

## Brushless 9 Click



PID: MIKROE-4387

**Brushless 9 Click** is a compact add-on board suitable for controlling BLDC motors with any MCU. This board features the TC78B027FTG, a 1-Hall sine-wave PWM controller for three-phase brushless DC motors from [Toshiba Semiconductor](https://www.toshiba-semiconductors.com). It simplifies the motor selection by using only one Hall sensor input that can be used with either a single Hall sensor motor or the more conventional 3 Hall sensor motors. Besides, it offers energy-saving and quiet motor operation, alongside incorporated non-volatile memory and a closed-loop speed control function. This Click board™ provides optimum operating efficiency in applications such as high-velocity server fans, blowers, and pumps.

Brushless 9 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 applications such as high-velocity server fans, blowers, and pumps.
On-board modules	Brushless 9 Click is based on the TC78B027FTG, a 1-Hall sine-wave PWM controller for three-phase brushless DC motors from Toshiba Semiconductor.
Key Features	1-Hall sine-wave PWM drive, closed loop speed control, output RPM information, protection features, and more.
Interface	GPIO
ClickID	No
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V or 5V

## Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

## Downloads

[Brushless 9 click 2D and 3D files](#)

[TC78B027FTG datasheet](#)

[Brushless 9 click schematic](#)

[SSM6K513NU datasheet](#)

[Brushless 9 click example on Libstock](#)

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).