

Time-saving embedded tools

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Brushless 14 Click





PID: MIKROE-4648

Brushless 14 Click is a compact add-on board suitable for controlling BLDC motors with any MCU. This board features the <u>TB67B001FTG</u>, a three-phase, brushless, Hall sensorless driver IC from <u>Toshiba Semiconductor</u>. It comes with a 150-degree wide-angle commutation drive, contributing to lower vibration and motor noise, while a rotation speed up to 30,000rpm (rotations per minute when a 4-pole motor is used) can be achieved through a high-speed PWM and improved cooling. This Click board[™] makes the perfect solution for delivering quiet, cool operation to home appliances and office automation equipment.

Brushless 14 Click is supported by a <u>mikroSDK</u> compliant library, which includes functions that simplify software development. This <u>Click board</u> comes as a fully tested product, ready to be used on a system equipped with the <u>mikroBUS</u> socket.

Mikroe produces entire development toolchains for all major microcontroller architectures.

Committed to excellency, we are dedicated to helping engineers bring the project development up to speed and achieve outstanding results.



ISO 27001: 2013 certification of informational security management system. ISO 14001: 2015 certification of environmental management system. OHSAS 18001: 2008 certification of occupational health and safety management system.



ISO 9001: 2015 certification of quality management system (QMS).



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Specifications

Туре	Brushless
Applications	This Click board [™] offers an energy-saving solution and quiet motor operation in brushless DC (BLDC) motors used for various applications
On-board modules	TB67B001FTG - three-phase PWM chopper driver for sensorless brushless motors from Toshiba Semiconductor
Key Features	Sensorless drive in three-phase full-wave mode, PWM chopper control, adjustable output PWM, lead angle control, overlapping commutation, rotation-speed and lock detection, and more
Interface	GPIO,I2C
ClickID	No
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V or 5V,External

Resources

<u>mikroBUS</u>™

<u>mikroSDK</u>

Click board[™] Catalog

Click boards™

Downloads

TB67B001FTG datasheet

PCA9538 datasheet

Brushless 14 click 2D and 3D files

Brushless 14 click schematic

DAC43608 datasheet

Brushless 14 click example on Libstock

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