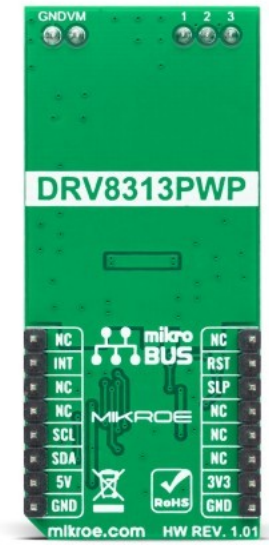
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Brushless 20 Click





PID: MIKROE-5294

Brushless 20 Click is a compact add-on board that controls brushless DC (BLDC) motors with any MCU. This board features the DRV8313, a fully integrated three-phase BLDC motor driver from Texas Instruments. It provides three individually controllable half-H-bridge drivers intended to drive a three-phase BLDC motor, solenoids, or other loads. Each output driver channel consists of N-channel power MOSFETs configured in a 1/2-H-bridge configuration. Besides, it has a wide operating voltage range from 8V to 60V, alongside several built-in protection circuits such as undervoltage, charge pump faults, overcurrent, and overtemperature. This Click board™ makes the perfect solution for driving three-phase brushless DC motors up to 2A output current rating.

DC Motor 17 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).

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Specifications

Type	Brushless
Applications	Can be used for driving three-phase brushless DC motors up to 2A output current rating
On-board modules	DRV8313 - three-phase BLDC motor driver from Texas Instruments
Key Features	Triple 1/2 H-bridge driver, high current drive capability, low MOSFET ON resistance, integrated protection features, sleep mode for standby operation, and more
Interface	I2C
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 20 click example on Libstock

DRV8313 datasheet

PCA9538A datasheet

Brushless 20 click 2D and 3D files

Brushless 20 click schematic

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