



Toshiba Adds New Function-Rich Resettable eFuse to its Product Portfolio

Featuring adjustable over-voltage protection plus flagging capabilities

Düsseldorf, Germany, 2 February 2021 – Toshiba Electronics Europe GmbH (“Toshiba”) has further expanded its range of advanced eFuse ICs, with the introduction of the TCKE712BNL. This new device will ensure that the highest degrees of safety are always maintained. It is targeted at a broad spectrum of different consumer electronics goods - including cameras, cordless cleaner and power tools, cleaning robots, server, smart, speaker, thermostats and wireless chargers, etc.

While conventional fuses, such as glass tube and chip fuses, protect power supply lines by breaking if there is excessive current, eFuses provide a much more effective alternative. Unlike outdated conventional fuses, they are designed to support repeated use (being automatically reset by an internal logic signal). These devices also offer much faster responsiveness and have a greater breadth of built-in protection functions.

Exhibiting a 53mΩ on-resistance and with a trip time of only 320ns, the TCKE712BNL covers an input voltage range spanning from 4.4V to 13.2V. It is possible to adjust this device’s over-voltage threshold to fit with the specific application requirements. In addition, over-current (also adjustable), over-temperature and short-circuit protection mechanisms have all been included. A flag function transmits an external signal that will alert engineers of possible faults in the circuit design, so they can be addressed early on in the development process. Thanks to the reverse current blocking feature, there is the scope for this device to be employed in multiplexed systems.

Toshiba’s TCKE712BNL eFuse is supplied in a compact WSON10 package measuring just 3.00mm x 3.00mm, thereby taking up minimal board real estate.

For more information, please visit: <https://toshiba.semicon-storage.com/eu/semiconductor/product/power-management-ics/efuse-ics/detail.TCKE712BNL.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. The company's broad portfolio encompasses integrated wireless ICs, power semiconductors, microcontrollers, optical semiconductors, ASSPs and discrete devices ranging from diodes to logic ICs.

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