

MR Angle Click



PID: MIKROE-4634

MR Angle Click is a compact add-on board that contains a magnetoresistive sensor with an integrated amplifier. This board features the KMZ60, a high precision sensor for magnetic angle measurement with single-ended cosine and sine outputs from [NXP Semiconductors](#). The MR sensor element comes with two Wheatstone bridges for cosine and sine signals, supports functions for control circuit and signal amplification, and enables angular measurements with high accuracy by an excellent linearity and temperature drift behavior. The KMZ60 is fully automotive qualified as well as applicable for industrial and consumer applications. This Click board™ is suitable for rotor position detection for BLDC motors and Electronic Power Steering (EPS) applications, steering angle measurement, window wiper position detection, and general contactless angular measurement (e.g., throttle valves or actuators).

MR Angle 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	Magnetic
Applications	Can be used for rotor position detection for BLDC motors and Electronic Power Steering (EPS) applications, steering angle measurement, window wiper position detection, and general contactless angular measurement (e.g., throttle valves or actuators).
On-board modules	KMZ60 - high precision sensor for magnetic angle measurement from NXP Semiconductors
Key Features	High precision sensor for magnetic angle measurement, temperature compensated output signal amplitude, Power-Down mode to enable or disable the device, integrated instrumentation amplifier, fully automotive qualified, and more.
Interface	SPI
ClickID	No
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V or 5V

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

Downloads

[MR Angle click 2D and 3D files](#)

[MCP3204 datasheet](#)

[KMZ60 datasheet](#)

[MR Angle click schematic](#)

[MR Angle click example on Libstock](#)

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