DC Motor 18 Click

PID: MIKROE-4786

DC Motor 18 Click is a compact add-on board that contains a brushed DC motor driver. This board features the TB9051FTG, an automotive PWM-type single-channel H-Bridge DC brushed motor driver from Toshiba Semiconductor. The Forward/Reverse/Brake mode can be selected according to PWM control signals, while the motor operation and stop mode can be chosen by an enable pin. It has a wide operating voltage range of 4.5V to 28V with an output current capacity of 5A max. Besides, it also features built-in protection against under-voltage, overcurrent, and overtemperature conditions. This Click board™ is suitable for various automotive applications such as throttle and valve control, various engine bulbs, storing of door mirrors, and seat positioning.

DC Motor 18 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 various automotive applications such as throttle and valve control, various engine bulbs, storing of door mirrors, and seat positioning
On-board modules	TB9051FTG - motor driver which incorporates the output driver for the direct drive of a DC brushed motor intended for automotive use from Toshiba Semiconductor
Key Features	Key Features Low power consumption, ultra low on-resistance, anomaly detection features, selectable motor operation, PWM control, high-side current monitoring, diagnosis indicator, and more.
Interface	Analog,GPIO,PWM
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V or 5V

Resources

mikroBUS™

mikroSDK

Click board™ Catalog

Click boards™

Downloads

DC Motor 18 click schematic

TB9051FTG datasheet

DC Motor 18 click 2D and 3D files

DC Motor 18 click example on Libstock