



Boost efficiency and expand possibilities with Toshiba's advanced H-bridge drivers

Real-time current monitoring and versatile control for brushed DC motors and beyond

Düsseldorf, Germany, 11th February 2025 – Toshiba Electronics Europe GmbH ("Toshiba") enhances motor control solutions by launching two single-channel H-bridge drivers for brushed DC motors. These new drivers, TB67H453FNG and TB67H453FTG, feature maximum motor output ratings of 50V and 3.5A, ensuring they can handle a wide range of DC motor driving applications and combine robust performance with advanced features, designed to optimise efficiency and broaden application possibilities.

Central to these drivers is a built-in current monitoring function that enables real-time feedback. This allows external devices such as CPUs and microcontrollers to track the load current and adjust control signals dynamically, optimising motor performance under varying conditions. In addition, the current monitoring can be used to detect torque changes and react accordingly, for example, when an endpoint is reached. The result is superior energy efficiency with precise motor operation and fewer external components, meeting the growing demand for smarter, more adaptable motor control in consumer and industrial equipment.

Among other error detection features, the drivers include overcurrent detection (ISD), which shuts down the output stage if the motor current exceeds a predefined limit. A fault signal indicates this abnormally high current in the motor coils and can also help to detect issues during operation, supporting predictive maintenance.

With an operational motor power supply range spanning 4.5V to 44V, the drivers are suited for an extensive array of applications, from battery-powered devices to equipment using commercial power sources. Their ultra-low current consumption in sleep mode, capped at 1µA, further enhances energy savings, making them ideal for battery-operated solutions like cordless cleaners.

In addition to motor control, including a half-bridge independent control mode unlocks new opportunities, enabling the use of these drivers in devices such as smart meters. This versatility makes the TB67H453FNG and TB67H453FTG an excellent choice for developers seeking a single, adaptable solution for multiple design requirements.

The TB67H453FNG is housed in an HTSSOP package measuring 5.0×6.4mm, while the TB67H453FTG is housed in a VQFN package measuring 3.0×3.0mm. Both packages come with an exposed thermal pad for enhanced thermal performance and reliability.

Read more about the new [TB67H453FNG](#) and [TB67H453FTG](#) H-Bridge drivers on Toshiba's website.

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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 Toshiba's 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.toshiba-tmat.co.jp/en/ for further company and product information.

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