprehensive video display processing pipeline commonly incorporated into larger HD and UHD flat panels.

"We're very pleased to be able to share this information with the rest of the industry," said Richard Miller, Pixelworks Senior Vice President, Technology. "We believe examining video quality at this level will spark further discussion and interest, and ultimately result in advancing the industry's understanding of how to create future displays capable of portraying the highest quality and most realistic images."

For additional information on Pixelworks' Video Display Processor Technology, as well as a copy of "High Resolution Displays and Moving Images," please visit the company's website at www.pixelworks.com.

Note to Editors:

Media interested in meeting with Pixelworks to learn more about the company's mobile display technology should contact Jacqueline O'Brien Savvy Public Relations, +1-409-594-9230, jacqueline@savvypublicrelations.net.

About Pixelworks, Inc.

Pixelworks creates, develops and markets video display processing technology for digital video applications that demand the very highest quality images. At design centers around the world, Pixelworks engineers constantly push video performance to keep manufacturers of consumer electronics, mobile devices and professional displays worldwide on the leading edge. The company is headquartered in San Jose, CA.

For more information, please visit the company's Web site at www.pixelworks.com.

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Source: Pixelworks, Inc.

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