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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









## **RTC 6 click**



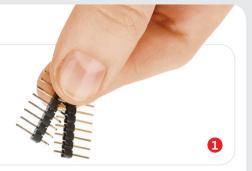


#### 1. Introduction

RTC6 click carries Microchip's MCP79410
Real-Time Clock/Calendar IC. The clock
frequency is derived from an onboard
32.768KHz crystal oscillator. Backup power
is supplied by a coin-cell Lithium battery.
RTC6 communicates with the target board
MCU through the mikroBUS™ I2C interface
[SCL, SDA] along with a multifunction pin
[MFP, in place of default mikroBUS™ INT
pin]. The board is designed to use either a
3.3V or a 5V power supply.

## 2. Soldering the headers

Before using your click board™, make sure to solder 1x8 male headers to both left and right side of the board. Two 1x8 male headers are included with the board in the package.

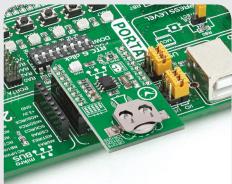




Turn the board upside down so that the bottom side is facing you upwards. Place shorter pins of the header into the appropriate soldering pads.



Turn the board upward again. Make sure to align the headers so that they are perpendicular to the board, then solder the pins carefully.



#### 4. Essential features

RTC6 click can be used to track hours, minutes, seconds, days, months, years, and weekdays. Leap years are compensated until 2399. For storing data, the MCP79411 has 64 bytes of battery-backed SRAM. The chip also features an additional kilobit of EEPROM. Additional 64 bits of protected EEPROM requires an unlock sequence to be unlocked, which makes it suitable for storing a unique ID or other critical information. The multifunctional pin [MFP] can be configured as an alarm, a square wave frequency output, or a general purpose output.



3. Plugging the board in

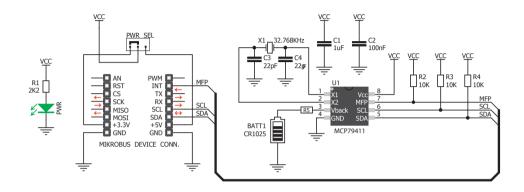
Once you have soldered the headers your board is ready to be placed into the desired mikroBUS $^{\text{M}}$  socket. Make sure to align the cut in the lower-right part of the board with the markings on the silkscreen at the mikroBUS $^{\text{M}}$ 

socket. If all the pins are aligned correctly, push the board all the way into the socket.



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#### 5. Schematic



## 8. Code examples

Once you have done all the necessary preparations, it's time to get your click board™ up and running. We have provided examples for mikroC™, mikroBasic™ and mikroPascal™ compilers on our **Libstock** website. Just download them and you are ready to start.



## 9. Support

MikroElektronika offers free tech support [www.mikroe.com/support] until the end of the product's lifetime, so if something goes wrong, we're ready and willing to help!



### 6. Dimensions



	mm	mils
LENGTH	42.9	1690
WIDTH	25.4	1000
HEIGHT*	3.9	154

\* without headers

## 7. SMD jumper



RTC6 click features an SMD jumper [zero ohm resistor] that let's you switch between a 3.3V or a 5V power supply.

#### 10. Disclaimer

MikroElektronika assumes no responsibility or liability for any errors or inaccuracies that may appear in the present document. Specification and information contained in the present schematic are subject to change at any time without notice.

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