

AMR Angle Click



PID: MIKROE-4561

AMR Angle Click is a compact add-on board containing an anisotropic magnetoresistive measurement solution ideal for either angle or linear position measurements. This board features the ADA4571, an AMR sensor with clean and amplified cosine and sine output signals related to a rotating magnetic field angle from Analog Devices. It can provide better than 0.2° angular accuracy over 180° , and linear accuracy of 2mil (0.002 inches) over a 0.5-inch range, depending on the size of the used magnet. This Click board™ is suitable for absolute position measurement (linear and angle), contactless angular measurement and detection, magnetic angular position sensing, actuator control and positioning, and more.

AMR Angle Click supports the mikroSDK compliant library, which includes functions that simplify software development. This Click board™ comes as a thoroughly 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 absolute position measurement (linear and angle), contactless angular measurement and detection, magnetic angular position sensing, actuator control and positioning, and more.
On-board modules	ADA4571 - AMR sensor with clean and amplified cosine and sine output signals related to a rotating magnetic field angle from Analog Devices LTC1407 - 12-bit 3MSPS ADC with two 1.5MSPS simultaneously sampled differential inputs from Analog Devices
Key Features	High precision 180° angle sensor, maximum angular error of 0.5°, magnetoresistive (MR) bridge temperature compensation mode, fault diagnostic, and more.
Interface	SPI
ClickID	No
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

[AMR Angle click 2D and 3D files](#)

[AMR Angle click schematic](#)

[ADA4571 datasheet](#)

[LTC1407 datasheet](#)

[AMR Angle click example on Libstock](#)

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