

Time-saving embedded tools

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# Brushless 24 Click





### PID: MIKROE-5478

**Brushless 24 Click** is a compact add-on board for controlling brushless DC (BLDC) motors with any MCU. This board features the <u>DRV10866</u>, a 3-phase sensorless motor driver from <u>Texas Instruments</u> with integrated MOSFETs capable of driving current up to 800mA in peak. The DRV10866 also has a 150° sensorless BEMF control scheme implemented for a 3-phase motors, alongside a synchronous rectification mode of operation that achieves increased efficiency for motor driver applications. Besides choosing the motor speed and a wide operating voltage range of up to 5V, it also has several built-in protection circuits, such as undervoltage, lock detection, voltage surge protection, and overtemperature. This Click board<sup>™</sup> makes the perfect solution for low-noise fan motor drive applications.

Brushless 24 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	Can be used for low-noise fan motor drive applications
On-board modules	DRV10866 - three-phase BLDC motor driver from Texas Instruments
Key Features	Sensorless BLDC driver, high current drive capability, low MOSFET ON resistance, integrated protection features, 150° commutation, synchronous rectification PWM operation, selectable FG, and more
Interface	PWM
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V or 5V

### Resources

<u>mikroBUS</u>™

<u>mikroSDK</u>

Click board<sup>™</sup> Catalog

Click Boards™

#### **Downloads**

Brushless 24 click example on Libstock

Brushless 24 click 2D and 3D files

DRV10866 datasheet

Brushless 24 click schematic

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