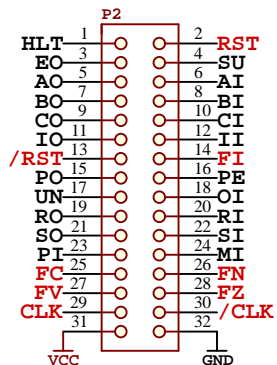
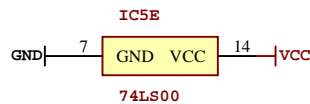
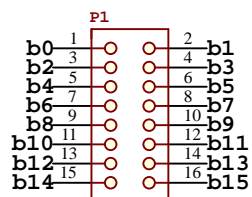


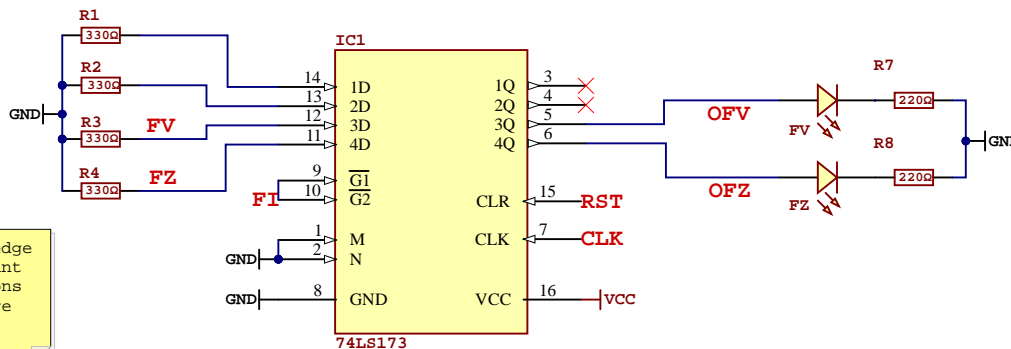
Control BUS Connector



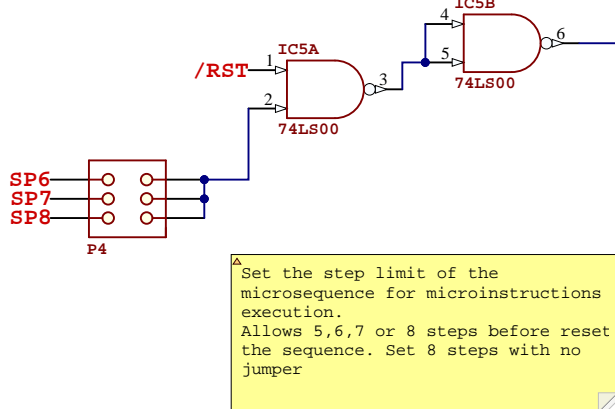
Data BUS Connector



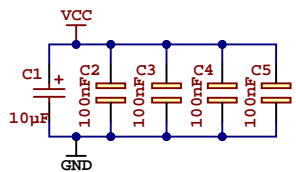
Step counter use the low edge of the clock signal to count the steps. Microinstructions are set during the low edge clock signal and executes during the high edge.



Sequencer Setup Jumper

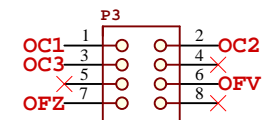


Set the step limit of the microsequence for microinstructions execution. Allows 5,6,7 or 8 steps before reset the sequence. Set 8 steps with no jumper



