

RTC2 click[™]

1. Introduction





RTC2 Click is an accessory board in **mikroBus**TM form factor. It features the **DS1307** serial realtime clock (RTC). It is a low-power, full binarycoded decimal (BCD) clock/calendar with programmable square-wave output signal. Board uses I²C interface for communication, and can only use **5V** power supply. Board features a 3V/230mA **lithium battery** as a backup power supply which ensures that timekeeping operation continues even when the main power supply goes OFF.

2. Soldering the headers

Before using your click board, make sure to solder the provided 1x8 male headers to both sides of the board. Two 1x8 male headers are included with the board in the package.

2



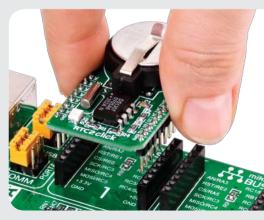


Turn the board upward again. Make sure to align the headers so that they are perpendicular to the board, then solder the pins carefully.



4. Board applications

RTC2 click is ideal for applications which require real-time clocks, calendars and programmed alarms. Communication with the board is done over standard I²C interface. The Real-Time Clock (RTC) counts seconds, minutes, hours, date of the month, month, day of the week, and year with leap-year clock function with four year calendar.



Turn the board upside down, so that

bottom side is facing you upwards. Place

shorter parts of the header pins in the

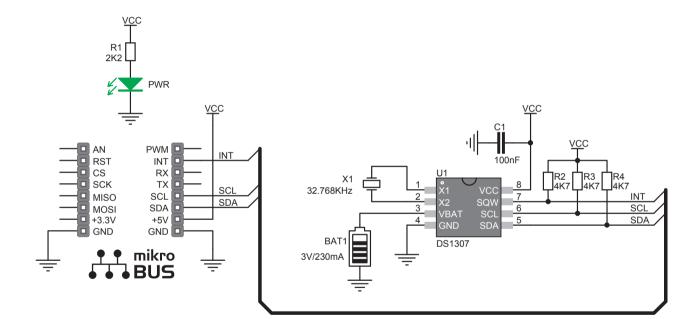
both soldering pad locations.

3. Plugging the board in

Once you have soldered the headers your board is ready to be placed into desired mikroBUS[™] socket. Make sure to align the cut in the lower-right part of the board with the markings on the silkscreen at the mikroBUS[™] socket. If all the pins are aligned correctly, push the board all the way into the socket.



5. RTC2 click Board Schematics



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. Copyright © 2012 MikroElektronika. All rights reserved.

6. Power supply - 5V only



Board is designed to use 5V power supply only. If you need to add RTC feature to your 3.3V prototype or development board, we

recommend you to use other boards such as the RTC click board:

http://www.mikroe.com/eng/products/ view/785/rtc-click/

7. Code Examples

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



8. Support

MikroElektronika offers **Free Tech Support** (www.mikroe.com/esupport) until the end of product lifetime, so if something goes wrong, we are ready and willing to help!



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Mikroe: MIKROE-948