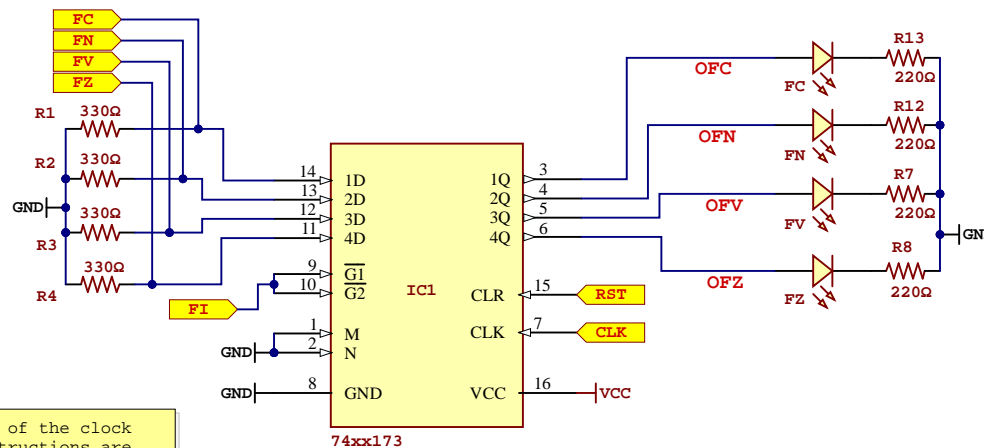
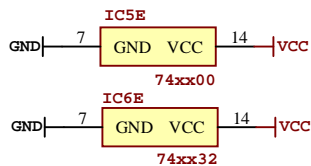
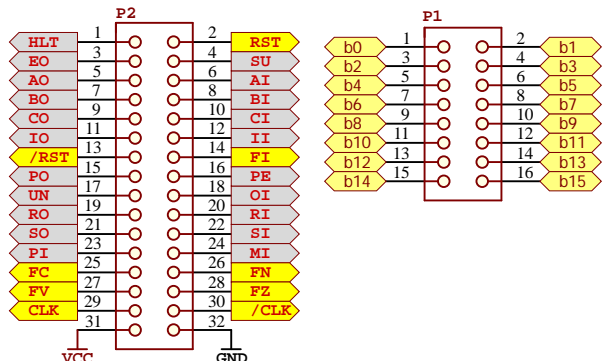
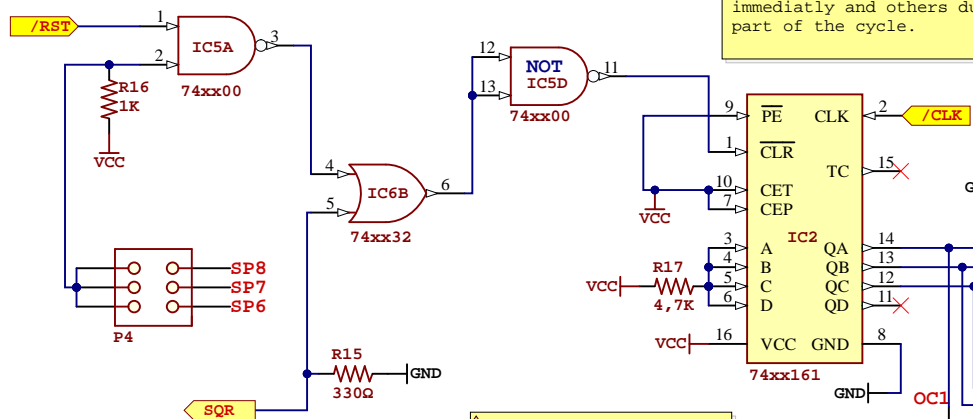


