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## Compass 5 Click





PID: MIKROE-4366

Compass 5 Click is a compact add-on board that contains a 3-axis magnetometer device suitable for compass application. This board features the AK09918C, a 3-axis electronic compass with high sensitive Hall sensor technology from AKM Semiconductor. This Click board<sup>™</sup>, an I2C configurable compass, incorporates magnetic sensors for detecting terrestrial magnetism in the X, Y, and Z-axis, its equipped with a magnetic overflow monitor function, a sensor driving circuit, signal amplifier chain, self-test function, and an arithmetic circuit for processing the signal from the sensor. This Click board™ is suitable for map heading-up purposes to realize the pedestrian navigation function.

Compass 5 Click is supported by a mikroSDK compliant library, which includes functions that simplify software development. This <u>Click board™</u> comes as a fully tested product, ready to be used on a system equipped with the mikroBUS<sup>™</sup> 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	Compass, Magnetic
Applications	Can be used for map heading-up purposes to realize the pedestrian navigation function.
On-board modules	Compass 5 Click is based on the AK09918C, a 3-axis electronic compass with high sensitive Hall sensor technology from AKM Semiconductor.
Key Features	Built-in ADC with 16-bit output data for each 3-axis magnetic component, a built-in magnetic sensitivity adjustment circuit and overflow monitor function, and several operating modes with a typical sensitivity of 0.15µT/LSB, and more.
Interface	I2C
ClickID	No
Compatibility	mikroBUS
Click board size	S (28.6 x 25.4 mm)
Input Voltage	3.3V or 5V

## **Resources**

mikroBUS™

**mikroSDK** 

Click board™ Catalog

Click boards™

## **Downloads**

PCA9306 datasheet

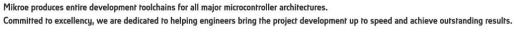
AK09918C datasheet

SPX3819 datasheet

Compass 5 click 2D and 3D files

Compass 5 click example on Libstock

Compass 5 click schematic



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