Third generation APTINA? A-PIX? technology enhances mobile imaging solutions

I-Micronews

Aptina, the leading innovator of CMOS imaging technology today announced two product additions to its industry leading portfolio that leverage the company's recent breakthrough in 1.4-micron pixel technology. The 3-megapixel MT9T113 and 5-megapixel MT9P017 image sensor solutions announced both highlight Aptina's third generation Aptina™ A-Pix™ technology developed to provide best-in-class performance. The MT9T113 provides the mobile market with a cost-effective, system-on-chip (SOC) 3-megapixel solution with advanced functionality, while the MT9P017 sensor with its 5-megapixels and superior pixel performance extends Aptina's range of advanced solutions targeting performance-oriented mobile manufacturers. The company has also announced today the news of its enhanced Aptina A-Pix technology along with its small pixel strategy. (See release entitled Aptina Details Image Sensor Pixel Technology Strategy)

The MT9T113 is a cost-effective 3MP SOC imaging solution providing interface flexibility and SOC capabilities typically found in higher end imagers. Features include JPEG thumbnail support, parallel and MIPI interfaces for ISP connection flexibility, a die size that enables a 6.5 x 6.5 mm module size, and advanced functionality like Scalado SpeedTags™ for image management. The integrated autofocus (AF) voice coil motor (VCM) driver makes this the world's first 1/5" sensor with AF capability. Additionally, the SOC provides high definition (HD) video at 720p/30fps. The MT9T113 is one of the first products to integrate third generation Aptina A-Pix technology, and delivers excellent low-light sensitivity and vibrant colors as a result of improvements in quantum efficiency and reduced crosstalk within the 1.4-micron pixel.

The MT9P017 is a 5MP mobile image sensor providing high performance and sophisticated functionality. Its ¼" optical format and small die size are well suited for integration into 6.5 x 6.5 mm modules, and it supplies parallel and MIPI interfaces as well as innovative features such as adaptive noise reduction, integrated autofocus VCM driver, two dimensional (2D) dynamic defect correction, and resampled binning for smoother video. To meet the demands of the increasingly video-centric mobile imaging market, the MT9P017 is capable of capturing HD video at 1080p/30fps or 720p/30fps. Third generation Aptina A-Pix technology was integrated into the 1.4-micron pixel to enhance performance and industry-leading image quality.

"Third generation Aptina A-Pix technology enhances and motivates new products like the MT9T113 and the MT9P017 with excellent image quality using proven technology," says **Farshid Sabet**, Vice President and General Manager of Aptina's Mobile, PC Gaming Business Unit. *"This technology ensures that our industry-leading portfolio of products provides our customers the reliable solutions and best-*

in-class performance that they expect from Aptina."

About Aptina A-Pix Technology
Aptina A-Pix is a series of advanced pixel technologies, featuring lightguide and deep photodiode, and 65 nanometer pixel design rules that cost-effectively advance pixel performance. The new, third generation Aptina A-Pix enhances quantum efficiency and minimizes cross talk to capture sharp images with vibrant colors even in the low-light conditions that challenge traditional sensors. Aptina has already shipped millions of imaging products containing earlier generations of Aptina's reliable and established FSI technology. Aptina A-Pix makes it possible for mobile phone cameras to capture quality images to compete with digital still cameras, and enables a new class of hybrid camera that combines digital still image capture with advanced high-performance HD video. Continuing with this success, Aptina is releasing a wide range of 1.4-micron products to leverage the latest advances in the third generation Aptina A-Pix technology. These new additions to the Aptina portfolio range from a high performing 14MP, targeted for DVC and high-end mobile phone handsets, to a 3MP sensor for mainstream mobile handsets.

For more information about Aptina A-Pix and frontside and backside illumination technology, download Aptina's technology white paper, An Objective Look at FSI and BSI, or check out Aptina's webcast at http://www.aptina.com/A-Pix.

Availability
Both the MT9T113 and MT9P017 are currently sampling with mass product scheduled for Q3 2010.

About Aptina
Aptina is a global provider of CMOS imaging solutions with a growing portfolio of products that can be found in all leading mobile phone and notebook computer brands as well as a wide range of products for digital and video cameras, surveillance, medical, automotive and industrial applications, video conferencing, barcode scanners, toys, and gaming. Aptina enables Imaging Everywhere™ and continually drives innovation in the market as seen with the introduction of the first 14MP CMOS image sensor for point-and-shoot and hybrid cameras (MT9F001), and the industry's first 5MP SOC with ¼" format (MT9P111). Privately held Aptina's investors include Riverwood Capital, TPG Capital and Micron Technology. For additional information on Aptina and news on technology webcasts visit www.aptina.com. Subscribe to the latest news from Aptina by copying the Aptina RSS feed into your favorite RSS reader.

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