

New full HD CMOS image sensor delivers high-resolution imagery to surveillance and automotive markets

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Toshiba America Electronic Components, today announces its newest device for the security/surveillance and automotive markets, a full HD (1080p) CMOS image sensor with industry-leading 100dB high dynamic range (HDR) , fast frame rate of 60 frames per second (fps) and also

featuring better color reproduction in low-light conditions with color noise reduction (CNR) technology. The [TCM5117PL](#) is a CIS-type 1/3 inch optical format image sensor providing high-resolution picture quality in low-to-bright light conditions making it ideal for implementation in security/surveillance cameras and automotive systems.

"In the security/surveillance markets conventional CCD-based analog systems are rapidly being switched over to CMOS-based systems which better support security and the development of the [network infrastructure](#)," says Andrew Burt, vice president of the Analog and Imaging Business Unit, [System LSI](#) Group at TAEC. "As such, we expect demand for these types of high-resolution CMOS image sensors to double in the next couple of years for both security/surveillance and automotive applications."

Toshiba's single-frame, alternate-row, dual-exposure HDR implementation in the TCM5117PL is well suited for capturing fast-moving objects compared to conventional multi-frame systems. With frame rates at 30 fps for conventional multi-frame systems, the single-frame approach, at 60 fps, promotes faster, less blurry and higher-quality images especially in high-contrast light conditions. The 2.7 um pixel size of the TCM5117PL, combined with the CNR technology, is highly sensitive, and therefore offers better visibility and color-rich images in low-luminescent environments. In addition, the TCM5117PL is designed for long-term use, operating 24 hours a day.

The TCM5117PL has a $3.3\pm 0.3V$ single-power supply and comes in a 10.5 x10.0 mm P-FLGA80 package. The device supports RAW10/RAW12 data formats.

Samples of the TCM5117PL full HD [CMOS image sensor](#) are available Q2/2013. Mass production is scheduled for Q3/2013. Sample pricing is

set at \$ 35 (U.S.).

Source: Toshiba

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