

# PLANCK 6502 BUILD GUIDE

## SOLDERING

The resistors should be placed as follows:

- R22, R21, R18, R17, R14, R6, R5, R4, R3, R2 have 1 k $\Omega$  value
- R16 has 2.2 k $\Omega$  value
- R13, R12, R11, R10, R9 have 330  $\Omega$  value
- R27, R26, R25, R24, R23, R15, R8, R1 have 10 k $\Omega$  value

There are two types of capacitors: the cylindrical one is called electrolytic and should be placed near the power plug

The other ones should be placed as follows: the big ones next to the expansion slots, and the small ones near the chips.

Place the 1.8432 MHz oscillator in the footprint that reads "SERIAL CLOCK"

Place the 24 MHz oscillator in the footprint marked "MAIN CLOCK"

All other components have only one place where they can fit, so solder away. Just make sure you put the diodes and the LEDs the right way around.

## FINISHING UP AND TESTING

Now that everything is soldered up, all that's left to do is to plug the chips in their respective sockets and give the board a test.

First check with a multimeter that you do not have a short between ground and VCC. Give a thorough visual inspection to the board to make sure that all solder joints are ok and that no bridging between pins occurs. Touch up where necessary.

You should now be able to connect your TTL serial to USB adapter to the pins in the bottom right of the Planck Computer. Note that only 3 pins are necessary: TX, RX and GROUND. RX on the Planck should be connected to TX on the adapter, and TX on the Planck should be connected to RX on the adapter.

If you have any issue at all, you can contact me by email at [jfoucher@6px.eu](mailto:jfoucher@6px.eu)

Enjoy your new retro-computer!