Control BUS Connector Data BUS Connector



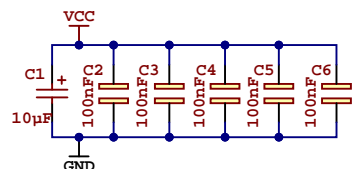
Setup Jumper and RST/SQR/SP(MAX) logic



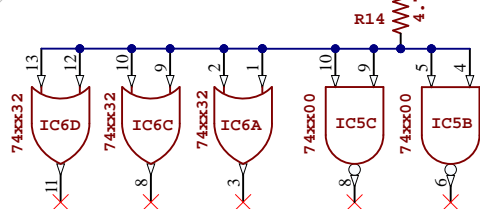
Step counter use the low edge of the clock signal for counting. Microinstructions are placed on control bus during the low part of clock signal, some of them are activated immediately and others during the next high part of the cycle.

P4 allows to set the step limit of the microsequence for the microinstruction execution. Allows 5,6,7 or 8 steps before resetting the sequence. The 8 steps limit is set with no jumper.

SQR signal is provided through the I. Decoder connector to reset the microsequence.

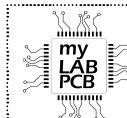


Decoupling Capacitors



Unused TTL Inputs

"74xx" Indicates the use LS (TTL) or HC(CMOS) ICs as your prefer for your build.

