

Time-saving embedded tools

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Brushless 27 Click





PID: MIKROE-5910

Brushless 27 Click is a compact add-on board that controls DC brushless motors with any MCU. This board features the TMC6300, a power driver for BLDC/PMSM motors from TRINAMIC. It is a highly efficient low voltage, zero standby driver for 3-phase BLDC/PMSM motors with up to 2A peak current. The triple half-bridge of this driver separates the HS and LS control signals, which allow driving a PMSM or a BLDC motor. This Click board[™] makes the perfect solution for the development of IoT and handheld devices, battery-operated motors, printers, POS, toys, office and home automation devices, and more.

Brushless 27 Click is fully compatible with the mikroBUS[™] socket and can be used on any host system supporting the <u>mikroBUS[™]</u> standard. It comes with the <u>mikroSDK</u> open-source libraries, offering unparalleled flexibility for evaluation and customization. What sets this Click board[™] apart is the groundbreaking <u>ClickID</u> feature, enabling your host system to seamlessly and automatically detect and identify this add-on board.

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. OHSA5 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 the development of IoT and handheld devices, battery-operated motors, printers, POS, toys, office and home automation devices, and more
On-board modules	TMC6300 - power driver for BLDC/PMSM motors from Analog Devices
Key Features	Wide input motor voltage range, battery operation, 3-phase motors up to 2A peak current, direct bridge control for BLDC or PMSM sine-commutation, low power consumption, full protection, diagnostic interrupt output, low RDSon, and more
Interface	12C
ClickID	Yes
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V or 5V

Resources

<u>mikroBUS</u>™

<u>mikroSDK</u>

Click board[™] Catalog

Click boards[™]

<u>ClickID</u>

Downloads

PCA9538A datasheet

LMV321 datasheet

Brushless 27 click example on Libstock

Brushless 27 click 2D and 3D files

TMC6300 datasheet

Brushless 27 click schematic

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