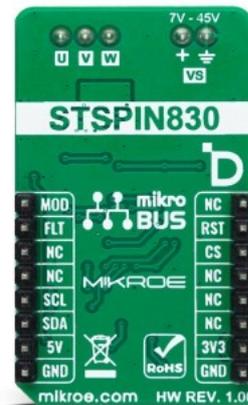


Brushless 13 Click



PID: MIKROE-5886

Brushless 13 Click is a compact add-on board that controls brushless DC motors with any MCU. This board features the [STSPIN830](#), a compact and versatile three-phase and three-sense motor driver from [STMicroelectronics](#). The driver integrates both the control logic and a fully protected low R_{Dson} triple half-bridge power stage. On this Click board™, the single-shunt architecture is enabled, and the driver embeds a PWM current limiter based on user-settable values of reference voltage and OFF time. This Click board™ makes the perfect solution for the development of industrial robotics, medical and health care, factory automation end-points, home appliances, small pumps, and more.

Brushless 13 Click is fully compatible with the mikroBUS™ socket and can be used on any host system supporting the [mikroBUS™](#) standard. It comes with the [mikroSDK](#) open-source libraries, offering unparalleled flexibility for evaluation and customization. What sets this Click board™ apart is the groundbreaking [ClickID](#) 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.
 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 for the development of industrial robotics, medical and health care, factory automation end-points, home appliances, small pumps, and more
On-board modules	STSPIN830 - compact and versatile three-phase and three-sense motor driver from STMicroelectronics
Key Features	Three-phase BLDC motor driver, current control with adjustable OOF time, flexible driving methodology between 6 inputs (high side & low side driving) and 3 inputs (direct PWM driving), low standby current consumption, non-dissipative overcurrent protection, short-circuit protection, under-voltage lockout, thermal shutdown, interlocking function, and more
Interface	I2C
ClickID	Yes
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V or 5V, External

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click Boards™](#)

[ClickID](#)

Downloads

[Brushless 13 click example on Libstock](#)

[Brushless 13 click schematic](#)

[STSPIN830 datasheet](#)

[PCA9538A datasheet](#)

[Brushless 13 click 2D and 3D files](#)

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