



10A H-Bridge Motor Driver ICs from Toshiba Fully Optimised for Automotive Deployment

Innovative design enables microcontroller port reduction via daisy-chain connection function

Düsseldorf, Germany, 10th December 2020 – Toshiba Electronics Europe GmbH (“Toshiba”) has just announced two new driver ICs for brushed DC motors. The TB9054FTG and TB9053FTG utilise advanced DMOS FET technology to achieve a low $R_{DS(on)}$ value. These H-bridge devices are AEC-Q100 Grade 1 qualified and support temperatures up to 150°C junction temperature.

Thanks to greater functional integration alongside streamlining of interfaces (e.g., no external capacitor is necessary for charge-pump operation), the new Toshiba driver ICs have the capacity to significantly contribute to the downsizing of automotive electronic control units (ECUs). High-precision motor control can be executed via use of just the SPI interface (or through direct PWM control if preferred). This enables port reductions in the host microcontroller to be realised. In addition, built-in diagnostics allow ongoing performance and functional observation. Current monitoring and current limiting features are also incorporated.

TB9053FTG is available in a QFN40 thermally enhanced power package with an extraordinary low R_{th} of just 0.67K/W. Over-current, over-temperature and open load protection mechanisms are all included. Among the key applications for these driver ICs are ETC, EGR, power mirror folding, small fans, grill shutter, camera or OBC lid operation, plus soft power door opening/closing systems.

For more information, please visit:

<https://toshiba.semicon-storage.com/eu/semiconductor/product/automotive-devices/detail.TB9054FTG.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](#) (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. 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.

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