

Toshiba's Visconti™4 Image Recognition Processor Selected by Leading Chinese Manufacturer for ADAS Solution

Düsseldorf, Germany, 11th August 2020 – Toshiba Electronics Europe GmbH announces that parent company Toshiba Electronic Devices & Storage Corporation communicated today that Zhejiang Asia-Pacific Mechanical & Electronic Co. Ltd. (APG), one of China's leading manufacturers of vehicle braking systems, will deploy the Visconti™4 image-recognition processor in its next generation advanced driver assistance system (ADAS). This is the first time that a Visconti™ family processor will be mass-produced for a company outside Japan.

The China-New Car Assessment Program, safety testing operated by the government's China Automotive Technology and Research Center Co., introduced evaluation of emergency braking systems in 2018. The decision recognized the growing number of vehicles incorporating ADAS functions on China's roads, with the Chinese market for vehicle-mounted cameras expected to grow fourfold from 2019 to 2030, to almost US\$6.1 billion^[1].

The Visconti™4 image recognition processor integrates eight media processing engines, allowing it to execute eight applications simultaneously. It detects and analyzes camera-generated images, and can recognize traffic lanes; nearby vehicles, both parked and moving; traffic signs and signals; the headlights of oncoming vehicles; plus the most vulnerable road users of all, bicyclists and pedestrians.

Visconti™4 integrates a Toshiba-developed image recognition algorithm, Enhanced CoHOG Accelerator, that refines processing of differences in luminance between objects and their backgrounds, significantly improving detection of pedestrians at night and in low light conditions. Visconti™4 also consumes less power than CPUs or GPUs because it executes image recognition on the hardware itself.

The versatility of Visconti™ family image-recognition processors positions them for use in diverse applications other than vehicles. They are already integrated into multi-function image sensors and surveillance camera systems, and are under consideration for deployment in construction and agricultural machinery and trains.

Notes:

[1] Yano Research Institute Ltd. "ADAS/Autonomous Driving System Sensors Market in China" Released on 11/05/2019

* Visconti™ is a trademark of Toshiba Electronic Device & Storage Corporation.

* All other company names, product names and service names may be trademarks of their respective companies.

About Toshiba Electronics Europe

[Toshiba Electronics Europe GmbH](#) (TEE) is the European electronic components business of [Toshiba Electronic Devices and Storage Corporation](#) (Toshiba). 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, 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. The 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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