

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.

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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
ClickID	No
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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