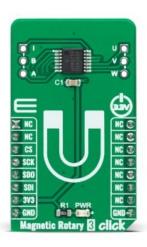


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Magnetic Rotary 3 Click



PID: MIKROE-5203

Magnetic Rotary 3 Click is a compact add-on board for accurate magnet-position sensing. This board features the AS5147, an SPI-configurable high-resolution rotary position sensor for fast absolute angle measurement over a full 360-degree range from ams AG. The AS5147 position sensor suppresses the influence of any homogenous external stray magnetic field, equipped with a revolutionary integrated dynamic angle error compensation (DAEC™) with almost zero latency. It also comes with onboard headers 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 too high, magnetic field strength too low or 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 3 Click is supported by a $\frac{\text{mikroSDK}}{\text{compliant library}}$, which includes functions that simplify software development. This $\frac{\text{Click board}^{TM}}{\text{comes}}$ comes as a fully tested product, ready to be used on a system equipped with the $\frac{\text{mikroBUS}^{TM}}{\text{mikroBUS}^{TM}}$ 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.









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Specifications

Туре	Magnetic
Applications	Can be used to support BLDC motor commutation for the most challenging automotive applications
On-board modules	AS5147 - 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, and more
Interface	SPI
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V

Resources

mikroBUS™

mikroSDK

Click board™ Catalog

Click boards™

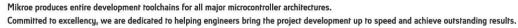
Downloads

Magnetic Rotary 3 click example on Libstock

Magnetic Rotary 3 click 2D and 3D files

AS5147 datasheet

Magnetic Rotary 3 click schematic







health and safety management system.