

## Brushless 8 Click



PID: MIKROE-4275

Brushless 8 Click is a compact add-on board suitable for controlling BLDC motors with any MCU. This board features the TC78B042FTG, a sine-wave PWM drive three-phase full-wave brushless motor controller from Toshiba Semiconductor. The TC78B042FTG has Toshiba's original automatic phase adjustment function, which secures both a high-efficiency fan motor drive and sine-wave drive that reduces noise at a wide range of motor rotation speeds, from almost 0rpm (rotations per minute) at Start-Up up to several 1.000rpm. This Click board™ makes the perfect solution for use in home appliances such as air-conditioners, air purifiers, and industrial equipment.

Brushless 8 Click is supported by a [mikroSDK](#) compliant library, which includes functions that simplify software development. This [Click board™](#) comes as a fully tested product, ready to be used on a system equipped with the [mikroBUS™](#) 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).

## Specifications

Type	Brushless
Applications	Can be used in home appliances such as air-conditioner fans, air purifiers, and industrial equipment.
On-board modules	Brushless 8 Click is based on the TC78B042FTG, a three-phase brushless motor controller that offers high efficiency over a wide rotation range without phase adjustment from Toshiba Semiconductor.
Key Features	Sine-wave PWM control, automatic lead angle control (InPAC), Hall sensor input, rotation switch, output current limit, built-in motor lock detection, and more.
Interface	Analog,GPIO,I2C,PWM
ClickID	No
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	5V

## Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click Boards™](#)

## Downloads

[Brushless 8 click 2D and 3D files](#)

[TB67Z800FTG datasheet](#)

[TC78B042FTG datasheet](#)

[Brushless 8 click schematic](#)

[DAC43608 datasheet](#)

[Brushless 8 click example on Libstock](#)

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