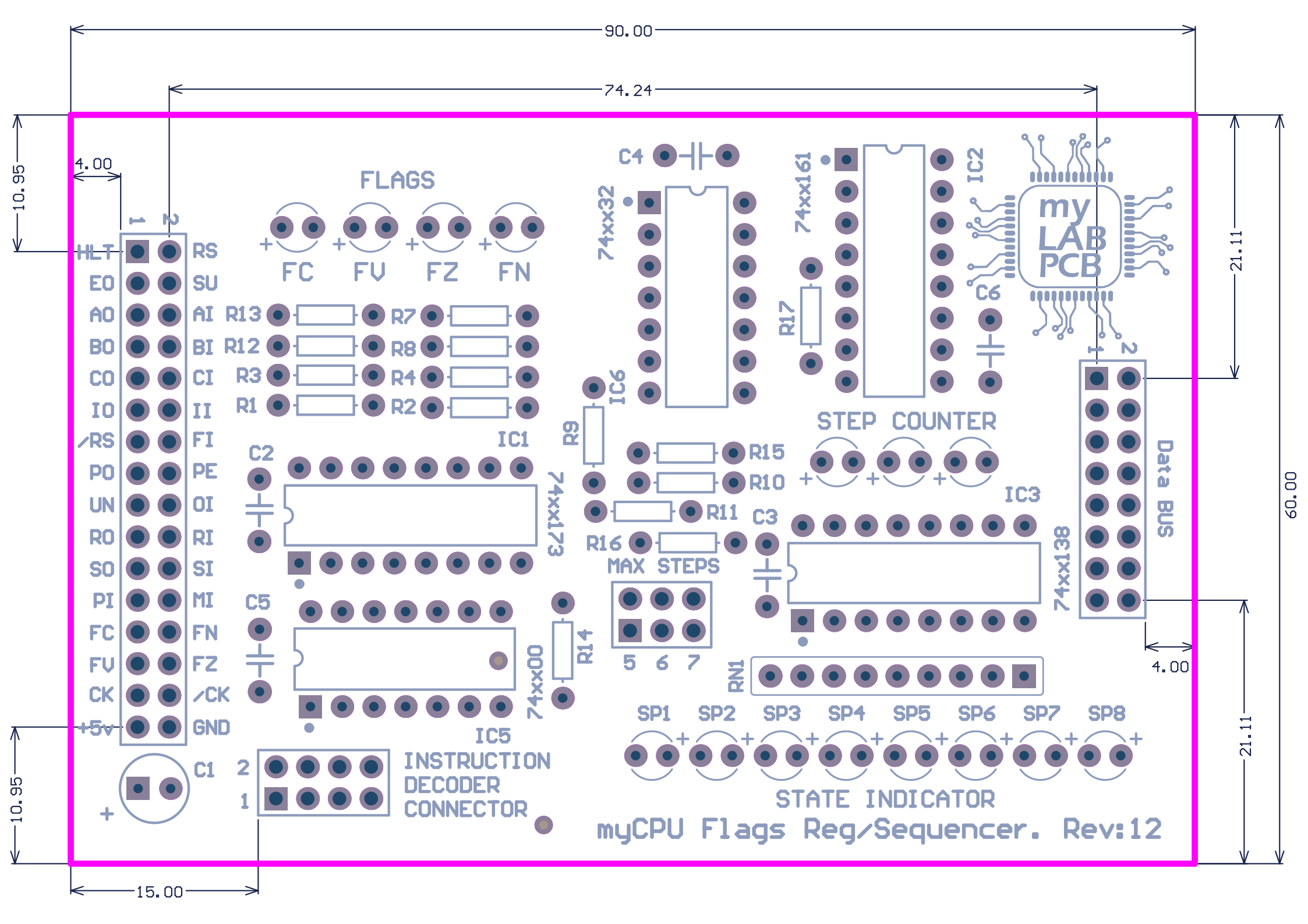


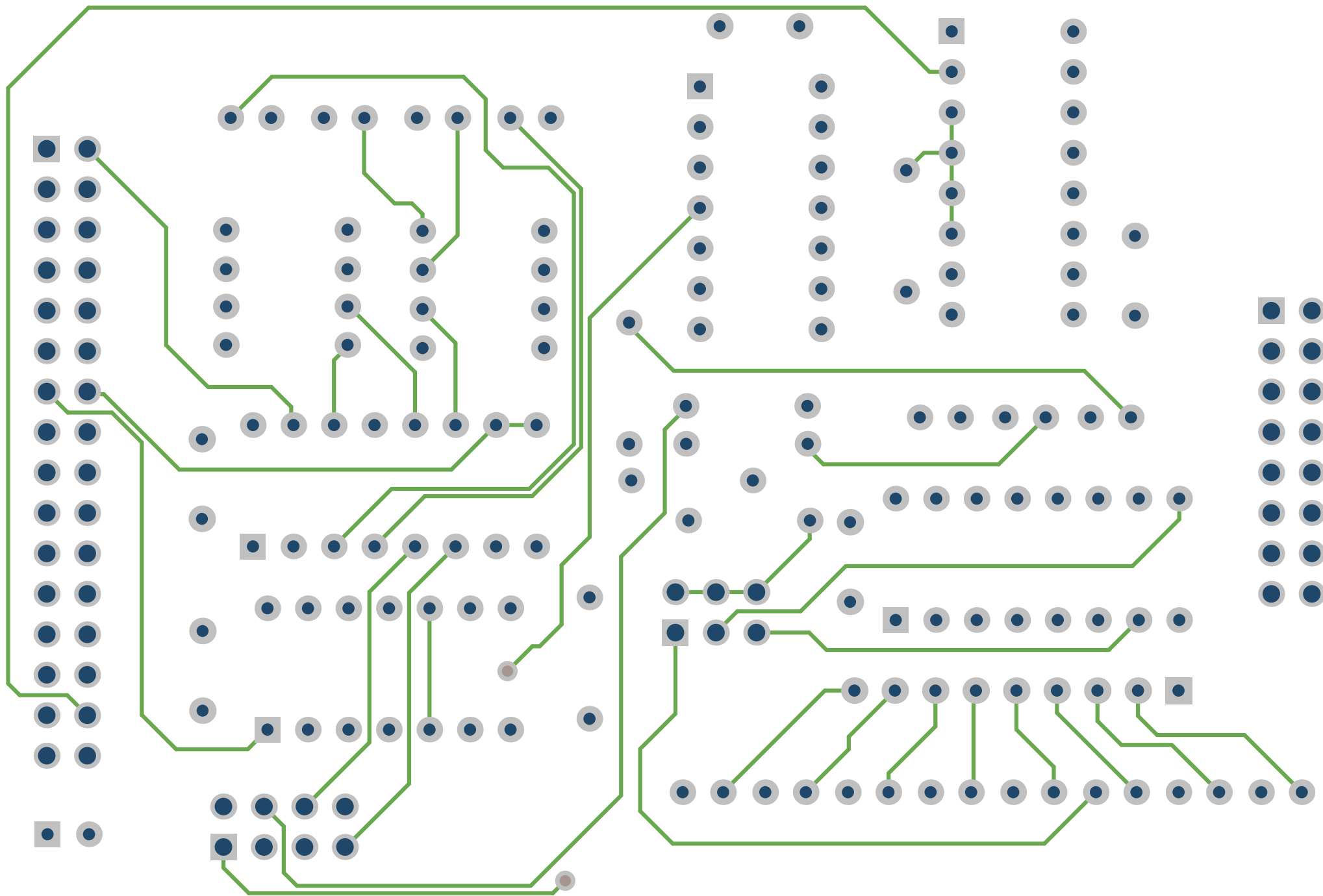
Project: myCPU Flags Register / Sequencer

