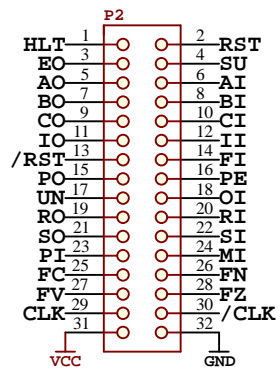
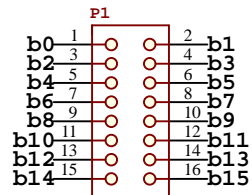




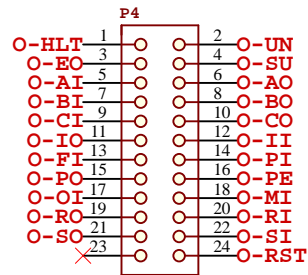
Control BUS Connector Top



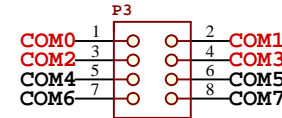
Data BUS Connector Top



CSM Connector

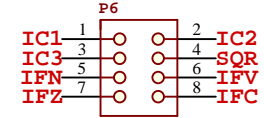


Instruction Register Connector

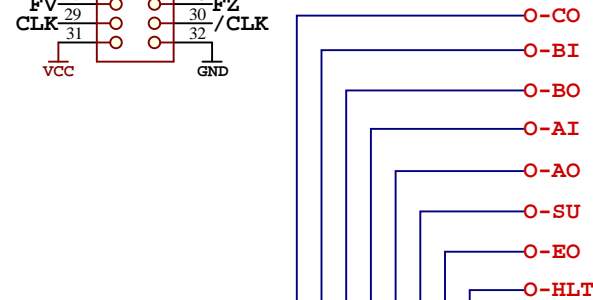


This I.Decoder revision use only the most 4 significative bits from instruction register corresponding to the instruction OP CODE.

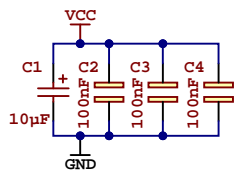
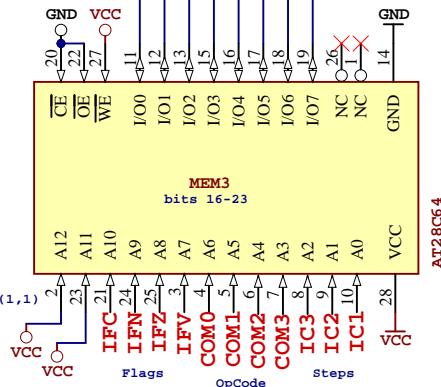
Flags register + Sequencer Connector



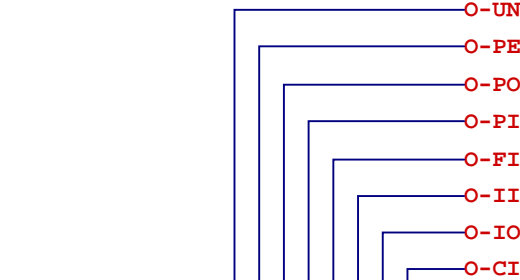
Flags inputs (IFN,IFV,IFZ,IFC) come from which are stored in the Flag Register, there are not the current values of FV,FZ,FN,FC which come through the control



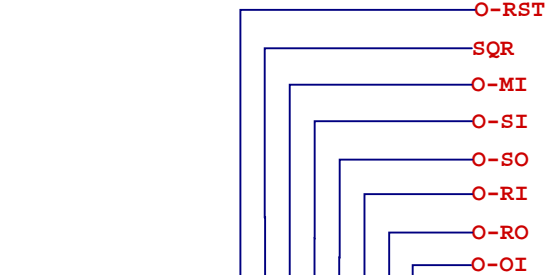
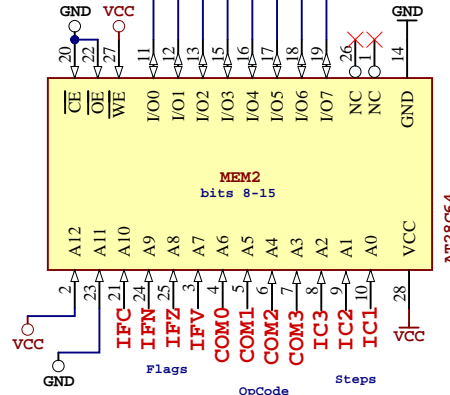
Memory Selection (1,1)



