Pixelworks Empowers realme P4 Series Smartphones to Deliver Flagship Visual Display Performance

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AI Enhanced Capability with Distributed Rendering Architecture and Newly Developed Frame Generation Index Uplevel the Mobile Gaming Experience

SHANGHAI, Aug. 20, 2025 /PRNewswire/ -- Pixelworks, Inc. (NASDAQ: PXLW), a leading provider of visual processing solutions, today announced that the newly launched realme P4 5G and P4 Pro 5G smartphones incorporate Pixelworks' X7 Gen 2 visual processor. The realme P4 series smartphones are the first models in the P series to integrate a dedicated visual processor solution aimed at setting a new benchmark for mid-range international market segment. Powered by the Snapdragon® 7 Gen 4 mobile platform from Qualcomm Technologies, Inc., the P4 Pro 5G supports a 144Hz refresh rate and 4608Hz high frequency dimming. The realme P4 5G smartphone utilizes MediaTek Dimensity 7400 Ultra 5G SoC, the device sports a 6.77-inch FHD+ 144Hz HyperGlow AMOLED display. Both smartphones are equipped with Pixelworks' X7 Gen 2 vision processor, which provides high-quality image optimization for games and video content, offering users a more immersive visual experience.

144fps High Frame Rate Effect for More Than One Hundred Games
The Pixelworks' X7 Gen 2 visual processor, featuring AI enhanced capability with distributed rendering architecture, integrates ultra-low latency MotionEngine® technology and high efficiency AI-based super resolution. The solution not only enables higher rendering output from the smartphone's application processor, but also optimizes the allocation of system computing power, resulting in reduced device temperature and a longer gaming experience with lower system power consumption. Built on Pixelworks' efficient neural network engine, the AI-based super resolution technology leverages trained deep learning to intelligently scale the image resolution of games up to 1.5K resolution, contributing to more natural and clear picture quality with more complete details.

Real-time "Frame Generation" Index Enriches the Game Testing Dimensions
The realme P4 5G and realme P4 Pro 5G smartphones are the first launched devices to fully implement and benefit from the Frame Generation index, which was jointly developed and introduced by Pixelworks and the PerfDog testing platform. Leveraging Pixelworks' rendering acceleration solution, the frame rate data of games while utilizing hardware acceleration can be accurately tested and viewed in real-time by users on every P4 series smartphone.

Combination of 1.5K Resolution and 120fps provides unprecedented Video Experience for the Mid-Range Smartphone
Within the mid-range market segment, the new P4 series are the first smartphones equipped to deliver video displayed at 1.5K resolution and 120fps. More specifically, Pixelworks' MotionEngine® technology upgrades the video experience by increasing the video frame rate to 120fps, making the visual experience smoother when watching sports events like car racing. Additionally, the integrated AI super resolution technology enables 1.5K high-resolution for videos, making the picture much clearer. The latest P4 series smartphones also feature always-on HDR, which significantly enhances image brightness and contrast through real-time SDR to HDR conversion. This unique combination of performance capabilities allows end users to experience immersive visual effects in popular video applications, such as YouTube, PLAYit, Netflix, and MX Player.

"Since the launch of the realme P series smartphones, we've received unanimous praise from international users," said Francis Wong, Chief Marketing Officer, realme India. "We have once again worked together with Pixelworks, this time to incorporate the X7 Gen 2 visual processor in the realme P4 series of smartphones, marking a new exploration of visual enhancement technology in the AI era. Building on the successes of the previous generations, these two smartphone models have been comprehensively optimized and upgraded in terms of core configuration and function expansion to bring our users a more outstanding video and gaming visual experience."

"We are thrilled that international users can experience the latest frame rate index," said Wensheng Cao, founder of Tencent WeTest PerfDog. "Historically, mobile game performance testing relied on imperfect indicators, such as average frame rate and frame stability index, for the frame rate test range. Through our collaboration with Pixelworks, we have now expanded the dimensions of testing data to make testing both more scientific and accurate. This servers to benefit the entire ecosystem with better informed game developers, players, and reviewers."

Commenting on this cooperation, Jun Fang, Vice President of Pixelworks and General Manager of Mobile Business Unit, stated, "With the flagship-like performance and attractive cost profile, the realme P series smartphones have always been popular among young users. Pixelworks is committed to providing users with a high-quality visual experience through advanced technologies and products. We have worked closely together with realme from the very beginning, including research and development of optimized visual solutions for consumers. As a result, Pixelworks has deeply integrated AI technology within its visual processor solution to further enhance the rendering capabilities of realme's latest P4 series smartphones. We look forward to continued in-depth cooperation in the future to bring a more stunning visual feast to global users."

About realme:
realme is a technology brand committed to delivering cutting-edge innovations and premium designs to young users. Founded in 2018, realme has rapidly expanded to 61 global markets, achieving over 300 million users by 2025 and ranking among the top five smartphone brands in 21 countries. In just five years of its inception, realme has crossed a milestone of 100 million shipments in India and 300 million globally. With a vision to become a sustainable enterprise and a mission to be a tech popularizer for the young generation, exceeding users' expectations, realme embodies the spirit of "Make it real."

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 more than 20 years of history delivering image processing innovation to leading providers of consumer electronics, professional displays and video streaming services.

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

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