

AMR Angle 2 Click



PID: MIKROE-4981

AMR Angle 2 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 ADA4570, an integrated AMR angle sensor with an integrated signal conditioner and differential outputs from Analog Devices. The ADA4570 delivers amplified differential cosine and sine output signals, with respect to the angle measuring from 0° to 180° when the magnetic field is rotating in the x-axis and the y-axis (x-y) plane, processed later by MAX11122, SAR ADC, which forwards the digital angle information to MCU via SPI interface for further processing. 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 2 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 absolute position measurement (linear and angle), contactless angular measurement and detection, magnetic angular position sensing, actuator control and positioning, and more
On-board modules	ADA4570 - anisotropic magnetoresistive (AMR) sensor from Analog Devices
Key Features	High precision 180° angle sensor, contactless angular measurement, sine and cosine differential outputs, temperature compensated AMR bridge, industrial and automotive temperature range, and more
Interface	Analog,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

[AMR Angle 2 click example on Libstock](#)
[AMR Angle 2 click schematic](#)
[MAX11122 datasheet](#)
[AMR Angle 2 click 2D and 3D files](#)
[ADA4570 datasheet](#)

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).