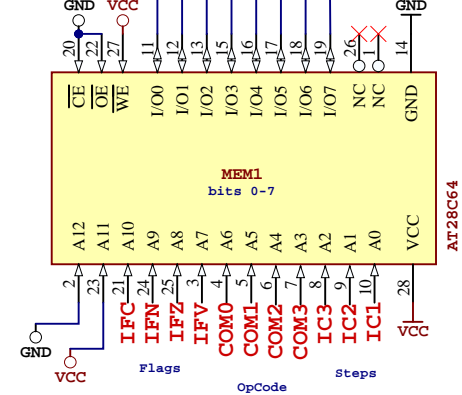
Decoupling Capacitors



Memory Selection (1,0)



Memory Selection (0,1)



Memory selector set which microinstruction part, of the entire microinstruction, are stored in each memory: MEM1 holds the less significative byte of bits 0-7, MEM2 holds the byte 8-15 and MEM3 holds byte 16-23

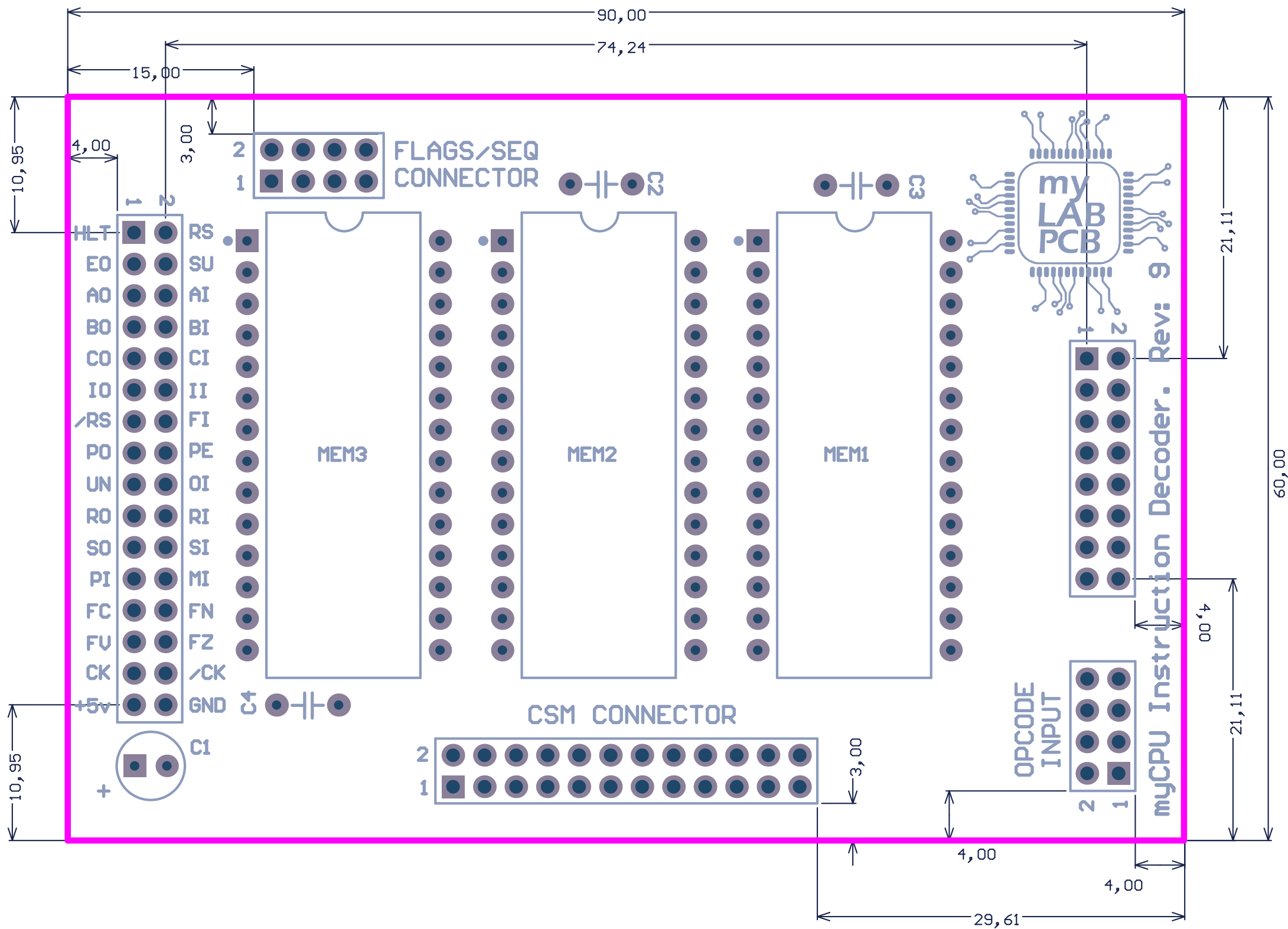


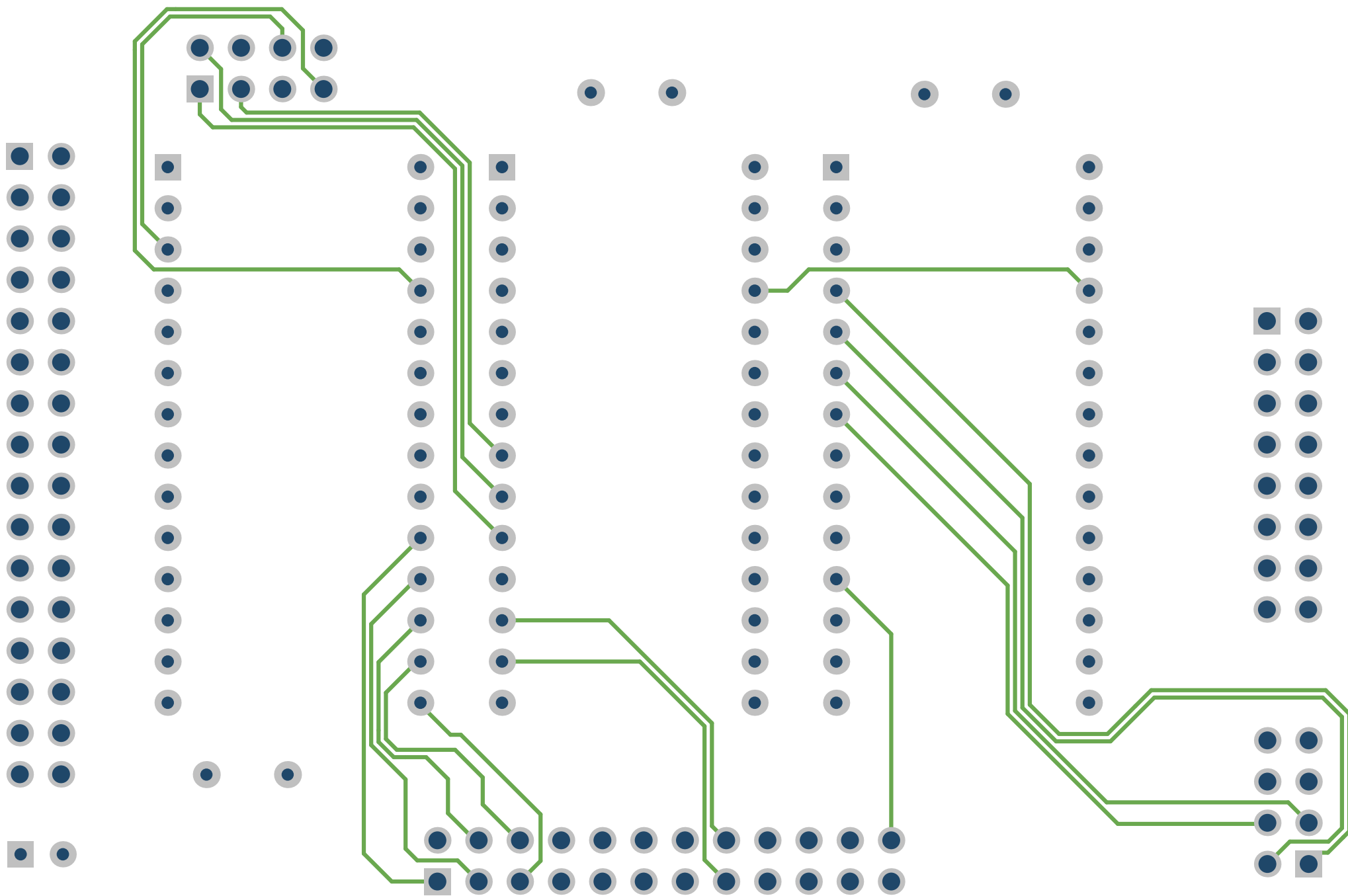
Project: myCPU Instruction Decoder module

