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Magnetic Rotary 6 Click





PID: MIKROE-5585

Magnetic Rotary 6 Click is a compact add-on board for accurate magnet-position sensing. This board features the AS5247U, an SPI-configurable high-resolution dual 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 onboard headers reserved for incremental and commutation signals of their respective A/B/I and U/V/W signals, with a maximum resolution of 16384 steps / 4096 pulses per revolution, alongside embedded self-diagnostics features. This Click board™ has been designed to support BLDC motor commutation for the most challenging automotive and safety-critical applications.

Magnetic Rotary 6 Click is supported by a $\underline{\mathsf{mikroSDK}}$ compliant library, which includes functions that simplify software development. This $\underline{\mathsf{Click}}$ board $\underline{\mathsf{mikroSDK}}$ comes as a fully tested product, ready to be used on a system equipped with the $\underline{\mathsf{mikroBUS}}^{\mathsf{mikroBUS}}$ 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.





health and safety management system.



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Specifications

Туре	Magnetic
Applications	Can be used to support BLDC motor commutation for the most challenging automotive and safety-critical applications
On-board modules	AS5247U - 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™

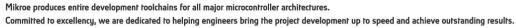
Downloads

Magnetic Rotary 6 click example on Libstock

Magnetic Rotary 6 click 2D and 3D files

AS5247U datasheet

Magnetic Rotary 6 click schematic







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