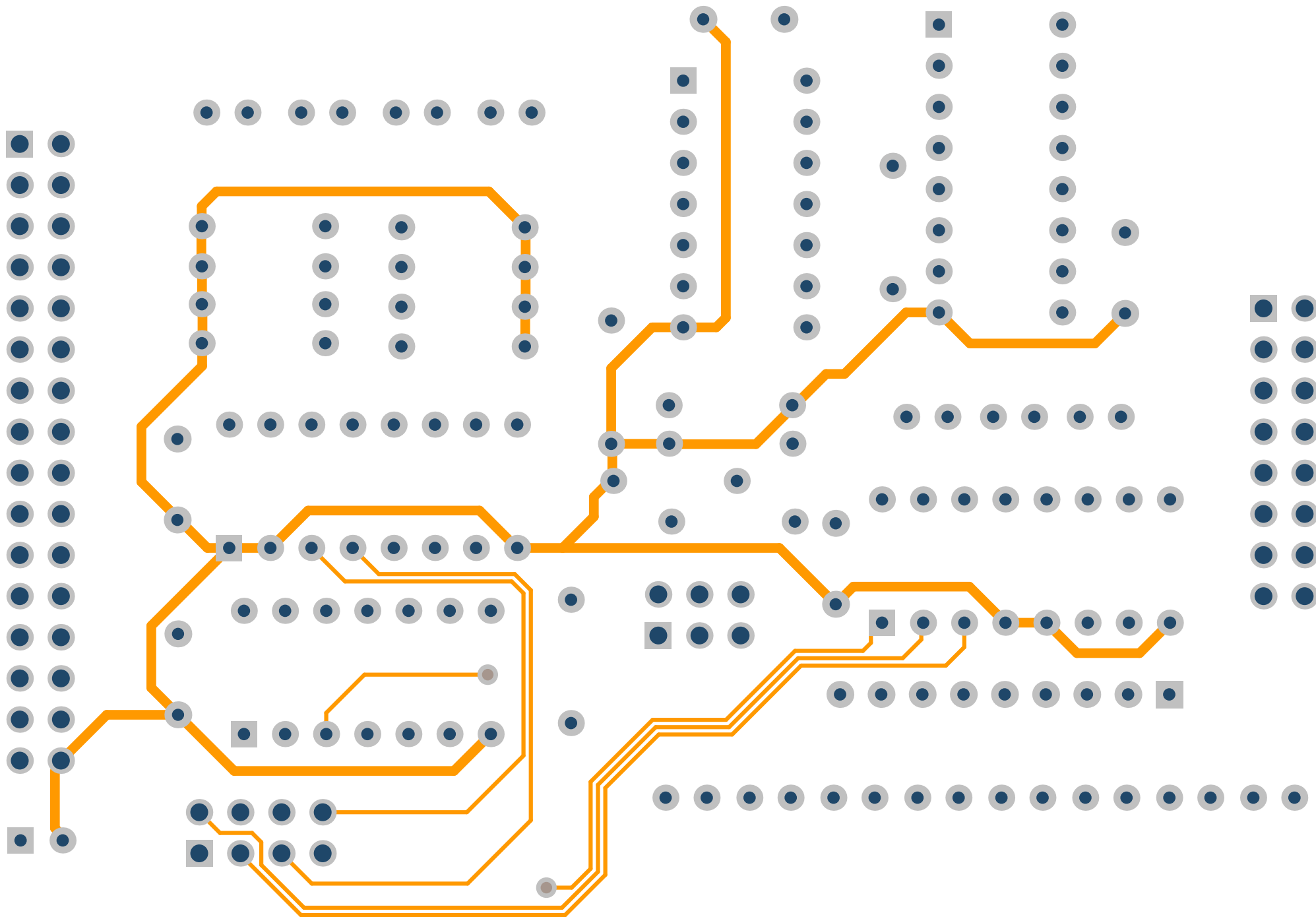
Revision: 11

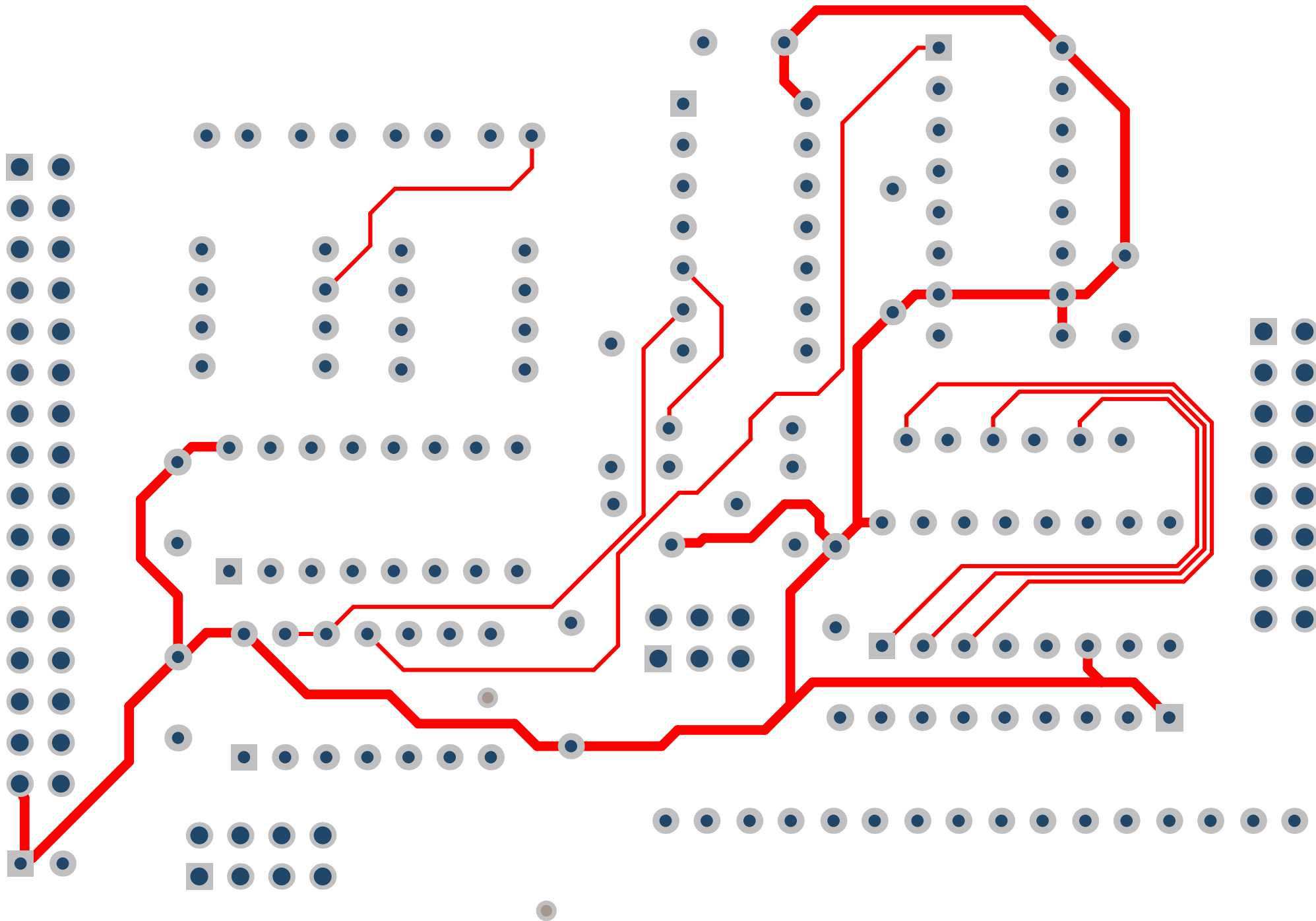
Date: 03-Jan-24

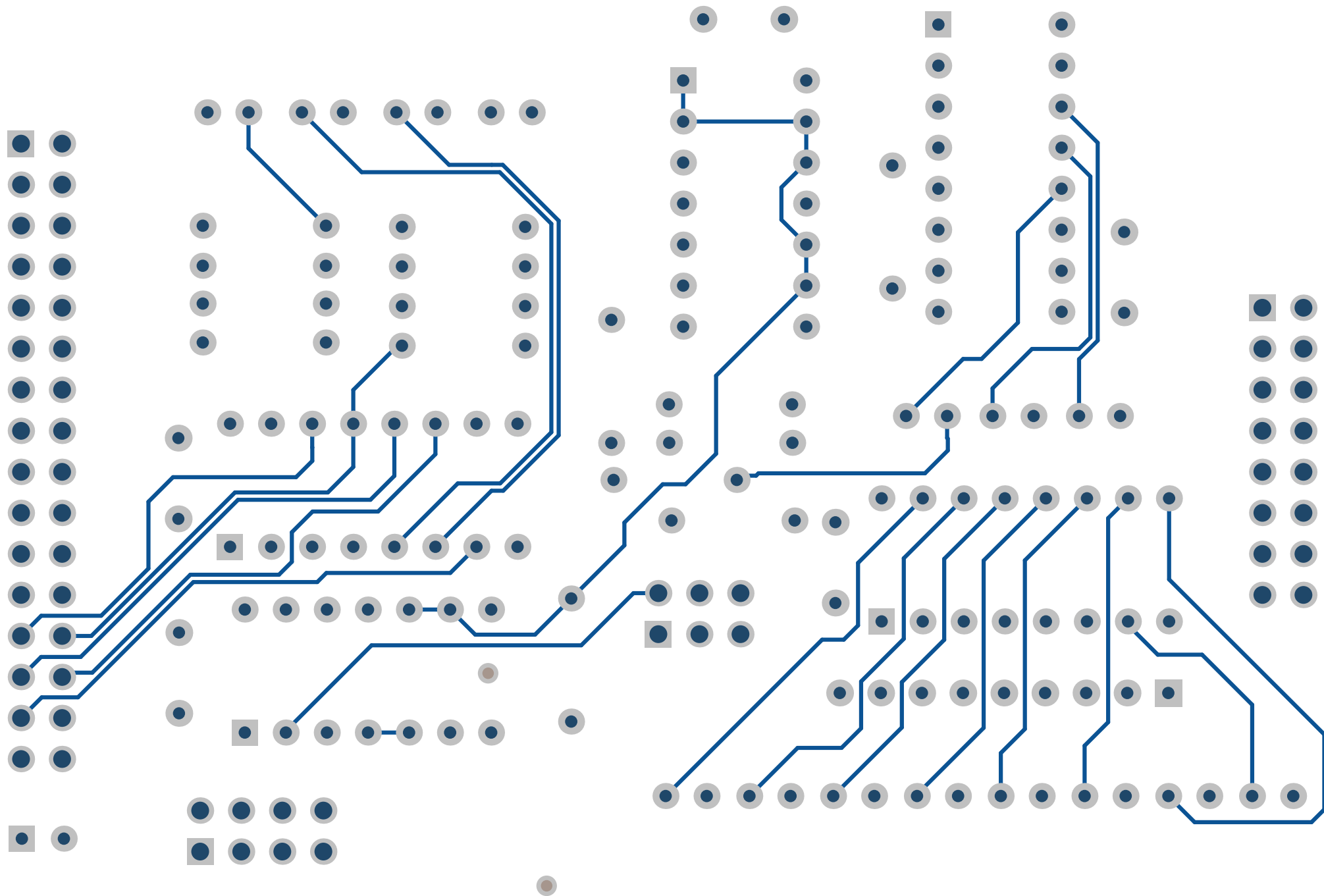
Author: Rafa Hernández

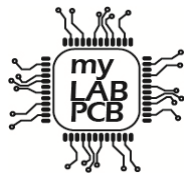








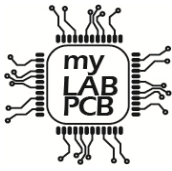




Bill of Materials

myCPU Flags Register / Sequencer

Description	Value	Q
Electrolytic capacitor 16v/50v	10 μ F	1
Ceramic or tantalum capacitor	100nF	5
Led 3mm Round	Red	4
4-bit D-Type Register with 3 state outputs	74xx173	1
4-Bit sync counter	74xx161	1
3-Line to 8-Line decoder/demultiplexer	74xx138	1
Quad 2-input NAND gates	74xx00	1
Quad 2-input OR gates.	74xx32	1
Led 3mm Round	Yellow	3
Pin Header, THT, pitch 2.54mm, Dual Row, Vertical, 16p	16p	1
