

Time-saving embedded tools

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Stepper 15 Click





PID: MIKROE-4639

Stepper 15 Click is a compact add-on board that contains a bipolar stepper motor driver. This board features the DRV8889A, an automotive stepper driver with integrated current sense and stall detection from Texas Instruments. It supports up to 1.5A full-scale current with an internal microstepping indexer, smart tune decay technology, advanced stall detection algorithm, and integrated current sensing, eliminating the need for power sense resistors. With a simple STEP/DIR interface, the device supports up to 1/256 levels of microstepping to enable a smooth motion profile. Also, an advanced stall detection algorithm allows users to detect if the motor stopped and take action as needed, improving efficiency and reducing noise. This Click board™ is suitable for driving motors in any application that demands a precise and safe step motor driver.

Stepper 15 Click is supported by a <u>mikroSDK</u> compliant library, which includes functions that simplify software development. This <u>Click board</u> comes as a fully tested product, ready to be used on a system equipped with the <u>mikroBUS</u> 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	Stepper
Applications	Can be used for driving motors in any application that demands a precise and safe step motor driver.
On-board modules	DRV8889A - integrated motor-driver solution for bipolar stepper motors from Texas Instruments
Key Features	Qualified for automotive, up to 1/256 microstepping, integrated current sense, various protection features, and more.
Interface	I2C,SPI
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V or 5V,External

Resources

<u>mikroBUS</u>™

<u>mikroSDK</u>

Click board[™] Catalog

Click boards™

Downloads

Stepper 15 click 2D and 3D files

PCA9538 datasheet

DRV8889 datasheet

Stepper 15 click schematic

Stepper 15 click example on Libstock

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