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MRAM 4 Click





PID: MIKROE-5838

MRAM 4 Click is a compact add-on board representing a magneto-resistive random-access memory solution. This board features the <u>EM064LX</u>, an industrial STT-MRAM persistent memory from <u>Everspin Technologies</u>. It is a 64Mb MRAM IC RAM and can achieve up to 200MHz as a single and double data rate (STR/DTR). The MRAM technology is analog to Flash technology with SRAM-compatible read/write timings (Persistent SRAM, P-SRAM), where data is always nonvolatile. It also has a hardware write-protection feature and performs read and write operations with data retention for ten years and unlimited read, write, and erase operations for the supported life of the chip. This Click board™ makes the perfect solution for the development of applications that need data storage and retrieval without incurring significant latency penalties.

MRAM 4 Click is supported by a $\underline{\mathsf{mikroSDK}}$ compliant library, which includes functions that simplify software development. This $\underline{\mathsf{Click}}$ board $\underline{\mathsf{mikroBUS}}^{\mathsf{m}}$ comes as a fully tested product, ready to be used on a system equipped with the $\underline{\mathsf{mikroBUS}}^{\mathsf{m}}$ 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.





health and safety management system.



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Specifications

Туре	MRAM
Applications	Can be used for the development of applications that need data storage and retrieval without incurring significant latency penalties
On-board modules	EM064LX - industrial STT-MRAM persistent memory from Everspin Technologies
Key Features	Security and write protections, erase capability as bulk and subsector, dedicated OTP area outside main memory, wide range SPI compatibility, low power modes, data integrity, 10 years of data retention, data endurance with unlimited read, write, and erase operations, and more
Interface	SPI
ClickID	Yes
Compatibility	mikroBUS
Click board size	S (28.6 x 25.4 mm)
Input Voltage	3.3V

Resources

mikroBUS™

mikroSDK

Click board™ Catalog

Click boards™

Downloads

MRAM 4 click example on Libstock

MRAM 4 click 2D and 3D files

EM064LXQADG13IS1R datasheet

TXB0106 datasheet

MRAM 4 click schematic

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