



Toshiba release new 40V/2.0A constant current stepper motor driver IC

Latest device operates without an external sense resistor and is integrated in the newly launched Stepper 17 Click board™ from Mikroe

Düsseldorf, Germany, 14. October 2021 – Toshiba Electronics Europe GmbH (“Toshiba”) has extended its lineup of stepping motor driver ICs with a new product that is capable of constant current motor control without the need for an external current sense resistor.

The new TB67S539FTG is housed in a 5.0mm x 5.0mm QFN32 package and is suited to a wide range of constant current control stepper motor applications including those found in office automation, commercial and industrial equipment. The device is also suited to use in surveillance cameras and projectors.

Based upon Toshiba’s latest BiCD process, the new product is capable of driving bipolar stepping motors at voltages up to 40V and currents up to 2.0A. The integrated H-bridge circuit for motor control uses an Nch/Nch configuration and has a built-in charge pump circuit for output stage control.

The current detector is integrated within the QFN32 package, removing the need for an external current sense resistor. In addition, the TB67S539FTG does not require an external capacitor for the charge pump as it is also integrated. With this high level of integration, the need for PCB space is significantly reduced.

The output stage (covering the upper and lower transistor) has an $R_{DS(ON)}$ of just 0.8 Ohm, ensuring efficient operation and reducing heat generation during use. When in sleep mode, the device draws a maximum current of 1μA.

Mass production shipments of the new device start today.

Alongside the stepping motor IC, a new, compact add-on board is also available. Created in partnership with Mikroe, the Stepper 17 Click board™ is supported by a mikroSDK compliant library, with functions that simplify software development.

For more information on the TB67S539FTG stepper motor IC, please visit:
<https://toshiba.semicon-storage.com/eu/semiconductor/product/motor-driver-ics/stepping-motor-driver-ics/detail.TB67S539FTG.html>

Or, for the Stepper 17 Click board™, please visit:
<https://www.mikroe.com/blog/stepper-17-click>

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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. 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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