

## Angle 5 Click



PID: MIKROE-4270

Angle 5 Click is a compact add-on board that detects the absolute angular position of a permanent magnet, typically a diametrically magnetized cylinder on a rotating shaft. This board features the MA302, a 12-bit digital contactless angle sensor with ABZ and UVW incremental outputs from Monolithic Power Systems. The MA302 features an ABZ encoder, UVW pole pair emulation, fast data acquisition, and processing which provides accurate angle measurement at speeds from 0 to 60,000 rpm, and a magnetic field strength detection with programmable thresholds. This Click board™ is suitable for various applications such as detecting the absolute rotor position of a brushless motor in real-time, even without a target magnet, by measuring the fringe field of the rotor.

Angle 5 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 various applications such as detecting the absolute rotor position of a brushless motor in real-time, even without a target magnet, by measuring the fringe field of the rotor.
On-board modules	Angle 5 Click is based on the MA302, a 12-bit digital contactless angle sensor with ABZ and UVW incremental outputs from Monolithic Power Systems.
Key Features	Fast data acquisition, magnetic field strength detection, contactless sensing for long life, supported both end-of-shaft and off-axis, and many more.
Interface	SPI
ClickID	No
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V

## Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click Boards™](#)

## Downloads

[Angle 5 click 2D and 3D files](#)

[MA302 datasheet](#)

[Angle 5 Click schematic](#)

[Angle 5 click example on Libstock](#)

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