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## Stepper 12 Click





PID: MIKROE-5303

**Stepper 12 Click** is a compact add-on board that contains a bipolar stepper motor driver. This board features the <u>TB67S549FTG</u>, a two-phase bipolar stepping motor driver from <u>Toshiba</u> <u>Semiconductor</u>. It supports a PWM constant-current control drive without a current sense resistor for motor-current detection and allows full-step to 1/32 steps resolution for less motor noise and smoother control. It has a wide operating voltage range of 4.5V to 34V with an output current capacity of 1.2A maximum and several anomaly detection indicators. This Click board ™ makes the perfect solution for small stepping motors in various applications such as office automation and commercial and industrial equipment.

Stepper 12 Click is supported by a  $\underline{\mathsf{mikroSDK}}$  compliant library, which includes functions that simplify software development. This  $\underline{\mathsf{Click}}$  board  $\underline{\mathsf{mikroBUS}}^{\mathsf{m}}$  comes as a fully tested product, ready to be used on a system equipped with the  $\underline{\mathsf{mikroBUS}}^{\mathsf{m}}$  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.





health and safety management system.



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## **Specifications**

Туре	Stepper
Applications	Can be used for small stepping motors in a wide range of applications such as office automation, commercial and industrial equipment
On-board modules	TB67S549FTG - two-phase bipolar stepping motor driver with resistorless current sensing thanks to Advanced Current Detect System (ACDS) from Toshiba Semiconductor
Key Features	Low power consumption, capable of controlling one bipolar stepping motor, PWM controlled constant-current drive, operational in full, half, quarter, 1/8, 1/16, and 1/32 step resolutions, built-in a mixed decay mode, anomaly detection functions, and more
Interface	GPIO,I2C
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V,5V,External

## **Resources**

<u>mikroBUS™</u>

**mikroSDK** 

Click board™ Catalog

Click boards™

## **Downloads**

Stepper 12 click example on Libstock

TB67S549FTG datasheet

MCP1501 datasheet

PCA9555A datasheet

Stepper 12 click schematic

Stepper 12 click 2D and 3D files

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