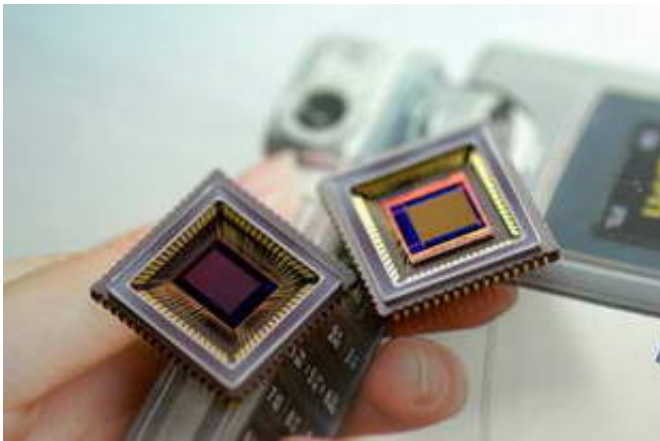


Samsung 5Mega-pixel Image Sensor Brings QSXGA Images to Handheld Devices

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Samsung Electronics Co., Ltd., the leader in advanced semiconductor technology, today announced that it has completed development of a CMOS [image sensor](#) (S5K2E1FX) with 5 megapixel (2,608 x 1,952 pixels) QSXGA resolution.

Samsung's 5M-pixel CIS performs at the same level as its charge-coupled device (CCD) counterpart, yet it operates on less power and is more price competitive. These advantages make the 5M-pixel CIS an attractive solution for image devices now being used on mobile phones as well as on digital cameras and digital camcorders.

Samsung's 5M-pixel CIS has a 1/2.5-inch lens aperture with a pixel measurement of 2.2 by 2.2 microns. Using 0.13-micron process technology, Samsung has increased the fill factor (the image sensor's measurement of light sensitivity) by over 50 percent, ensuring extremely sharp images.

The 5M-pixel CIS has a footprint at least 30 percent smaller than other models of the same resolution. This allows the camera module to be designed into ever-smaller camera phones.

A sub-sampling function that shoots VGA quality moving pictures at 30 frames per second with no deterioration of picture quality has also been incorporated to shoot faster high-resolution images. Power consumption has been minimized as well to prolong battery life.

“The new 5M-pixel CIS marks a new milestone in digital imaging excellence,” Yong-Hee Lee, vice president of Samsung Electronics' System LSI Division. “We are committed to introducing advanced imaging technologies for optimal performance on mobile and digital consumer applications.”

Samsung has also completed development of a 3.2M-pixel CIS (S5K3C1FX) for camera phones. Pixels measure 2.25 by 2.25 microns in a 1/3-inch lens aperture with serial interface applied for accelerated data processing speeds.

Market analyst firm Gartner Dataquest predicts that the global CIS market will increase from US\$2.4 billion in 2004 to US\$3.2 billion this year and surge to US\$5.6 billion by 2008.

Samsung plans to begin mass-production of the 5M-pixel CIS in the fourth quarter of 2005 and the 3.2M-pixel CIS with an embedded image signal processor (ISP) by the first half of 2006. Both at its 300mm

System LSI dedicated mass production line.

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