

## Stepper 16 Click



PID: MIKROE-4751

**Stepper 16 Click** is a compact add-on board that contains a micro-stepping stepper motor driver. This board features the [NCV70517](#), an SPI and I/O configurable motor driver for bipolar stepper motors from [ON Semiconductor](#). The NCV70517 contains a current–translation table and takes the next micro–step depending on the clock signal on the NXT input pin and the status of the DIR pin. It also provides an error message if an electrical error, an undervoltage, or an elevated junction temperature is detected. This Click board™ is fully compatible with the automotive voltage requirements and ideally suited for general–purpose stepper motor applications in the automotive, industrial, and applications with fluctuating battery supplies.

Stepper 16 Click is supported by a [mikroSDK](#) compliant library, which includes functions that simplify software development. This [Click board™](#) comes as a fully tested product, ready to be used on a system equipped with the [mikroBUS™](#) 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).

## Specifications

Type	Stepper
Applications	Can be used for general–purpose stepper motor applications in the automotive, industrial, and applications with fluctuating battery supplies.
On-board modules	NCV70517 - integrated motor-driver solution for bipolar stepper motors with integrated current sense and current regulation from ON Semiconductor
Key Features	Dual H–bridge for 2–phase stepper motors, fully integrated current–sensing and current–regulation, integrated current translator, 5 step modes from full-step up to 16 micro-steps, PWM current control with automatic selection of fast and slow decay, and more
Interface	GPIO,SPI
ClickID	No
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V,External

## Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

## Downloads

[Stepper 16 click 2D and 3D files](#)

[NCV70517 datasheet](#)

[Stepper 16 click schematic](#)

[Stepper 16 click example on Libstock](#)

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).