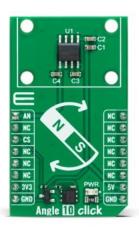


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## **Angle 10 Click**





PID: MIKROE-5387

**Angle 10 Click** is a compact add-on board that detects the absolute angular position of a permanent magnet. This board features the  $\underline{\mathsf{AS5070A}}$ , a high-resolution angular position sensor with an analog output for precise absolute angle measurement from  $\underline{\mathsf{ams}}\ \mathsf{AG}$ . Based on a Hall sensor technology, the AS5070A measures the orthogonal component of the flux density over a full-turn rotation and compensates for external stray magnetic fields with a robust architecture based on a 14-bit sensor array and analog front-end. Only a simple two-pole magnet rotating over the center of the AS5070A is required to measure the angle, providing an instant indication of the magnet's angular position. This Click board  $^\mathsf{m}$  is suitable for contactless potentiometers, knobs, and other angular position measurement solutions.

Angle 10 Click is supported by a  $\underline{\mathsf{mikroSDK}}$  compliant library, which includes functions that simplify software development. This  $\underline{\mathsf{Click}}$  board  $\underline{\mathsf{mikroBUS}}^{\mathsf{m}}$  comes as a fully tested product, ready to be used on a system equipped with the  $\underline{\mathsf{mikroBUS}}^{\mathsf{m}}$  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 for contactless potentiometers, knobs, and other angular position measurement solutions
On-board modules	AS5070A - Hall-based rotary magnetic position sensor using a CMOS technology from ams AG
Key Features	Contactless angle measurement, highest reliability and durability, high-resolution output signal, magnetic stray field immunity, great flexibility on angular excursion, analog output, and more
Interface	Analog
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V,5V

## Resources

mikroBUS™

**mikroSDK** 

Click board™ Catalog

Click Boards™

## **Downloads**

Angle 10 click example on Libstock

Angle 10 click 2D and 3D files

AS5070A datasheet

Angle 10 click schematic

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health and safety management system.