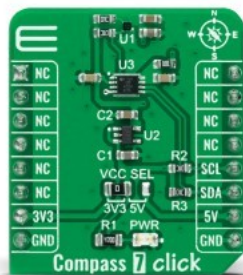


Compass 7 Click



PID: MIKROE-5190

Compass 7 Click is a compact add-on board perfect for applications like an electronic compass. This board features the [MMC5633NJL](#), a monolithic complete 3-axis AMR magnetic sensor with on-chip signal processing and an integrated digital bus from [MEMSIC](#). It can measure magnetic fields within the full-scale range of ± 30 Gauss (G) with up to 0.0625mG per LSB resolution at 20bits operation mode and 2mG total RMS noise level, enabling heading accuracy of $\pm 1^\circ$ in electronic compass applications. Also, an integrated SET/RESET function eliminates thermal variation-induced offset error (Null field output) and clears the residual magnetization resulting from powerful external fields. This Click board™ is suitable, as mentioned before, as an electronic compass but also can be used in various position sensing applications.

Compass 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	Compass,Magnetic
Applications	Can be used as an electronic compass but also can be used in various position sensing applications
On-board modules	MMC5633NJL - monolithic high-performance 3-axis AMR magnetic sensor from MEMSIC
Key Features	Low power consumption, superior dynamic range and accuracy, on-chip automatic degaussing with built-in SET/RESET function, sensitivity compensation and on-chip temperature sensor, and more
Interface	I2C
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](#)
[MMC5633NJL datasheet](#)
[MAX8511 datasheet](#)
[Compass 7 click 2D and 3D files](#)
[Compass 7 click schematic](#)
[Compass 7 click example on Libstock](#)

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