

Time-saving embedded tools

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RTC 13 Click





PID: MIKROE-4794

RTC 13 Click is a compact add-on board that accurately keeps the time of a day. This board features the PCF2123, an SPI configurable real-time clock/calendar optimized for low power operations from NXP Semiconductors. The PCF2123 provides year, month, day, weekday, hours, minutes, and seconds based on a 32.768kHz quartz crystal. Data is transferred serially via an SPI interface with a maximum data rate of 6.25 Mbit/s. An alarm and timer function is also available, providing the possibility to generate a wake-up signal on an interrupt line, in addition to a programmable square-wave clock output. This Click board[™] is suitable for various time-keeping applications, including high-duration timers, metering, daily alarms, low standby power applications, and many more.

RTC 13 Click is supported by a <u>mikroSDK</u> compliant library, which includes functions that simplify software development. This <u>Click board</u> comes as a fully tested product, ready to be used on a system equipped with the <u>mikroBUS</u> 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	RTC
Applications	Can be used for various time-keeping applications, including high-duration timers, metering, daily alarms, low standby power applications, and many more
On-board modules	PCF2123 - SPI configurable real-time clock/calendar optimized for low power operations from NXP Semiconductors
Key Features	Low power consumption, clock/calendar feature, freely programmable timer and alarm with interrupt capability, battery back-up, programmable square wave clock output, 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

RTC 13 click example on Libstock

RTC 13 click schematic

RTC 13 click 2D and 3D files

PCF2123 datasheet

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