

Brushless 12 Click



PID: MIKROE-4357

Brushless 12 Click is a compact add-on board suitable for controlling BLDC motors with any MCU. This board features the L6235, DMOS fully integrated 3-phase motor driver with overcurrent protection from STMicroelectronics. The L6235 combines isolated DMOS power transistors with CMOS and bipolar circuits on the same chip. It features a non-dissipative overcurrent protection on the high-side power MOSFETs and thermal shutdown and includes all the circuitry needed to drive a 3-phase brushless DC motor. This Click board™ makes the perfect solution for small home appliances, robotics, battery-powered systems, small cooling fans, and many more.

Brushless 12 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).

Specifications

Type	Brushless
Applications	Can be used for small home appliances, robotics, battery-powered systems, small cooling fans, and many more.
On-board modules	Brushless 12 Click is based on the L6235, fully integrated motor driver specifically developed to drive a wide range of BLDC motors with Hall effect sensors from STMicroelectronics.
Key Features	Overcurrent detection and protection, undervoltage lockout, PWM current controller, brake function, tachometer output for speed loop, thermal shutdown, and more.
Interface	GPIO,PWM
ClickID	No
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	5V,External

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

Downloads

[Brushless 12 click example on Libstock](#)

[L6235 datasheet](#)

[LM358 datasheet](#)

[Brushless 12 click 2D and 3D files](#)

[Brushless 12 click schematic](#)

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