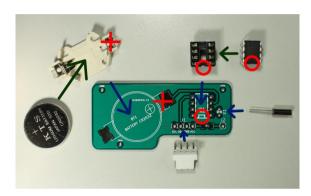
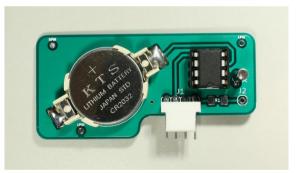
## **Montage RTC Module**

## Components:

- 1. PCB
- 2. IC Socket
- 3. IC DS1307 (Real Time Clock)
- 4. Crystal
- 5. Pinstrip male 4Pol (angle 90 Grad)
- 6. Battery holder SMD
- 7. Battery CR2032



1. Look at the picture and place the components onto the right place at the silkscreen, now solder them. **The IC notch must match with the silkscreen**.



2. Check your work.



3. Plug the RTC module on the I2C interface.

## GENERAL DESCRIPTION OF THE RTC Module

The DS1307 serial real-time clock (RTC) is a low-power, full binary-coded decimal (BCD) clock/calendar plus 56 bytes of NV SRAM.

Address and data are transferred serially through an I2C, bidirectional bus. The clock/calendar provides seconds, minutes, hours, day, date, month, and year information. The end of the month date is automatically adjusted for months with fewer than 31 days, including corrections for leap year. The clock operates in either the 24- hour or 12-hour format with AM/PM indicator.

The DS1307 has a built-in power-sense circuit that detects power failures and automatically switches to the backup supply. Timekeeping operation continues while the part operates from the backup supply.

The monster alarm clock saves all menu setting data in to the DS1307 SRAM, after a blackout the time, date and menu setting information will be restored back onto the monster alarm clock.