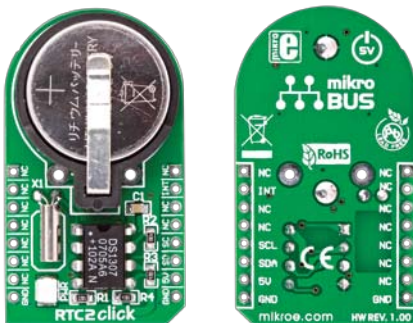# RTC2 click™

1. Introduction

RTC2 Click is an accessory board in **mikroBus™** form factor. It features the **DS1307** serial real-time clock (RTC). It is a low-power, full binary-coded 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.
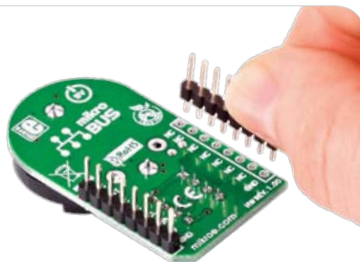
2. Soldering the headers

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.
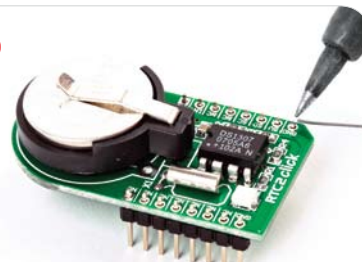
1

2

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.
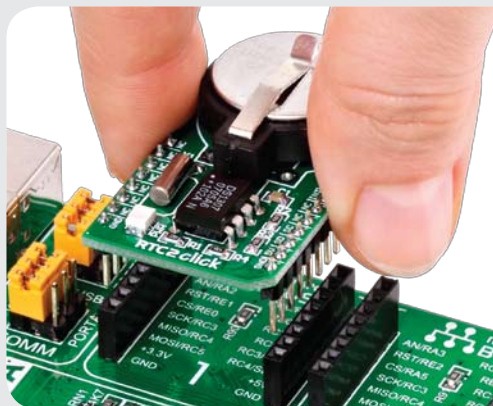
3

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

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.

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.

click™
BOARD

www.mikroe.com

RTC2 click Manual
ver. 1.00

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5. RTC2 click Board Schematics
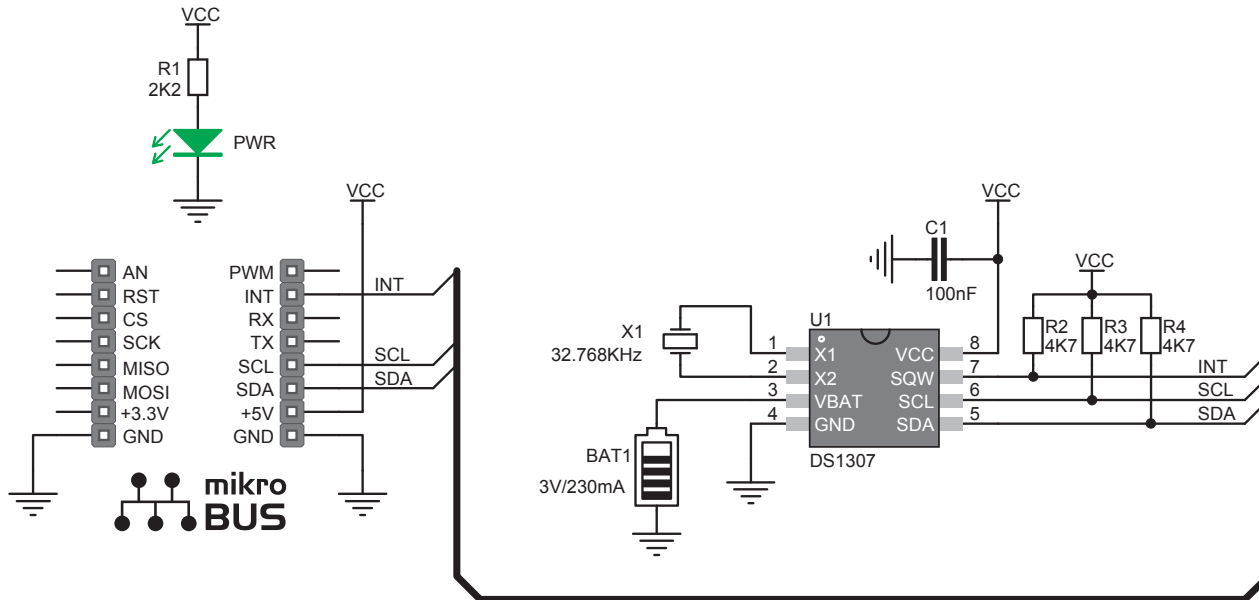
6. Power supply - 5V only

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!

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