

Time-saving embedded tools

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PID: MIKROE-4231

Compass 4 Click is a compact add-on board that can measure the three-axis magnetic field that is perfect for implementation in applications such as electric compasses. This board features AK09915, a complete 3-axis magnetic sensor with signal processing from AKM. For obtaining the sensor measurement data of the magnetic field, an I2C or SPI protocol can be used. The main feature of the sensor is the capability to measure magnetic fields within the full-scale range of ±4912 μ T, with a sensitivity of 0.15 μ T per LSB, resolution at 16bits, and built-in Noise Suppression Filter (NSF), enabling high measurement accuracy for electronic compass applications. This Click boardTM is suitable for applications such as an electrical compass, position sensing, general magnetic field measurement, and more.

Compass 4 Click is supported by a <u>mikroSDK</u> 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 <u>mikroBUS</u> 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).



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Specifications

Туре	Compass,Magnetic
Applications	Suitable for applications such as electrical compass, position sensing, general magnetic field measurement and more.
On-board modules	Compass 4 Click is based on the AK09915, a complete 3-axis magnetic sensor with signal processing from AKM
Key Features	Full scale range of ±4912 μ T, sensitivity of 0.15 μ T per LSB, resolution at 16bits, Noise Suppression Filter (NSF)
Interface	I2C,SPI
ClickID	No
Compatibility	mikroBUS
Click board size	S (28.6 x 25.4 mm)
Input Voltage	3.3V

Resources

<u>mikroBUS</u>™

<u>mikroSDK</u>

Click board[™] Catalog

Click boards™

Downloads

Compass 4 click 2D and 3D files

AK09915 datasheet

Compass 4 click schematic

Compass 4 click example on Libstock

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