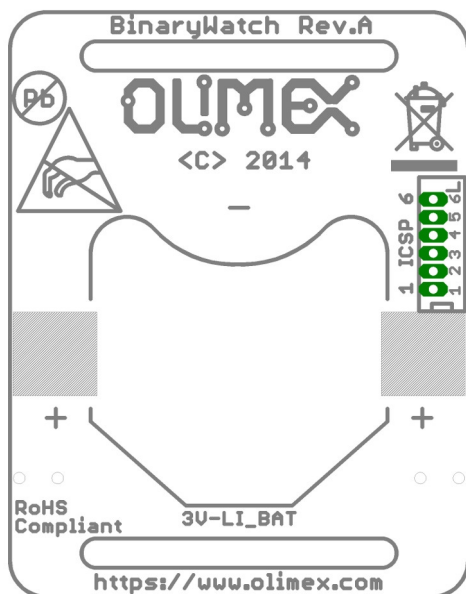
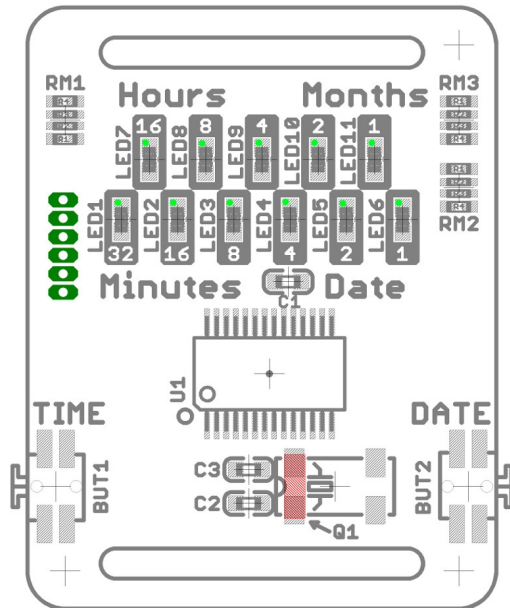


BINARY-WATCH assembly cheatsheet



Binary-Watch design is made with small SMT components in mind.

There are several ways how to assemble the SMT components, the harder one requires no extra tools but experience with soldering iron, good eyesight. You hold the components with tweezers then solder the legs one by one.

Easier assembly process for SMT components requires some tools and preparation and follows these steps:

1. Apply solder paste
2. Place the components
3. Reflow

Capacitors:

Name	Size	Value
C1	0603	100nF, 50VDC, 10%
C2, C3	0603	10pF, 50VDC, 10%

Resistor matrices:

Name	Size	Value
RM1, RM2, RM3	4×0603	4.7K, 5%

LEDs:

They have green arrow on the bottom side, that must touch PCB, when LEDs are placed.
On the top side of LEDs there is green dot, that indicates the cathode and should point outwards.

Name	Size	Value
LED1..LED6	0603	GREEN 100mCd
LED7..LED11	0603	RED 100 mCd

Buttons:

Name	Value
BUT1, BUT2	WTCM-TR

MCU:

Warning first pin is marked with DOT!

Name	Size	Value
U1	SSOP28	PIC16F722A-I/SS

Quartz:

Name	Size	Value
Q1	1206	CM7V-T1A 32.768kHz 12.5pF 20ppm

BAT holder:

Name	Value
3V-LI_BAT	BC2001

