



Toshiba launches CCD linear image sensor with enhanced performance

New device offers 5340-pixel by 3-line resolution for office automation and industrial applications

Düsseldorf, Germany, 18th June 2019 – Toshiba Electronics Europe GmbH has just launched a new lens reduction type, 5340-pixel by 3-line colour CCD linear image sensor for office automation and industrial equipment that realizes 24 lines per millimetre resolution for an A4-size document.

More and more users want A4-size multifunction printers that can deliver the same high image quality and high-speed operation as A3-size models. This is especially true for scanning objects other than documents such as three-dimensional objects with very high reflectance and other types of shiny objects. Scanning these objects with conventional lens reduction type CCD linear image sensors often results in blooming of the sensor and horizontally streaked images. As a result, the output signal voltage of the sensor in the blooming area often exceeds the maximum input voltage range of the analogue front-end IC.

Toshiba's new TCD2569BFG offers high image quality with less colour registration by reducing the spacing between pixel arrays (red-green, green-blue). Each of the pixels in the 5340 pixel by 3-line array measures 5.25µm x 5.25µm. A built-in sample and hold

circuit lengthen the video output signal period of the sensor and contributes to easier design of high-speed scanners for use in office automation equipment and industrial equipment. Additionally, 4V saturation output voltage in the CCD shift register reduces any blooming. Installing a clipping function via a clamp circuit ensures the output signal voltage is held below 1.8V, which prevents output signal voltage from exceeding the maximum input voltage range of the analogue front-end IC.

The device operates from a power supply in the range 9.5V to 10.5V and can operate at frequencies up to 35MHz.

Mass production shipments of the TCD2569BFG has started.

Follow the link below for more information on the new sensor:
<https://toshiba.semicon-storage.com/eu/product/sensor/linear-sensor/detail.TCD2569BFG.html>

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About Toshiba Electronics Europe

[Toshiba Electronics Europe GmbH](#) (TEE) is the European electronic components business of [Toshiba Electronic Devices and Storage Corporation](#). TEE offers European consumers and businesses a wide variety of innovative hard disk drive (HDD) products plus semiconductor solutions for automotive, industrial, IoT, motion control, telecoms, networking, consumer and white goods applications. The company's broad portfolio encompasses integrated wireless ICs, power semiconductors, microcontrollers, optical semiconductors, ASICs, ASSPs and discrete devices ranging from diodes to logic ICs.

TEE has headquarters in Düsseldorf, Germany, with branch offices in France, Italy, Spain, Sweden and the United Kingdom providing design, manufacturing, marketing and sales. Company president is Mr. Tomoaki Kumagai

For more company information visit TEE's web site at www.toshiba.semicon-storage.com.

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