Brushless 11 Click

PID: MIKROE-5865

Brushless 11 Click is a compact add-on board that controls brushless DC motors with any MCU. This board features the A4931, a 3-phase brushless DC motor pre-driver from Allegro Microsystems. It drives six onboard N-channel power MOSFETs and supplies the motor with 8V up to 30V voltages. This pre-driver offers enable, direction, and brake inputs that can control motor functions and logic outputs for measuring motor rotation. This Click board™ makes the perfect solution for the development of 3-phase brushless DC motor drivers, motor control systems, robotics, industrial automation, electric vehicles, and more.

Brushless 11 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.

Specifications

Type	Brushless
Applications	Can be used for the development of 3-phase brushless DC motor drivers, motor control systems, robotics, industrial automation, electric vehicles, and more
On-board modules	A4931 - 3-phase brushless DC motor pre-driver from Allegro Microsystems
Key Features	Drives 6 N-channel MOSFETs, synchronous rectification for low power dissipation, internal UVLO and thermal shutdown circuitry, Hall element inputs, PWM current limiting, FG outputs, lock detect protection, overvoltage protection, and more
Interface	GPIO
ClickID	Yes
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V

Resources

mikroBUS™

mikroSDK

Click board™ Catalog

Click boards™

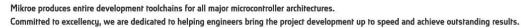## Downloads

Brushless 11 click example on Libstock

Brushless 11 click 2D and 3D files

Brushless 11 click schematic

A4931 datasheet