

Magnetic Rotary 5 Click



PID: MIKROE-5691

Magnetic Rotary 5 Click is a compact add-on board for accurate magnet-position sensing. This board features the AS5134, a contactless magnetic rotary encoder from ams AG for accurate angular measurement over a full turn of 360°. It is designed to provide accurate angle measurements with a simple two-pole magnet rotating over the center of the chip, featuring an integrated Hall element, analog front end, and digital signal processing. Offering a high resolution of 8.5 bits, which equates to 360 positions per revolution, it is also capable of high-speed performance, with a maximum RPM of 76875. It can accommodate a wide range of magnetic fields, from 20 to 80mT. It also has an onboard header for incremental and commutation signals of their respective A/B/I and U/V/W signals and pins for Daisy Chain Mode and OTP programming. This Click board™ is suitable for contactless rotary position sensing, rotary switches (human-machine interface), AC/DC motor position control, and brushless DC motor position control.

Magnetic Rotary 5 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	Magnetic
Applications	Can be used for contactless rotary position sensing, rotary switches (human-machine interface), AC/DC motor position control, and brushless DC motor position control
On-board modules	AS5134 - contactless magnetic rotary encoder from ams
Key Features	Accurate angular measurement over a full turn of 360°, user programmable zero position and sensitivity, high speeds, data transmission via 3-wire or analog signal, incremental and commutation signal, low power consumption, daisy chain mode, and more
Interface	Analog, SPI
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V or 5V

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

Downloads

[AS5134 datasheet](#)

[TXS0104E datasheet](#)

[Magnetic Rotary 5 click 2D and 3D files](#)

[Magnetic Rotary 5 click schematic](#)

[Magnetic Rotary 5 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).