

DC Motor 12 Click



PID: MIKROE-5374

DC Motor 12 Click is a compact add-on board with a brushed DC motor driver. This board features the TB9054FTG, a PWM-type, dual-channel, H-bridge, brushed DC motor driver from Toshiba Semiconductor. The TB9054FTG is rated for an operating voltage range from 4.5V to 28V, with the motor controlled directly through a PWM signal or SPI serial interface. In addition, this driver allows a dual configuration with two motors with 5A current ratings per channel or one 10A channel drive in a Parallel mode of operation. It also has complete diagnostic and protection capabilities supporting robust and reliable operation. This Click board™ is suitable for driving DC brushed motors in various automotive applications such as control of the throttle valve, engine valves, retractable door mirrors, and seat heater.

DC Motor 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	Brushed
Applications	Can be used for automotive applications (AEC-Q100 Grade 1 qualified), such as control of the throttle valve, engine valves, retractable door mirrors, and seat heater
On-board modules	TB9054FTG - brushed DC motor driver from Toshiba Semiconductor
Key Features	Driver for one or two DC motors, direct PWM control or through SPI interface, selectable motor control functions and operational modes, Sleep mode and current monitoring, full protection and diagnostics, and more
Interface	I2C,PWM,SPI
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V,5V,External

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

Downloads

[TMUX1237 datasheet](#)

[TB9054FTG datasheet](#)

[PCA9538A datasheet](#)

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

[DC Motor 12 click schematic](#)

[DC Motor 12 click example on Libstock](#)

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