Pixelworks Announces Sixth Generation Visual Processor with AI Adaptive Picture Quality for a Superior, Always-on HDR Experience

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The low-power Pixelworks i6 and i6 Pro processor, the newest solutions in the Company's re-named i series lineup, is currently sampling to lead mobile customers

SAN JOSE, Calif., Sept. 1, 2020 /PRNewswire/ -- Pixelworks, Inc. (NASDAQ: PXLW), a leading provider of innovative video and display processing solutions, today announced its sixth generation mobile visual processor, the first with low-power Artificial Intelligence (AI) technology built upon the Company's extensive mobile display datasets and training models. The Pixelworks i6 processor is the industry's first with an integrated AI processing unit that adaptively optimizes overall picture quality to produce a consistently superior visual experience across widely-varying mobile viewing conditions.

The Pixelworks i6 processor utilizes AI to intelligently upscale the dynamic range of video and gaming content while concurrently optimizing contrast, sharpness, brightness and color temperature of the display based on ambient lighting conditions, content attributes, display characteristics and usage patterns for always-cinematic visual quality. The new solution also supports advancements in the Company's patented and industry-leading color calibration and management as well as its unique always-on HDR technology and precision HDR10/10+ tone mapping, with up to 40% lower overall power consumption than its predecessor, the Pixelworks i3 processor, formerly known as Iris 3.

The Pixelworks i6 Pro processor provides additional system-level software optimization that ensures superior visual quality and power efficiency at the highest possible refresh rates and resolutions by intelligently mapping feature sets and modes across the widest range of apps and use cases for LCDs as well as OLED displays. Both solutions feature a broad set of auto-adaptive display innovations by Pixelworks, including flicker-free DC Dimming and Ultra-smooth Brightness Control for OLED displays and Dynamic Brightness Control with 3X more video and gaming contrast for LCD displays, as well as a new processing unit that preserves sharpness, contrast and skin tone accuracy across all color gamuts and viewing modes.

"With over two decades of display processing experience, we are excited to unveil and sample our sought-after sixth generation architecture to leading smartphone customers," said Todd DeBonis, President and CEO, Pixelworks. "The i6 processor is the first dedicated processor using artificial intelligence for key display features to put a truly cinematic experience in the palm of consumers' hands for today's high-quality photos, videos and games. We look forward to bringing this technology to market with our partners in mid- and high-tier smartphones."

"Our PureDisplay screen technology is designed to give everyone a truly superior viewing experience," said Juho Sarvikas, Chief Product Officer & Vice President North America at HMD Global, the home of Nokia phones. "And with almost two thirds of videos around the world being viewed on mobile, our PureDisplay technology - powered by Pixelworks - delivers incredible HDR videos for higher contrast, great clarity and enhanced colours across all your content. I would like to congratulate the team on the introduction of the Pixelworks i6 processor and am super excited to take our PureDisplay experience to the next level."

"Pixelworks continues to be a reliable and innovative partner with the proven performance that has helped establish Display Greatness across our portfolio of TCL branded smartphones with NXTVision technology," said Michael Chen, General Manager of the Global Product Center at TCL Communication. "The Pixelworks i6 processor that features their new AI based solution to help elevate the entertainment experience is an exciting step forward in adaptive visual processing and why we continue to partner so closely with Pixelworks on our TCL mobile devices."

"We are excited about our ongoing collaboration with Pixelworks and our joint track record of pushing the display performance envelope in successive smartphones in both the gaming category and flagship tier," said Bryan Chang, General Manager, Smartphone Business Unit at ASUS. "The Pixelworks i6 processor, with its new AI based architecture, is a testament to the innovations from Pixelworks that continue to advance visual quality for a wide range of entertainment and smartphone experiences of consumers wherever they go."

New Architecture for Advanced Visual Processing
The Pixelworks i6 processor dramatically improves video and image quality and sets a new standard for picture quality on both LCD and OLED mobile displays with a new AI-driven architecture and dynamic refresh rate support for up to 144 Hz. The new and enhanced features include:

- **Dedicated AI processing unit** – Lightweight AI display inferencing that augments the Company's fuzzy logic IP to adaptively and intelligently optimize overall picture quality for video, games and photos at low power.
- **AI scene detection** – Provides optimal real time SDR-to-HDR conversion for videos, games and photos, while dynamically tuning local contrast and sharpness for an always-on HDR experience with superior visual quality.
- **AI adaptive display** – Analyzes ambient light conditions, settings, and the content to intelligently adjust daylight view controls for even more perceptually accurate display under a variety of lighting conditions.
- **Skin Tone Accuracy –** Dynamically detects and protects skin tones for a more natural look across color gamuts and custom viewing modes.
- **Dark Noise Suppression** – Dynamically reduces visual background "noise" in low-light videos and photos.
- **Color Calibration 3.0** – Takes industry-leading color accuracy to new heights with colors that are indistinguishable from perfect with simple and quick one-pass tests easily deployable on the factory floor.

The new i series naming encompasses both the Pixelworks i3 (formerly Iris 3) and the new i6 processor and uses the existing chip numbering. The Company's existing premium tier solution – Iris 5 – becomes part of the X series and is renamed the Pixelworks X5 processor. More information is

available [here](#).

Availability
The Pixelworks i6 processor is sampling now to lead customers and is expected to be in commercial production in Q4 2020.

About Pixelworks
Pixelworks provides industry-leading content creation, video delivery and display processing solutions and technology that enable highly authentic viewing experiences with superior visual quality, across all screens – from cinema to smartphone and beyond. The Company has a 20-year history of delivering image processing innovation to leading providers of consumer electronics, professional displays and video streaming services. Pixelworks is headquartered in San Jose, CA. For more information, please visit the company's web site at www.pixelworks.com.

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Safe Harbor Statement
This release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These statements may be identified by use of terms such as "begin," "continue," "will," "expect", "believe," "anticipate" "projected" and similar terms or the negative of such terms, and include, without limitation, statements about the launch dates of smartphones containing Company's products. Such statements are based on management's current expectations, estimates and projections about the Company's business. These statements are not guarantees of future performance and involve numerous risks, uncertainties and assumptions that are difficult to predict. Actual results could vary materially from those contained in forward looking statements due to many factors, including, without limitation: our ability to execute on our strategy; competitive factors; the success of our products in expanded markets; current global health and economic challenges, including the impact of COVID-19; and changes in our target markets, including as to demand. More information regarding potential factors that could affect the Company's financial results and could cause actual results to differ materially from those discussed in the forward-looking statements is included from time to time in the Company's Securities and Exchange Commission filings, including its Annual Report on Form 10-K for the year ended December 31, 2019 as well as subsequent SEC filings.

The forward-looking statements contained in this release are as of the date of this release, and the Company does not undertake any obligation to update any such statements, whether as a result of new information, future events or otherwise.

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