Toshiba's 2-megapixel CMOS image sensor for vehicles mitigates LED flicker

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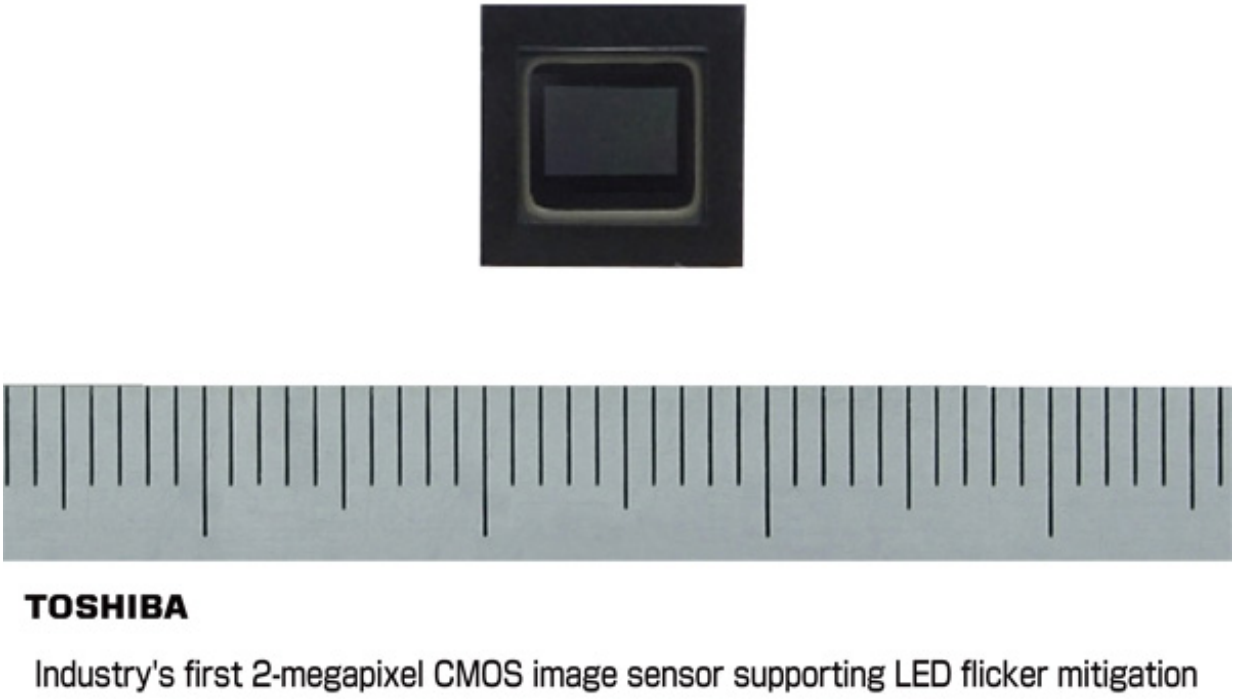

Toshiba Corporation today announced that it has developed a new 2-megapixel (MP) CMOS image sensor for automotive cameras,

"CSA02M00PB", equipped with the industry's first LED flicker mitigation function. Sample shipments start in March, 2016.

The new sensor will be exhibited at the 22nd ITS World Congress 2015 in Bordeaux, France, from October 5 to 9.

The new 2MP sensor is equipped with Toshiba's original LED flicker (pulsed LED) mitigation circuit to minimize image flicker caused by LED light sources. When recording LED traffic lights and signs with conventional CMOS image sensors, the output images often flickers, preventing an accurate sensing function. Toshiba's new sensor mitigates the flicker and delivers clear images for faster, more accurate image sensing.

The sensor also adopts Toshiba's original next-generation HDR (High Dynamic Range) system and BSI process, which together record high-precision images. Toshiba's next-generation HDR system uses the company's single frame method for clear images free of the degraded resolution and blown-out highlights typical of high contrast-light conditions. The BSI process, first brought to automotive image sensors by Toshiba, makes it possible to shoot brighter pictures with higher image quality in low light conditions.

The new sensor integrates functions to meet the requirements of ASIL, the Automotive Safety Integrity Level intended to protect life, and supports failure detection, report flagging and control of vehicles. It is also compliant with AEC-Q100 (Grade 2) and is suited both for front end sensing cameras for the Advanced Driving Assistance System (ADAS) and the latest viewing applications, such as e-Mirror and CMS (Camera Monitor System).

With increasing concerns for road safety, the importance of advanced driving assistant systems is growing, and will be further spurred by

future advances in autonomous cars. Toshiba foresees three-fold growth in the automotive CMOS image sensor market in the period to 2020. Toshiba will continue to develop its automotive CMOS image sensor business to fully meet expanding market requirements.

More information: For further information about this product, please visit toshiba.semicon-storage.com/in … p.jsp?pid=CSA02M00PB®ion=apc&lang=en

Provided by Toshiba Corporation