MIKROELEKTRONIKA D.O.O, Batajnički drum 23, 11000 Belgrade, Serbia
VAT: SR105917343 Registration No. 20490918
Phone: + 381 11 78 57 600 Fax: + 381 11 63 09 644 E-mail: office@mikroe.com
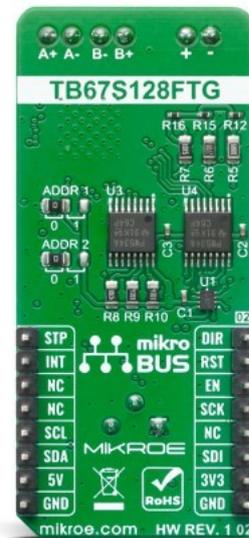www.mikroe.com

Stepper 10 Click

PID: MIKROE-4138

Stepper 10 Click is a two-phase bipolar stepping motor driver capable of controlling one stepper motor with PWM constant current drive. Click's featured chip TB67S128FTG, from Toshiba Semiconductor, fabricated with BiCD process with an output rating of 50V/5A and a built-in decoder can supply the motor with voltage of up to 44V. Toshiba's innovative technology process results in low-power consumption with low on-resistance (0.25Ω) on the integrated MOSFET output stage. The stepper motor can be driven in both directions from full step to 1/128 micro-steps. The motor driver possesses features like high-efficiency motor current control mechanism, advanced current detection system, active gain control and multi error detect functions. Stepper 10 Click has two types of interfaces for motor control drive: CLK and Serial mode.

Stepper 10 Click board™ 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.

Specifications

Type	Stepper
Applications	This Click board™ is a perfect solution for building various applications that require advanced stepper motor control, with maximum precision and reliability.
On-board modules	Stepper 10 Click uses the TB67S128FTG IC, a two-phase bipolar stepper motor driver using a PWM chopper, from Toshiba Semiconductor
Key Features	Allows full, half, quarter, 1/8, 1/16, 1/32, 1/64, 1/128 step operation, low on-resistance. MOSFET output stage, high-efficiency motor current control mechanism, built-in anti-stall architecture, built-in sense resistor less current control architecture, high voltage and current, multi error detect functions
Interface	I2C,SPI,GPIO
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V,5V

Resources

mikroBUS™ Standard specification

Libstock: mikroSDK

Click board catalog

Click boards™ Standard Page

Downloads

TB67S128FTG datasheet

TS5A23157 datasheet

Stepper 10 click 2D and 3D files

Stepper 10 click example on Libstock

Stepper 10 click schematic