

Magnetic Rotary 4 Click



PID: MIKROE-5223

Magnetic Rotary 4 Click is a compact add-on board for accurate magnet-position sensing. This board features the AS5047D, an SPI-configurable high-resolution rotary position sensor for fast absolute angle measurement over a full 360-degree range from [ams AG](#). The AS5047D is equipped with revolutionary integrated dynamic angle error compensation (DAEC™) with almost 0 latency and offers a robust design that suppresses the influence of any homogenous external stray magnetic field. It also comes with an onboard header reserved for incremental and commutation signals of their respective A/B/I and U/V/W signals alongside embedded self-diagnostics, including magnetic field strength, lost magnet, and other related diagnostic features. This Click board™ has been designed to support BLDC motor commutation for the most challenging automotive applications.

Magnetic Rotary 4 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 to support BLDC motor commutation for the most challenging automotive applications
On-board modules	AS5047D - rotary position sensor for fast absolute angle measurement over a full 360-degree range from ams AG
Key Features	Good resolution for motor and position control, independent output interfaces, self-diagnostics, immune to external stray field, low power consumption, highest reliability and durability, rotary magnet holder, and more
Interface	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

[Magnetic Rotary 4 click example on Libstock](#)

[AS5047D datasheet](#)

[Magnetic Rotary 4 click 2D and 3D files](#)

[Magnetic Rotary 4 click schematic](#)

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).

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Daughter Cards & OEM Boards](#) category:

Click to view products by [MikroElektronika](#) manufacturer:

Other Similar products are found below :

[MPC574XG-176DS](#) [SPC56ELADPT144S](#) [DM160216](#) [AIR FLOW CLICK](#) [TDC CLICK](#) [ADC 19 CLICK](#) [MIKROE-3591](#) [STEPPER 20 CLICK](#) [DC MOTOR 26 CLICK](#) [ANNA-B412 CLICK](#) [LED DRIVER 19 CLICK](#) [6DOF IMU 20 CLICK](#) [TWO-WIRE ETH CLICK](#) [USB UART ISO CLICK](#) [ANGLE 10 CLICK](#) [AIR MOTION CLICK](#) [EXPAND 11 CLICK](#) [THERMO 26 CLICK](#) [CLICK SHIELD FOR NUCLEO-64](#) [DIGI ISOLATOR CLICK](#) [DIFF PRESS 4 CLICK](#) [GROVE BASE FOR XIAO](#) [HEADPHONE AMP 3 CLICK](#) [EEPROM 8 CLICK](#) [SMART BUCK 3 CLICK](#) [DC MOTOR 25 CLICK](#) [STEP DOWN 10 CLICK](#) [ESP8684 CLICK](#) [LP WIFI CLICK](#) [AMBIENT 22 CLICK](#) [GYRO 9 CLICK](#) [SHUTTER CLICK](#) [SMART DOF 3 CLICK](#) [UWB 3 CLICK](#) [A5000 PLUG&TRUST CLICK](#) [WIREPAS CLICK](#) [HOD CAP CLICK](#) [DC MOTOR 12 CLICK](#) [PWR METER 3 CLICK](#) [BAROMETER 12 CLICK](#) [SPI ISOLATOR 5 CLICK](#) [EXPANSION BASE FOR XIAO WITH GROVE OLED](#) [NANO GPS 3 CLICK](#) [DC MOTOR 23 CLICK](#) [CAN FD 7 CLICK](#) [NANO POWER 3 CLICK](#) [ROUND DISPLAY FOR XIAO](#) [ULTRASONIC 5 CLICK](#) [NANOBEACON CLICK](#) [OPTO 7 CLICK](#)