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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 $^{\text{TM}}$, 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 $^{\text{TM}}$ is suitable for map heading-up purposes to realize the pedestrian navigation function.

Compass 5 Click is supported by a $\underline{\mathsf{mikroSDK}}$ compliant library, which includes functions that simplify software development. This $\underline{\mathsf{Click}}$ board $\underline{\mathsf{mikroBUS}}$ comes as a fully tested product, ready to be used on a system equipped with the $\underline{\mathsf{mikroBUS}}$ 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.





health and safety management system.



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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





