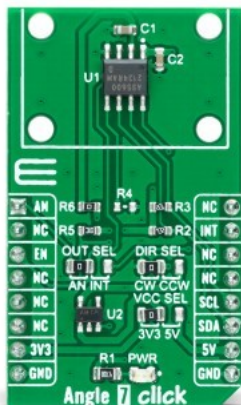


Angle 7 Click



PID: MIKROE-5196

Angle 7 Click is a compact add-on board that detects the absolute angular position of a permanent magnet. This board features the AS5600, a programmable Hall-based rotary magnetic position sensor with a high-resolution 12-bit analog or PWM output from ams AG. Based on planar Hall technology, this sensor measures the orthogonal component of the flux density (Bz) from an external magnet while rejecting stray magnetic fields. The default range of the output is from 18 to 360 degrees, where the full resolution of the device can be applied to a smaller range by programming a zero angle (start position) and a maximum angle (Stop position) through the I2C interface used for configuration and user programming of non-volatile parameters. This Click board™ is suitable for contactless potentiometers, contactless knobs, RC servos, and other angular position measurement solutions.

Angle 7 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 contactless potentiometers, contactless knobs, RC servos, and other angular position measurement solutions
On-board modules	AS5600 - rotary magnetic position sensor from ams AG
Key Features	Contactless angle measurement, highest reliability and durability, simple user-programmable start and stop positions over the I2C Interface, high-resolution output signal, great flexibility on angular excursion, selectable output, and more
Interface	Analog,I2C,PWM
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

[Angle 7 click example on Libstock](#)
[MAX40200 datasheet](#)
[AS5600 datasheet](#)
[Angle 7 click 2D and 3D files](#)
[Angle 7 click schematic](#)

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