



### **Toshiba extends TC75W series of CMOS dual comparators for overcurrent detection in industrial equipment**

High-speed response times enable immediate shutdown and enhance operational safety

**Düsseldorf, Germany, 23rd April 2026** – Toshiba Electronics Europe GmbH (“Toshiba”) extends its TC75W series of CMOS dual comparators for overcurrent detection in industrial equipment, with the introduction of the TC75W71FU. Featuring high-speed response times and a full input/output range, the product enables immediate shutdown for enhanced operational safety and supports low-voltage operation. Target applications include industrial robots, photovoltaic systems, uninterruptible power supplies (UPS), and transformers.

The TC75W71FU delivers significant performance improvements over the existing TC75W56FU, particularly in propagation delay. The new device achieves a maximum delay of 45ns for low-to-high transitions and 30ns for high-to-low transitions compared to 550ns and 250ns, respectively, for the TC75W56FU. This high-speed response capability ensures that industrial systems can shut down immediately in the event of an overcurrent, thereby greatly enhancing operational safety.

To facilitate easier design integration, the TC75W71FU features a full input/output voltage range (rail-to-rail), allowing the component to operate effectively from the minimum supply voltage (GND) to the maximum supply voltage (Vcc). Furthermore, the device supports low-voltage operation with a minimum operating supply voltage of 1.8V, making it a versatile choice for a wide range of circuit requirements.

Expanding on this release, Toshiba has outlined plans for two additional models in the series, the TC75W72FU and the TC75W73FU, both scheduled to enter mass production in February 2026. The upcoming TC75W72FU will feature increased hysteresis to improve

noise immunity. The TC75W73FU will offer hysteresis and an open-drain output, enabling signal transmission to voltage domains outside the comparator's supply.

Housed in SOT-505 (SM8) packages, these comparators are suitable for industrial and consumer applications, including home appliances and power supplies. The series is rated for operation from -40 to 125°C and supports supply voltages from 1.8V to 5.5V. Toshiba will continue to develop comparators that enhance the safety and reliability of industrial equipment while expanding its product lineup to meet a wide range of customer needs.

For more information about the new CMOS dual comparators, please visit:

<https://toshiba.semicon-storage.com/eu/semiconductor/product/linear-ics/operational-amplifiers-and-comparators/detail.TC75W71FU.html>

###

#### **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 SCiB™ battery cells and modules with lithium titanium oxide (LTO) for heavy-duty applications.

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](http://www.toshiba.semicon-storage.com), [www.scib.jp/en](http://www.scib.jp/en) and [www.toshiba-tmat.co.jp/en/](http://www.toshiba-tmat.co.jp/en/) for further company and product information.

#### **Contact details for publication:**

Toshiba Electronics Europe GmbH, Hansaallee 181, D-40549 Düsseldorf, Germany

Tel: +49 (0) 211 5296 0

Web: [www.toshiba.semicon-storage.com/eu/company/news.html](http://www.toshiba.semicon-storage.com/eu/company/news.html)

#### **Contact details for editorial enquiries:**

Michelle Shrimpton, Toshiba Electronics Europe GmbH

Tel: +44 (0)7464 493526

E-mail: [MShrimpton@teu.toshiba.de](mailto:MShrimpton@teu.toshiba.de)

#### **Issued by:**

Birgit Schöniger, Pretzl

Tel: +49 (0)172 617 8431

Web: [www.pretzl.com](http://www.pretzl.com)

E-mail: [birgit.schoeniger@pretzl.com](mailto:birgit.schoeniger@pretzl.com)