



## New range of Mikroelektronika Click boards™ featuring stepper motor drivers from Toshiba

*Nine new boards support easy prototyping and offer rich feature sets*

**Düsseldorf, Germany, 29<sup>th</sup> March 2022** – Toshiba Electronics Europe GmbH (“Toshiba”) announces a new series of Mikroelektronika Click boards™ featuring Toshiba bipolar stepper motor drivers to allow for quick and easy device evaluation and prototyping. The highly integrated motor drivers offer an extensive range of features and efficient operation, while saving PCB space and reducing bill of material (BoM) costs.

These motor drivers are used to control small-to-medium size stepper motors in a wide range of modern applications including 3D printers, linear actuators, textile / sewing machines, surveillance equipment, industrial equipment and point of sales (PoS) systems.

The nine motor drivers offer footprint compatibility for easy interchanging with six devices in the series offering a clock interface, while the remaining three feature a phase interface. The integrated H-bridges are capable of driving up to 50V at up to 4A and offer efficient operation due to low  $R_{DS(ON)}$  resistance.

Devices in the series support up to 1/32 micro steps to ensure smooth operation of the motor. They are designed for flexible and simple operation, operating from a single supply and providing a constant current drive. An integrated voltage regulator derives logic voltages from the motor supply voltage (VM).

Despite their small package size, the stepper motor drivers offer extensive functionality including an advance dynamic mixed decay (ADMD) function that uses the internal current feedback to control the threshold level when switching from fast to slow decay mode automatically. This leads to more effective and precise motor control.

A number of protection functions are in-built including a thermal shutdown that operates when the junction temperature ( $T_j$ ) of the IC exceeds 160°C (typ.) and an over current detection function that switches off output transistors when the output current exceeds a threshold. A dedicated output signals an over temperature or over current shutdown to a system controller.

The Click boards can be found here: <https://www.mikroe.com/click-package/multi-stepper>

Further information for all Toshiba stepper motor drivers:

#### Clock Interface devices

- [TB67S109AFTG](#)
- [TB67S269FTG](#)
- [TB67S102AFTG](#)
- [TB67S209FTG](#)
- [TB62269FTG](#)
- [TB62262FTG](#)

#### Phase Interface devices

- [TB67S101AFTG](#)
- [TB67S261FTG](#)
- [TB62261FTG](#)

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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](http://www.toshiba.semicon-storage.com).

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