Decoupling Capacitors

Instruction Decoder Connector

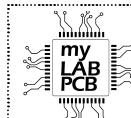


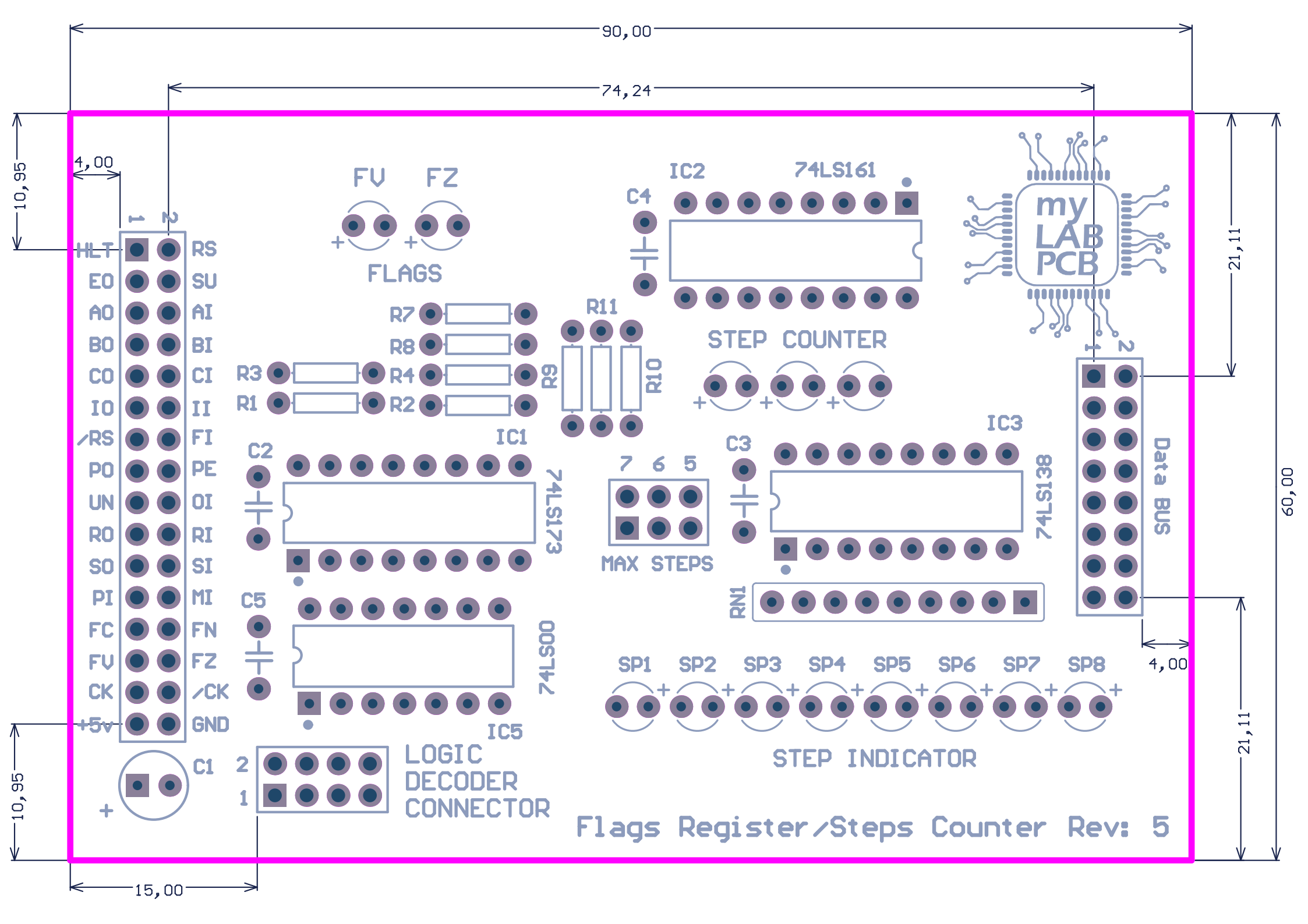
Project: myCPU Flags Register / Sequencer

