

Time-saving embedded tools

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Stepper 21 Click





PID: MIKROE-5678

Stepper 21 Click is a compact add-on board that contains a bipolar stepper motor driver. This board features the DRV8825, a stepper motor controller integral circuit from <u>Texas Instruments</u>. It is a PWM micro-stepping stepper motor driver with up to 1/32 micro-stepping resolution and a built-in micro-stepper indexer. The driver has two H-bridge drivers and is intended to drive a bipolar stepper motor in a voltage supply operating range of 8.2V up to 45V. This Click board[™] makes the perfect solution for small stepping motors in various applications such as office automation and commercial and industrial equipment.

Stepper 21 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 small stepping motors in various applications such as office automation and commercial and industrial equipment
On-board modules	DRV8825 - stepper motor controller integral circuit from Texas Instruments
Key Features	Low power consumption, capable of controlling the bipolar stepping motor, operational in full, half, quarter, 1/8, 1/16, and 1/32 step resolutions, built-in a mixed decay mode, anomaly detection functions, expander that controls most of I/O of the stepper driver with interrupt abilities, and more
Interface	GPIO,I2C
ClickID	Yes
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[™] Catalog

Click Boards[™]

<u>ClickID</u>

Downloads

Stepper 21 click example on Libstock

PCA9538A datasheet

DRV8825 datasheet

Stepper 21 click 2D and 3D files

Stepper 21 click schematic

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