

Time-saving embedded tools

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Brushless 22 Click





PID: MIKROE-4995

Brushless 22 Click is a compact add-on board suitable for controlling brushless DC (BLDC) motors with any MCU. This board features the MTD6508, a 3-phase full-wave sensorless driver for BLDC motors from Microchip Technology. It features 180° sinusoidal drive, high torque output, and silent drive, rated for an operating voltage range including both mikroBUS[™] power rails, and comes with speed control achieved through pulse-width modulation (PWM). Besides, it features several diagnostic circuits and drive-control functions such as motor lock protection, overcurrent limitation, and thermal shutdown protection. This Click board[™] makes the perfect solution for home appliances and industrial equipment, such as cooling fans.

Brushless 22 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 home appliances and industrial equipment, such as cooling fans
On-board modules	MTD6508 - 3-phase full-wave sensorless driver for brushless DC motors from Microchip Technology
Key Features	180° sinusoidal drive for high efficiency and low acoustic noise, position sensorless BLDC driver, motor constant setting, speed control, PWM slew rate control, protection features, and more
Interface	GPIO,I2C,PWM
ClickID	No
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[™] Catalog

Click Boards[™]

Downloads

Brushless 22 click example on Libstock

Brushless 22 click 2D and 3D files

MTD6508 datasheet

MCP4661 datasheet

Brushless 22 click schematic

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