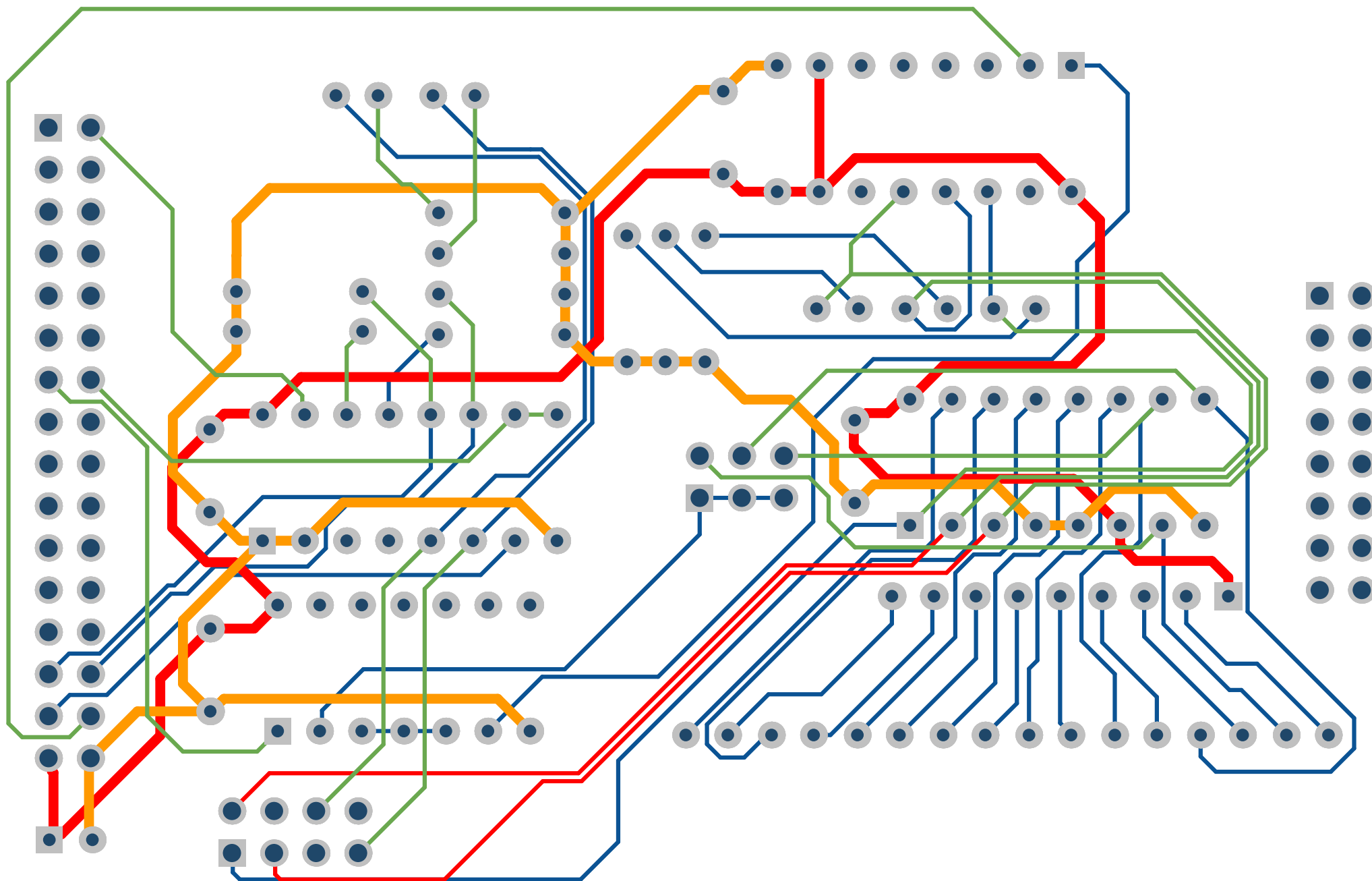
Revision: 5

Date: 09/10/2021

Author: Rafa Hernández









Bill of Materials

Designator	Description	Value	Q
C1	Electrolytic capacitor 16v/50v	10 μ F	1
C2, C3, C4, C5	Ceramic or tantalum capacitor	100nF	4
FV, FZ	Led 3mm Round	Red	2
IC1	4-bit D-Type Register with 3 state outputs	74LS173	1
IC2	4-Bit sync counter	74LS161	1
IC3	3-Line to 8-Line decoder/demultiplexer	74LS138	1
IC5	Quad 2-input NAND gates	74LS00	1
L1, L2, L3	Led 3mm Round	Yellow	3
P1	Pin Header, THT, pitch 2.54mm, Dual Row, Vertical, 16p	16p	1
P2	Pin Header, THT, pitch 2.54mm, Dual Row, Vertical, 32p	32p	1
P3	Pin Header, THT, pitch 2.54mm, Dual Row, Vertical, 8p	8p	1
P4	Pin Header, THT, pitch 2.54mm, Dual Row, Vertical, 6p	6p	1
R1, R2, R3, R4	Resistor axial	330 Ω	4
R7, R8, R9, R10, R11	Resistor axial	220 Ω	5
RN1	Resistor array 8 elements,9 pins	220 Ω	1
SP1, SP2, SP3, SP4, SP5	Led 3mm Round	Blue	8



Assembly List

Desig.	Description	Value
C1	Electrolytic capacitor 16v/50v	10 μ F
C2	Ceramic or tantalum capacitor	100nF
C3	Ceramic or tantalum capacitor	100nF
C4	Ceramic or tantalum capacitor	100nF
C5	Ceramic or tantalum capacitor	100nF
FV	Led 3mm Round	Red
FZ	Led 3mm Round	Red
IC1	4-bit D-Type Register with 3 state outputs	74LS173
IC2	4-Bit sync counter	74LS161
IC3	3-Line to 8-Line decoder/demultiplexer	74LS138
IC5	Quad 2-input NAND gates	74LS00
L1	Led 3mm Round	Yellow
L2	Led 3mm Round	Yellow
L3	Led 3mm Round	Yellow
P1	Pin Header, THT, pitch 2.54mm, Dual Row, Vertical, 16p	16p
P2	Pin Header, THT, pitch 2.54mm, Dual Row, Vertical, 32p	32p
P3	Pin Header, THT, pitch 2.54mm, Dual Row, Vertical, 8p	8p
P4	Pin Header, THT, pitch 2.54mm, Dual Row, Vertical, 6p	6p
R1	Resistor axial	330 Ω
R2	Resistor axial	330 Ω
R3	Resistor axial	330 Ω
R4	Resistor axial	330 Ω
R7	Resistor axial	220 Ω
R8	Resistor axial	220 Ω
R9	Resistor axial	220 Ω
R10	Resistor axial	220 Ω
R11	Resistor axial	220 Ω
RN1	Resistor array 8 elements,9 pins	220 Ω
SP1	Led 3mm Round	Blue
SP2	Led 3mm Round	Blue
SP3	Led 3mm Round	Blue
SP4	Led 3mm Round	Blue
SP5	Led 3mm Round	Blue
SP6	Led 3mm Round	Blue
SP7	Led 3mm Round	Blue
SP8	Led 3mm Round	Blue