



Toshiba launches 600V sine-wave PWM Driver IC for three-phase brushless motors

New highly integrated device offers greater protection against voltage fluctuations

Düsseldorf, Germany, 23rd October 2019 – Toshiba Electronics Europe (“Toshiba”) today announced the launch of a new three-phase brushless motor driver for home appliances such as air-conditioners and air-purifiers. The new TB67B000AHG driver is also suited for use in a wide variety of industrial applications. This high-voltage device extends and expands the existing TB67B000 series of drivers that delivers highly energy efficient motor drive and noise reduction in a single, integrated package.

Demand is growing for high-efficiency three-phase brushless fan motors that reduce energy consumption and, particularly in emerging economies, can manage fluctuations in the supply voltage. These applications require higher-voltage PWM driver ICs to maintain high product reliability.

Toshiba’s newly developed 600V TB67B000AHG driver IC is pin-compatible with the current 500V TB67B000HG and can easily be used as a replacement or upgrade to provide greater resilience to voltage fluctuations. The motor drive output can generate

either sine-wave PWM signals or wide-angle trapezoidal commutation at frequencies between 14kHz and 23kHz, thereby achieving low-noise, low vibration operation. The device integrates a 600V/2A IGBT three-phase bridge and motor control IC into a 32.8mm x 13.5mm HDIP30 package, saving board space and system cost. Error detection functions including a current limiter, thermal shutdown, under voltage lockout (UVLO) and motor lock detection are also integrated in the compact package.

As modern applications benefit from saving space as well as efficient operation, Toshiba is also developing another 600V driver (TB67B000AFG) that is housed in a small 34-pin HSSOP package that includes a heat sink.

For more information about the new product, please visit:

<https://toshiba.semicon-storage.com/eu/product/linear/motordriver/detail.TB67B000AHG.html>

###

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. The company's broad portfolio encompasses integrated wireless ICs, power semiconductors, microcontrollers, optical semiconductors, ASICs, 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. Company president is Mr. Tomoaki Kumagai

For more company information visit TEE's web site at www.toshiba.semicon-storage.com.

Contact details for publication:

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

Tel: +49 (0) 211 5296 0 Fax: +49 (0) 211 5296 79197

Web: www.toshiba.semicon-storage.com/eu/company/news.html

E-mail: discrete-ic@toshiba-components.com

Contact details for editorial enquiries:

Michelle Shrimpton, Toshiba Electronics Europe GmbH

Tel: +44 (0)193 282 2832

E-mail: MShrimpton@teu.toshiba.de

Issued by:

Birgit Schöniger, Publitek

Tel: +44 (0) 1582 390980

Web: www.publitek.com

E-mail: birgit.schoeniger@publitek.com

October 2019

Ref. 7233/A