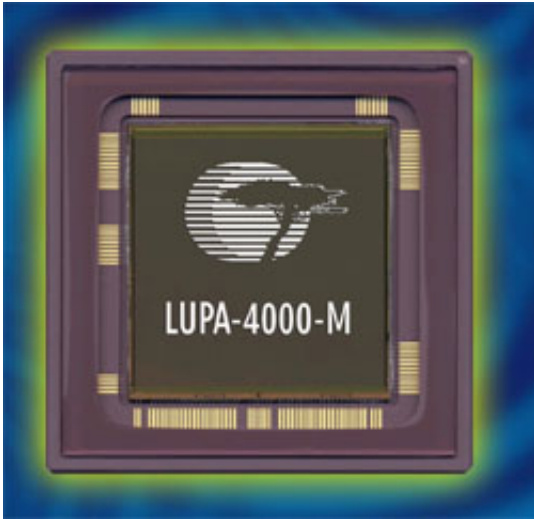


High-End 4M pixels CMOS Image Sensor

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Cypress Semiconductor Corp today announced commercial sampling of the LUPA-4000-M [CMOS](#) image sensor from recently acquired FillFactory NV. Developed to address the specific imaging needs of the professional and industrial market place, the LUPA-4000-M's target applications include machine vision, instrumentation, surveillance, biometric identification and medical imaging.

The LUPA-4000-M includes three unique features: a fully synchronous or pipelined snapshot shutter, making it possible to read one image while the next is being captured and to capture moving objects without distortion; a multiple windowing feature that enables the user to read out

only regions of interest of the image and as such increasing the effective frame rate; and a multiple slope capability that allows the user to capture scenes with a high contrast ratio without saturating the bright areas while maintaining good contrast in the dark parts. The LUPA-4000-M is formatted as 2k x 2k pixels 4M pixels with 12 x 12 μm^2 pixel size, featuring a full frame rate of 15 images-per-second and a 10-bit parallel digital output. The LUPA-4000-M is offered only as a monochrome device at this time.

“The LUPA-4000-M takes full advantage of the advantages CMOS image sensors have over CCDs: namely, high speed, dynamic range and windowing capability,” said Lou Hermans, Senior Marketing Director for FillFactory. “These are all features you need for security, and machine vision and the other applications for which the LUPA-4000 was designed. Our relationship with Cypress—a pioneer and world leader in CMOS technology—will help us migrate our technology into a much broader range of markets.”

FillFactory is a good strategic fit for Cypress on two fronts: key end markets and manufacturing. The CMOS image sensors will effectively double sales into the cell phone market, where Cypress is a leading supplier of low-power memories. They will expand Cypress’s market in digital still cameras, where it currently sells a broad array of timing solutions. In the automotive market, where Cypress sells configurable microcontrollers and memories, the image sensors will augment the market. The CMOS manufacturing process used to make image sensors is similar to that used to manufacture memories, which make FillFactory a great fit with Cypress’s core manufacturing capabilities.

Price and Availability

Samples of the LUPA-4000-M are available now for \$960 in a PGA package; full production is expected in Q1/2005. An evaluation kit for the LUPA-4000M will be available Q1/2005, and will be priced around

\$5,000.

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