

Time-saving embedded tools

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# nvSRAM 4 Click





#### PID: MIKROE-4482

**nvSRAM 4 Click** is a compact add-on board that contains the most reliable nonvolatile memory. This board features the <u>CY14B101PA</u>, a 1-Mbit nvSRAM with a fully-featured real-time clock from <u>Infineon</u>. The memory is organized as 128K words of 8 bits each, where the embedded elements incorporate the QuantumTrap technology that provides highly reliable, nonvolatile data storage. It provides infinite read and writes cycles with an additional automatic backup switch. Data transfer, initiated by the user through SPI commands, takes place automatically at Power-Down. On the other hand, during the Power-Up, data is restored to the SRAM from the nonvolatile memory. This Click board<sup>™</sup> is suitable for all applications that require fast access and high reliability of stored data, and unlimited endurance.

nvSRAM 4 Click is supported by a <u>mikroSDK</u> compliant library, which includes functions that simplify software development. This <u>Click board</u><sup>m</sup> comes as a fully tested product, ready to be used on a system equipped with the <u>mikroBUS</u><sup>m</sup> 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             | SRAM  |
|------------------|---|
| Applications     | Can be used for all applications that require fast access and high reliability of stored data, and unlimited endurance.   |
| On-board modules | CY14B101PA - 1-Mbit nvSRAM memory<br>organized as 128K words of 8 bits each, with a<br>fully-featured real-time clock from Cypress<br>Semiconductor                 |
| Key Features     | 1Mbit nonvolatile static random access<br>memory, high reliability, real-time clock, high<br>speed interface, write protection, low power<br>consumption, and more. |
| Interface        | SPI   |
| ClickID          | No  |
| Compatibility    | mikroBUS  |
| Click board size | L (57.15 x 25.4 mm)   |
| Input Voltage    | 3.3V  |

### Resources

<u>mikroBUS</u>™

<u>mikroSDK</u>

Click board<sup>™</sup> Catalog

Click Boards<sup>™</sup>

### **Downloads**

CY14B101PA datasheet

nvSRAM 4 click 2D and 3D files

nvSRAM 4 click schematic

nvSRAM 4 click example on Libstock

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