

Time-saving embedded tools

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Magnetic Rotary 2 Click





PID: MIKROE-4952

Magnetic Rotary 2 Click is a compact add-on board used for accurate magnet-position sensing. This board features the <u>AEAT-9922</u>, an angular magnetic rotary sensor providing accurate angular measurement over a full 360 degrees of rotation from <u>Broadcom Limited</u>. The AEAT-9922 uses integrated Hall sensor elements with complex analog and digital signal processing within a single device. The absolute angle measurement provides an instant indication of the magnet's angular position with a selectable and one-time programmable resolution from 10 to 18 bits. It also comes with an onboard header reserved for incremental outputs of their respective A, B, and I pins, the same as the commutation U, V, and W signals. This Click board[™] represents a versatile solution capable of supporting a broad range of applications with its robust architecture to measure and deliver absolute and incremental signals.

Magnetic Rotary 2 Click is supported by a <u>mikroSDK</u> compliant library, which includes functions that simplify software development. This <u>Click board</u>^m comes as a fully tested product, ready to be used on a system equipped with the <u>mikroBUS</u>^m 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	Magnetic
Applications	Can be used as a versatile solution capable of supporting a broad range of applications with its robust architecture to measure and deliver absolute and incremental signals
On-board modules	AEAT-9922 - an angular magnetic rotary sensor manufactured with a CMOS standard process providing accurate angular measurement over a full 360 degrees of rotation from Broadcom Limited
Key Features	Programmable angular magnetic encoder, selectable angular resolution, flexible incremental ABI resolution, user- programmable zero position, direction, index width and index position, SPI interface, 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

<u>mikroBUS</u>™

<u>mikroSDK</u>

Click board[™] Catalog

Click boards[™]

Downloads

Magnetic Rotary 2 click 2D and 3D files

AEAT-9922 datasheet

Magnetic Rotary 2 click schematic

Magnetic Rotary 2 click example on Libstock

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