Micron Introduces Advanced Feature Set with New 2-Megapixel System-On-A-Chip Image Sensor for Mobile Phones

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Micron Technology, Inc., a leading, global memory and image sensor supplier, today announced the launch of their new 2-megapixel system-on-a-chip (SOC) sensor featuring DigitalClarity technology. The new ultra low-power MT9D111 integrates Micron's advanced 2-megapixel sensor core with a new generation of image processing technologies in one monolithic integrated circuit. The MT9D111 is currently sampling to select customers with general sampling expected in April.

The MT9D111 introduces advanced features that enable easier design implementation and faster time-to-market for mobile phone makers. This camera-on-a-chip SOC device provides newly-incorporated functions, including an integrated microcontroller that achieves more efficient image processing, global reset to avoid image bending, and pixel binning for enhanced image viewing. The microcontroller also increases the device's flexibility to adjust color and other image processing functions, and the integrated auto focus and JPEG compression save design cost and space normally incurred by a required companion chip. The MT9D111 is one of the first SOC devices with integrated and flexible auto focus and real-time JPEG compression.

"Micron's new SOC sensor integrates advanced technology that delivers expanded functionality to better support handset manufacturers' product offerings at a time when consumers are demanding superior imaging quality," said Farhad Rostamian, Micron's Strategic Marketing Director.

“Handset manufacturers require flexible solutions without compromising image quality, ease of integration or time-to-market. This new sensor device is designed to provide a level of image quality and performance essentially in the same class as digital still cameras with similar resolution. Additionally, the ease of use and overall performance of the new device has been validated by our leading customers.”

“The novelty of cameras in phones has evolved into customers demanding lasting picture quality”, said Rostamian. “People want a photo they can be proud of. On a separate yet equally compelling level, service providers want their customers to carry a camera phone that captures images they’ll want to email – again and again. That requires more than just a higher resolution sensor. It demands one that can capture a high quality image in any lighting condition, and process that image into a compressed format the handset can then store and transmit – and do it all at a low-power threshold. Micron’s MT9D111 achieves these performance requirements.”

Additional features enabling new handset designs include: a sophisticated image flow processor, 10 bit on-chip ADC, advanced color interpolation for truer colors and sharper details; and very fast auto white balance with gray-scale detection providing better color across a wide range of lighting conditions.