

Time-saving embedded tools

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# DC Motor 22 Click





#### PID: MIKROE-5189

**DC Motor 22 Click** is a compact add-on board that contains a brushed DC motor driver. This board features the <u>TMC7300</u>, a low voltage driver for one or two DC motors from <u>Analog</u> <u>Devices</u>. The TMC7300 is rated for an operating voltage range from 2V to 11V and operates up to two DC motors via simple UART control for direction, velocity, and torque. It also has a complete set of diagnostic and protection capabilities that supports robust and reliable operation, like short to ground protection, short to power supply protection and undervoltage detection. This Click board<sup>™</sup> is suitable for driving DC brushed motors and targeted at the consumer and industrial market with end applications to low voltage equipment with up to 2A (2.4A) current per motor.

DC Motor 22 Click is supported by a <u>mikroSDK</u> compliant library, which includes functions that simplify software development. This <u>Click board</u><sup>TM</sup> comes as a fully tested product, ready to be used on a system equipped with the <u>mikroBUS</u><sup>TM</sup> 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).



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## Specifications

Туре	Brushed
Applications	Can be used for driving DC brushed motors and targeted at the consumer and industrial market with end applications to low voltage equipment
On-board modules	TMC7300 - low voltage driver optimized for DC motor control from Analog Devices
Key Features	Driver for one or two DC motors, UART based control over motor velocity and direction by setting PWM voltage for each motor, control motor torque limit for both motors, full protection and diagnostics, and more
Interface	I2C,UART
ClickID	No
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V or 5V

### Resources

<u>mikroBUS</u>™

<u>mikroSDK</u>

Click board<sup>™</sup> Catalog

Click boards<sup>™</sup>

### **Downloads**

DC Motor 22 click example on Libstock

DC Motor 22 click 2D and 3D files

TMC7300 datasheet

MAX11645 datasheet

DC Motor 22 Click schematic

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