

Aptina Imaging Enhances Technology and Product Portfolio

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San Jose, CA, Tuesday, March 04, 2008 – It doesn't stop with a new name. Aptina Imaging, a division of Micron Technology, Inc., today unveiled some new imaging technology initiatives enabling high quality picture taking experiences across the entire spectrum of applications, from the most cost-sensitive mobile phones to high-performance point-and-shoot digital cameras.

"We are bringing new opportunities and capabilities to market with our enhanced CMOS portfolio and are doing things that CCD can't do," said Bob Gove, President of Aptina. "We still see tremendous growth opportunities in CMOS imaging. Aptina will continue to penetrate new markets with new solutions, but also find ways to capitalize on mature markets, including digital still cameras and mobile handsets."

Shrinking Pixels, Maintaining Image Quality

Shrinking pixel size is important for bringing more resolution to consumer devices including digital cameras and mobile phones, while maintaining the small form factor required for these applications. Aptina has produced working samples of its 1.4-micron pixel technology, delivering excellent image quality unrivaled by the competition.

By reworking the fundamental design layout of its 1.4-micron pixel technology using proprietary processes and pixel scale optics that funnel light into the most sensitive areas of the pixel, Aptina was able to produce astonishing resolution and image quality that is on par or better than today's leading-edge 1.75 micron pixels. The pixel is based on Aptina's new 95-nanometer copper process, which both improves pixel performance and reduces the physical size of the chip, enabling smaller cameras.

Aptina will begin sampling to customers the products designed on the 1.4-micron pixel in summer 2008. Continuing its pixel performance leadership, Aptina also revealed that it is producing color images taken with a 1.2-micron pixel prototype in the lab.

Improved 1.75-micron Pixel Performance in New 9-Megapixel Sensor

Aptina also reengineered the pixel architecture in its 1.75-micron pixel, greatly enhancing performance for producing more vibrant, truer-to-the-eye pictures. Changes made to the pixel include improved fill factor, allowing more light into the pixel and making it less sensitive to lens shading; increased quantum efficiency, improving the ability of the sensor to detect light; and better dark current, which reduces noise in the dark parts of pictures.

A new 9-megapixel (MP) image sensor from Aptina is leveraging the 1.75-micron pixel architecture, delivering quality, high-resolution image capture. The sensor has a 1/2.3-inch optical format, the ideal size for pocket digital cameras and high-end handsets. Unlike a CCD, the new sensor can capture up to 15 frames per second (fps) at full resolution for ultra-fast, burst mode picture taking and can produce high-definition video of 720p (progressive) at 30 fps.

"We have received the first production orders for our 9 MP and are effectively penetrating the Japanese name-brand camera market, which has long been the leader in producing quality digital cameras and has largely focused on CCD as the image capture technology of choice," said Gove.

Revolutionizing Camera Phone Designs with New Wafer Level Camera Technology

Showing its full range of expertise in delivering the complete imaging pipeline – from image capture to output – Aptina today also announced that it is taking on a new approach to designing cameras for mobile handsets by incorporating the image sensor, optics and processing in a single, tiny package. By using its new wafer level camera (WLC) technology, Aptina is able to shrink camera solutions, or modules, by more than 50 percent when compared to existing camera solutions.

The first product designed with Aptina's WLC technology is a VGA camera developed on its high-performance pixel technology. The VGA camera can be produced as a complete system-on-chip with processing or as a sensor only. Measuring just 4 by 4 by 2.5 millimeters, the z-height of the camera enables Aptina to provide customers with the thinnest package available for today's camera phone designs – no more sacrificing sleek design for a bulky camera system. The finished product will be a popular choice as a secondary handset camera for video conferencing or as a primary camera in emerging market handsets, which otherwise couldn't support the cost of a camera.

"With our WLC technology, we are enabling a high-performance VGA complete camera solution at a price that can provide ease of design into any handset on the market, regardless how cost sensitive," continued Gove.

For editors: Additional information on Aptina's new products including sample pictures, videos and product flyers can be found in its virtual press room at http://www.aptina.com/news/press_kits.jsp.

About Aptina Imaging

Aptina Imaging, a division of Micron Technology, Inc., has long piloted the path of pixel performance in CMOS imaging, bringing high-quality picture and video capabilities to mobile phones, digital still cameras, security and surveillance cameras, PC cameras, automotive applications, and more. With its photographic eye and keen understanding of the opportunities for imaging technology, Aptina continues to drive innovation forward with its portfolio of camera solutions creating beautiful and accurate images for the world to see and share. For additional information on Aptina Imaging, visit http://www.aptina.com.

About Micron

Micron Technology, Inc., is one of the world's leading providers of advanced semiconductor solutions. Through its worldwide operations, Micron manufactures and markets DRAMs, NAND flash memory, CMOS image sensors, other semiconductor components, and memory modules for use in leading-edge computing, consumer, networking, and mobile products. Micron's common stock is traded on the New York Stock Exchange (NYSE) under the MU symbol. To learn more about Micron Technology, Inc., visit www.micron.com.

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