Updated Motor Control Studio software from Toshiba streamlines motor control solutions

Simplify the use of Brushless DC (BLDC) and Permanent Magnet Synchronous Motor (PMSM) drives

Düsseldorf, Germany, 25th March 2025 – Toshiba Electronics Europe GmbH ("Toshiba") has released MCU Motor Studio 4.0 (MMS), the latest update to Toshiba's TXZ+™ advanced class microcontroller motor control software tool and firmware.

This release of the MCU Motor Studio now adds bare-metal configurations, covering all supported devices and allowing for usage with no real-time operating system. It extends the MCU coverage with the latest Toshiba's TMPM4KNF10x group. New features implemented in this release include a change-down stage support, allowing smooth transition from vector control to sine-wave commutation (Force mode); PWM shift-2 enhancement of the 1-shunt current sensing for both vector engine (VE) based hardware control and software implemented FOC. Direction change/reverse rotation with flux observer based FOC as well as "STOP Brake" mode are also added. MMS 4.0 includes a free-run digital storage oscilloscope (DSO) for continuous real-time logging of up to four parameters to complement existing DSO one-shot real-time logging, which, in contrast, is performed over shorter time intervals with a pre-defined number of samples and sampling rate.

Compatible with Windows 11, MMS 4.0 is available for download from the Toshiba website. A planned future update will allow users to install Motor Tuning Studio (MTS), which is currently available to download as an accompanying tool, as a standalone library within MMS 4.0, thereby allowing users to conveniently access the features of both tools via a single graphical user interface (GUI).

In addition, MIKROE is planning to release the Clicker 4 Inverter Shield 2, the latest addition to the Clicker 4 series of extension boards, which will be fully supported in this new MMS 4.0 version.

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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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