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Stepper 19 Click

PID: MIKROE-6034

Stepper 19 Click is a compact add-on board for precise control over stepper motors. This board features the DRV8424, a stepper motor driver from Texas Instruments designed to drive both industrial and consumer stepper motors. The DRV8424 has dual N-channel power MOSFET H-bridge drivers, a microstepping indexer, and integrated current sensing, eliminating the need for external power sense resistors. Operating on a 5V to 30V external power supply, the DRV8424 can deliver up to 2.5A of full-scale output current, with an internal PWM current regulation scheme that includes smart tune, slow, and mixed decay options to optimize performance. Ideal for applications in multichannel system monitoring, robotics, precision positioning, and automated manufacturing processes, this Click board™ appears as a versatile solution for sophisticated stepper motor control.

Stepper 19 Click is fully compatible with the mikroBUS™ socket and can be used on any host system supporting the mikroBUS™ standard. It comes with the mikroSDK open-source libraries, offering unparalleled flexibility for evaluation and customization. What sets this Click board™ apart is the groundbreaking ClickID feature, enabling your host system to seamlessly and automatically detect and identify this add-on board.

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

Type	Stepper
Applications	Ideal for multichannel system monitoring, robotics, precision positioning, and automated manufacturing processes
On-board modules	DRV8424 - stepper motor driver from Texas Instruments
Key Features	Dual N-channel power MOSFET H-bridge drivers, microstepping indexer, integrated current sensing, high output current, integrated PWM current regulation, protection features, low power sleep mode, STEP/DIR interface, 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,External

Resources

mikroBUS™

mikroSDK

Click board™ Catalog

Click Boards™

Downloads

Stepper 19 click example on Libstock

Stepper 19 click 2D and 3D files v100

Stepper 19 click schematic v100

DRV8424 datasheet

PCA9538A datasheet