

### 4.1 myCPU BOM List

Bellow you can find the full BOM list of myCPU.

Table 4.1: myCPU Semiconductors

Description	Value	Q
+5v Voltage regulator	LM7805	10
555 Timer	NE555	8
Non inverting BUS Transceiver	74xx245	9
4-bits sync counter	74xx161	8
2 Line to 1 line, 4-bit data selector	74xx157	4
4-bits D-Type register with 3-state outputs	74xx173	11
3 to 8 lines decoder/demultiplexer	74xx138	1
Dual 2 to 4 lines decoder/demultiplexer	74xx139	5
TTL SRAM 64x1 with inverted outputs	74LS189	2
4-bits full adder with fast carry	74xx283	2
Quad 2 input NAND gates	74xx00	2
Quad 2 input NOR gates	74xx02	1
Hex inverters	74xx04	6
Quad 2 input AND gates	74xx08	2
Quad 2 input OR gates	74xx32	2
Quad 2 input XOR gates	74xx86	2
8-bits shift register	CD4094	2
EEProm 64K 8Kx8	AT28C64	8
Rectifier Diode 20v 1A	1N5817 or 1N4007	2
Fast Switch Diode	1N4148	2

Table 4.2: myCPU Capacitors

Description	Value	Q
Electrolytic capacitor 16v or 50v	0.22 $\mu$ F	1
Electrolytic capacitor 16v or 50v	0.47 $\mu$ F	18
Electrolytic capacitor 16v or 50v	1 $\mu$ F	2
Electrolytic capacitor 16v or 50v	10 $\mu$ F	16
Electrolytic capacitor 16v or 50v	330 $\mu$ F	4
Ceramic or Tantalum capacitor	10 nF	8
Ceramic or Tantalum capacitor	100 nF	90
Ceramic or Tantalum capacitor	470 nF	1

Table 4.3: myCPU Resistors

Description	Value	Q
Resistors Array	220Ω	4
Resistors Array	330Ω	6
Resistors Array	**1K	20
Resistors Array	*1.2K	10
Resistors Array	*2.2K	10
Resistors Array	*3.3K	10
Resistors Array	*4.7K	10
Variable resistor horizontal	500K	5
Vertical Trimmer	1K	1
Resistor Axial 1/4W	220Ω	4
Resistor Axial 1/4W	330Ω	16
Resistor Axial 1/4W	680Ω	40
Resistor Axial 1/4W	1K	10
Resistor Axial 1/4W	2.2K	4
Resistor Axial 1/4W	4.7K	20
Resistor Axial 1/4W	6.8K	2
Resistor Axial 1/4W	100K	2

\* Number is approximated depending of the limiting resistors values used for displays

\*\* Based on the use of 1K value for pull-down resistors on BUS modules

Table 4.4: myCPU Electromechanical

Description	Value	Q
Power Jack 3 pin center pin	2mm	3
Linear potentiometer (Vertical)	1M	1
Mini slide switch right angle, pitch 2mm	1P2T 3 pin	2
Mini slide switch, pitch 2mm	1P2T 3 pin	4
DIP Switch	4 pos	1
DIP Switch	8 pos	3
DIP Switch	12 pos	2
Push button	6mm	3
Push button	12mm	3

## Chapter 4. The Components

Table 4.5: myCPU Display

Description	Value	Q
7 Segment 4 digits display red color	0.36"	4
7 Segment 4 digits display green color	0.36"	1
Bar LED 8 segments (if use 16b display modules)	*Red	12
Led 5mm	Red	1
Led 5mm	Green	2
Led 5mm	Yellow	1
Led 3mm	Blue	21
Led 3mm	Green	8
Led 3mm	*Red	45

\* Number depends of your preferences for the color of 8b or 16b displays.

Table 4.6: myCPU Headers, Connectors, Wire and DIP sockets

Description	Value	Q
ZIF socket 28p wide (EEprom programmer)	28W	1
28 pin wide socket for AT28C64	28p	10
20 pin narrow socket	20p	10
16 pin narrow socket	16p	40
14 pin narrow socket	14p	20
8 pin narrow socket	8p	10
Socket header female vertical dual row	2x16	20
Socket header female vertical dual row	2x12	10
Socket header female vertical dual row	2x8	20
Socket header female right angle dual row	2x16	10
Socket header female right angle dual row	2x8	10
Pin header right angle dual row	2x40	20
Pin header vertical dual row	2x40	30
IDC flat wire connector female dual row	2x4	10
IDC flat wire connector female dual row	2x12	2
Flat Ribbon Wire 1,27mm	8 lines	1m
*Flat Ribbon Wire 1,27mm	34 lines	1m

\* Is difficult to find 32 lines flat wire 1.27mm