



# Toshiba launches second product in its SmartMCD series for automotive dual brushed DC motor applications

Integrated solution for efficient and precise dual DC motor control

**Düsseldorf, Germany, 24<sup>th</sup> June 2025** – Toshiba Electronics Europe GmbH ("Toshiba") starts sample shipment for the TB9M001FTG, the second product in the innovative Smart Motor Control Driver (SmartMCD™) series. This highly integrated device is specifically designed to deliver efficient and accurate control of brushed DC motors in automotive applications, including electric sunroofs, wipers, powered windows, and adjustable seats.

The SmartMCD™ TB9M001FTG integrates four low-side drivers that function as relay drivers, enabling forward and reverse control of two brushed DC motors when using single-pole double-throw (SPDT) relays. In addition, the device features a built-in microcontroller (MCU) with an Arm® Cortex®-M0 core, 192kB of Flash memory and an additional 16kB of Data Flash. It also includes two high-side drivers for supporting 5V and 12V loads to external components, a LIN-transceiver for in-vehicle communication, and a fully integrated power management system that generates all the required voltage levels from the car battery. All these functions are integrated into a compact VQFN48 package, measuring just 7mm x 7mm (typ.), enabling engineers to realise more compact system designs and reduce component count.

The TB9M001FTG is AEC-Q100 (Grade 1) qualified and meets ASIL-A requirements. It includes robust safety features such as built-in error detections for overcurrent (low-side driver, high-side driver), overvoltage, undervoltage, and thermal shutdown protection.

Sample shipments have commenced, with mass production of the SmartMCD TB9M001FTG scheduled for December 2025. Toshiba will continue expanding its lineup of SmartMCD series products for automotive DC and BLDC motor control applications. Additional information can be found on the Toshiba website: <a href="https://toshiba.semiconstorage.com/eu/semiconductor/product/automotive-devices/detail.TB9M001FTG.html">https://toshiba.semiconstorage.com/eu/semiconductor/product/automotive-devices/detail.TB9M001FTG.html</a>



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### **About Toshiba Electronics Europe**

Toshiba Electronics Europe GmbH (TEE) offers European consumers and businesses a wide variety of hard disk drive (HDD) products plus semiconductor solutions for automotive, industrial, IoT, motion control, telecoms, networking, consumer, and white goods applications. Next to HDDs, the company's broad portfolio encompasses power semiconductors and other discrete devices ranging from diodes to logic ICs, optical semiconductors as well as microcontrollers and application specific standard products (ASSPs) amongst others.

In addition, TEE also offers SCiB™ battery cells and modules with lithium titanium oxide (LTO) for heavy-duty applications and Silicon Nitride (SiN) ceramic substrates used in power semiconductor modules, inverters, and converters for their heat dissipation characteristics and strength.

TEE has its headquarters in Düsseldorf, Germany, with branch offices in France, Italy, Spain, Sweden and the United Kingdom providing marketing, sales and logistics services.

Visit Toshiba's websites at www.toshiba.semicon-storage.com, www.scib.jp/en and www.toshibatmat.co.jp/en/ for further company and product information.

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