Pin Header, THT, pitch 2.54mm, Dual Row, Vertical, 32p	32p	1
Pin Header, THT, pitch 2.54mm, Dual Row, Vertical, 8p	8p	1
Pin Header, THT, pitch 2.54mm, Dual Row, Vertical, 6p	6p	1
Resistor Axial	330 Ω	5
Resistor Axial	220 Ω	7
Resistor Axial	4.7K	1
Resistor Axial	1K	1
Resistor Axial	4,7K	1
Resistor array 8 elements,9 pins	220 Ω	1
Led 3mm Round	Blue	8



Assembly List

myCPU Flags Register / Sequencer

Designator	Description	Value
C1	Electrolytic capacitor 16v/50v	10μF
C2	Ceramic or tantalum capacitor	100nF
C3	Ceramic or tantalum capacitor	100nF
C4	Ceramic or tantalum capacitor	100nF
C5	Ceramic or tantalum capacitor	100nF
C6	Ceramic or tantalum capacitor	100nF
FC	Led 3mm Round	Red
FN	Led 3mm Round	Red
FV	Led 3mm Round	Red
FZ	Led 3mm Round	Red
IC1	4-bit D-Type Register with 3 state outputs	74xx173
IC2	4-Bit sync counter	74xx161
IC3	3-Line to 8-Line decoder/demultiplexer	74xx138
IC5	Quad 2-input NAND gates	74xx00
IC6	Quad 2-input OR gates.	74xx32
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	330Ω
R2	Resistor Axial	330Ω
R3	Resistor Axial	330Ω
R4	Resistor Axial	330Ω
R7	Resistor Axial	220Ω
R8	Resistor Axial	220Ω
R9	Resistor Axial	220Ω
R10	Resistor Axial	220Ω
R11	Resistor Axial	220Ω
R12	Resistor Axial	220Ω
R13	Resistor Axial	220Ω
R14	Resistor Axial	4.7K
R15	Resistor Axial	330Ω
R16	Resistor Axial	1K
R17	Resistor Axial	4,7K
RN1	Resistor array 8 elements,9 pins	220Ω
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