Cypress Introduces Versatile CMOS Image Sensor with Pipelined Snapshot Shutter Capability
Last Updated: 11/02/2009

New 1.3-Mega-Pixel VITA 1300 Image Sensors Delivers 150 fps at Full Resolution For Fast, Reliable Machine Vision and Other Applications

SAN JOSE, Calif., November 3, 2009 – Cypress Semiconductor Corp. (NYSE: CY), today introduced a high-sensitivity, high-speed CMOS image sensor targeted for the machine vision market. The new 1.3-megapixel VITA 1300 sensor combines a pipelined and triggered global snapshot shutter with a high frame rate of 150 frames-per-second (fps) for undistorted images and fast readout. The pipelined snapshot shutter capability enables exposure during read-out to reduce motion blur. The sensor also works in a rolling shutter mode with Correlated Double Sampling (CDS) to reduce noise and increase dynamic range. The new VITA 1300 family builds on the success of Cypress’s IBIS5 imagers in the machine vision market, and also addresses barcode scanning, motion monitoring and security applications.

The VITA 1300 sensor offers a 1/2-inch optical format with monochrome or color digital output. The sensor has four 10-bit digital Low Voltage Differential Signaling (LVDS) outputs that enable transfer of image data over a standard industry protocol at low power and low noise. It also has a multiple slope capability to maintain good contrast in shadowed regions without saturating bright areas in scenes with a high contrast ratio. Cypress will demonstrate its industry-leading custom and standard CMOS image sensor solutions at VISION 2009 in Stuttgart, Germany from November 3-5, in Hall 6, stand C 23. For more information on the VITA 1300 CMOS image sensor visit www.cypress.com/go/vita1300 or email imagesensors@cypress.com.

“Cypress has established a leadership position in the machine vision market by providing a broad portfolio of high-performance CMOS image sensors with strong customer support,” said Georges Hiltrop, general manager of Cypress’s image sensor business unit. “The VITA 1300 sensor adds a pipelined shutter, over 5X faster frame-rate and other innovative features to the strong foundation the IBIS5 has built for machine vision applications.”

The VITA 1300 sensor has 1280 x 1024 active pixels with 4.8 µm x 4.8 µm pixel size. The image sensor integrates a programmable offset and gain amplifier for each channel of the LVDS outputs. Each channel runs at a 620 Mbps, which results in 150 fps frame rate at full resolution. Higher frame rates can be achieved by windowed or sub-sampled readout modes. Settings of the sensor are programmable over the SPI interface. All internal exposure and timing of read-outs are generated by an on-board sequencer. Extended optical dynamic range can be achieved by setting multiple slopes. The VITA 1300 sensor also features a 10-bit on-chip analog-to-digital converter (ADC) for digital output and on-chip timing control for easy application development. An alternative data output is available through a single 10-bit parallel CMOS data output, operating at 62 Msps.

Availability
Samples of the VITA 1300 image sensor are expected to be available in February 2010, with production devices expected in the fourth quarter of 2010.

Cypress Image Sensors
Cypress offers standard and customized CMOS image sensors for consumer as well as industrial and professional applications. Consumer applications include solutions for fast growing high-speed machine vision, motion monitoring, medical imaging, intelligent traffic systems, security, and barcode applications. Cypress's customized CMOS image sensors are characterized by very high pixel counts, large area, very high frame rates, large dynamic range, and high sensitivity.

CMOS image sensors complement Cypress's technology and market strengths and expand Cypress's existing presence in numerous complementary markets where it sells a broad array of timing and USB solutions, configurable microcontrollers and memories.

About Cypress
Cypress delivers high-performance, mixed-signal, programmable solutions that provide customers with rapid time-to-market and exceptional system value. Cypress offerings include the flagship PSoC® programmable system-on-chip families and derivatives such as PowerPSoC® solutions for high-voltage and LED lighting applications, CapSense® touch sensing and TrueTouch™ solutions for touchscreens. Cypress is the world leader in USB controllers, including the high-performance West Bridge® solution that enhances connectivity and performance in multimedia handsets. Cypress is also a leader in high-performance memories and programmable timing devices. Cypress serves numerous markets including consumer, mobile handsets, computation, data communications, automotive, industrial and military. Cypress trades on the NYSE under the ticker CY.
symbol CY.* Visit Cypress online at [www.cypress.com](http://www.cypress.com).

* Beginning November 12, Cypress will trade on the NASDAQ under the same ticker symbol.

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