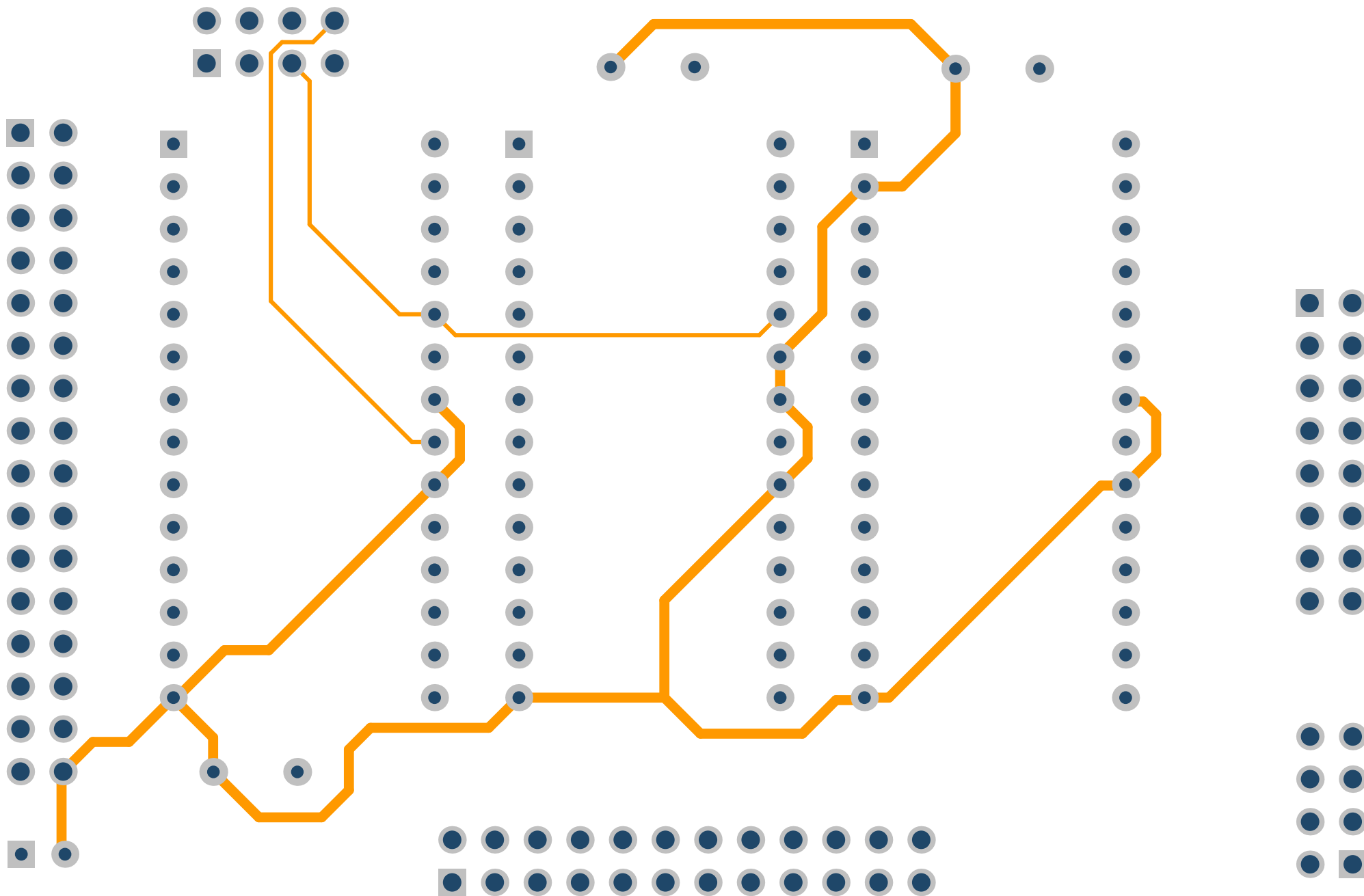
Revision: 9

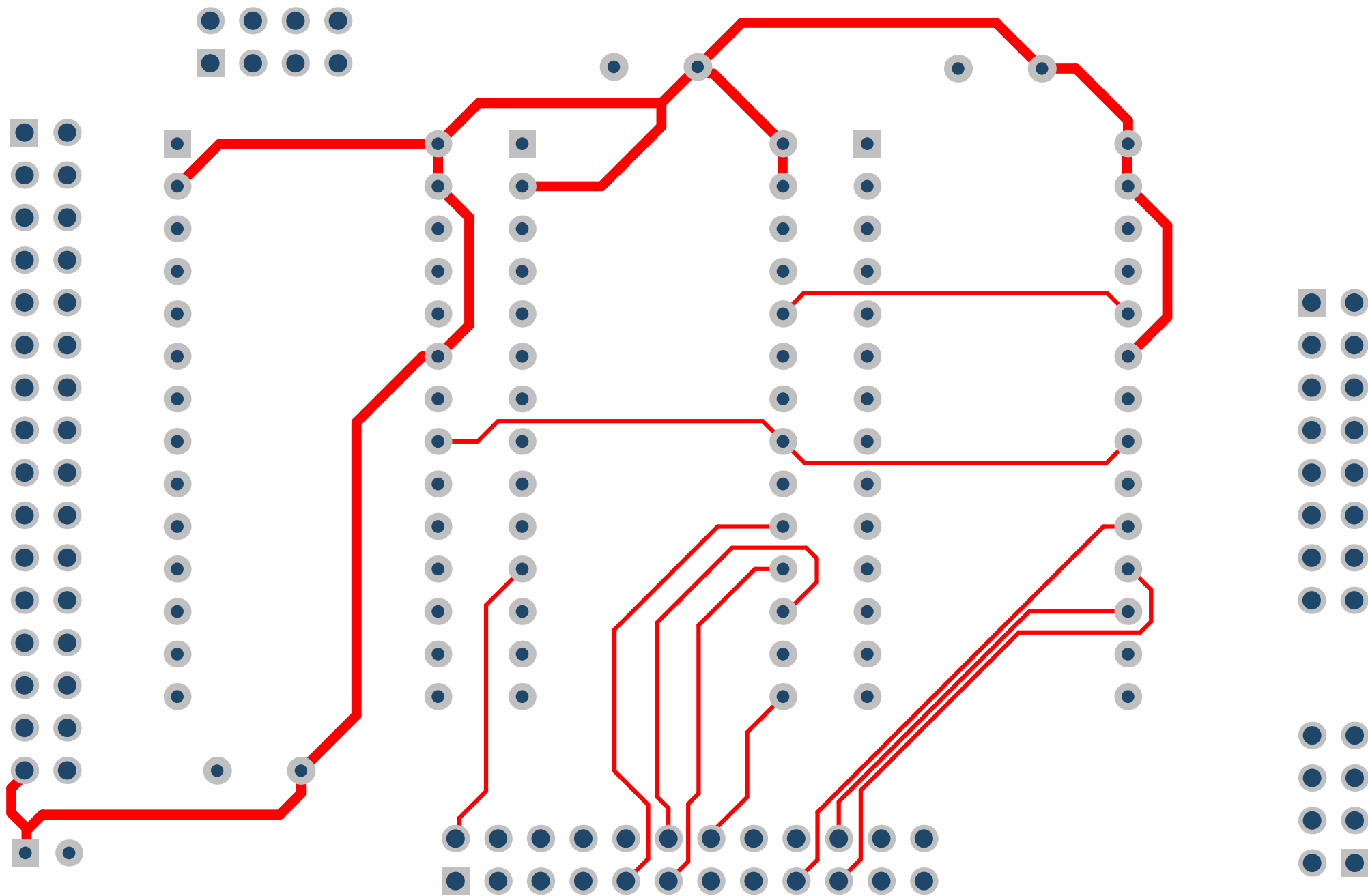
Date: 04/12/2022

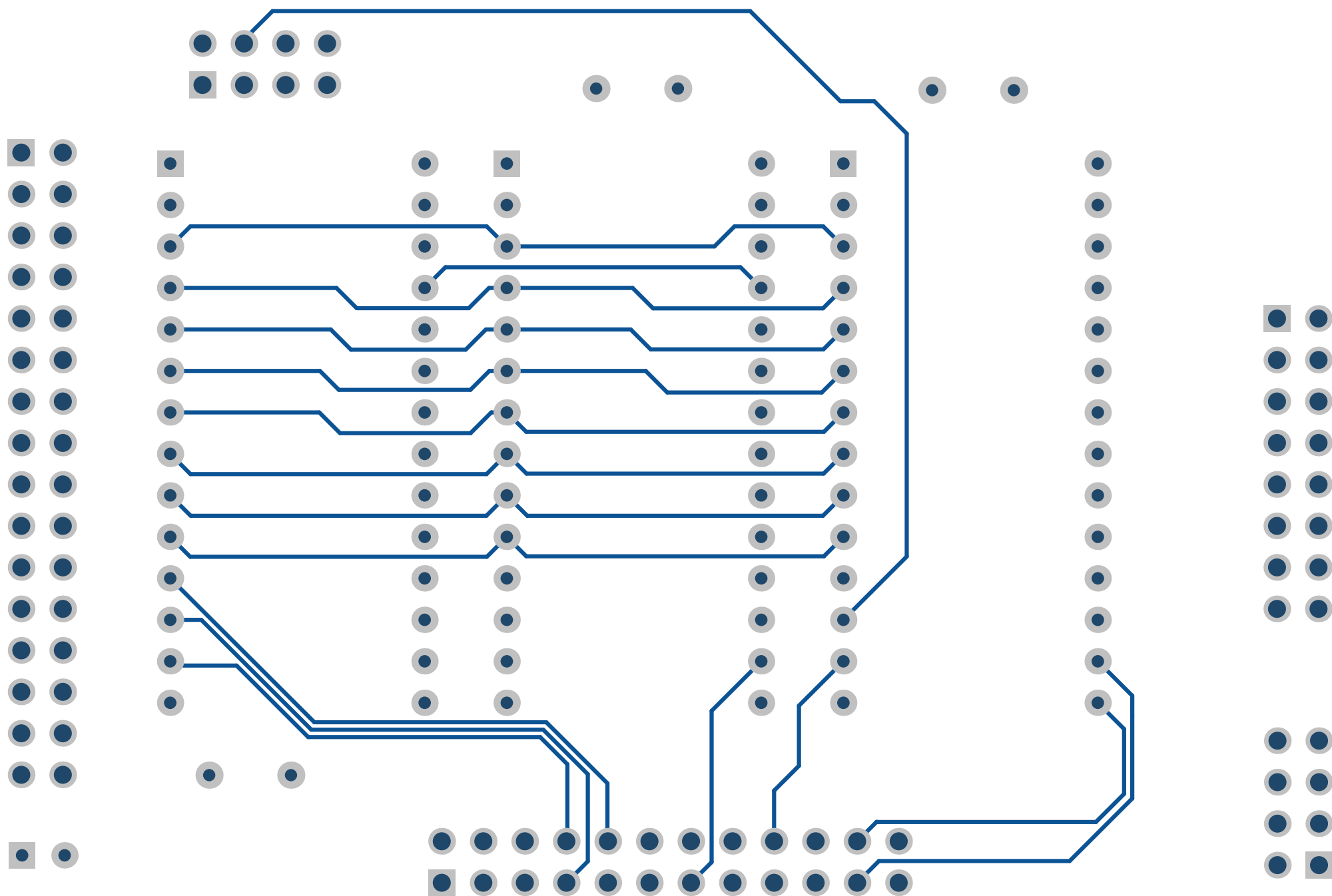
Author: Rafa Hernández















# Bill of Materials

Designator	Description	Value	Q
C1	Electrolytic capacitor 16v/50v	10µF	1
C2, C3, C4	Ceramic or tantalum capacitor	100nF	3
MEM1, MEM2, MEM3	EEProm 64K, 8K x 8 bits	AT28C64	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, P6	Pin Header, THT, pitch 2.54mm, Dual Row, Vertical, 8p	8p	2
P4	Pin Header, THT, pitch 2.54mm, Dual Row, Vertical, 24p	24p	1



# Assembly List

Designator	Description	Value
C1	Electrolytic capacitor 16v/50v	10 $\mu$ F
C2	Ceramic or tantalum capacitor	100nF
C3	Ceramic or tantalum capacitor	100nF
C4	Ceramic or tantalum capacitor	100nF
MEM1	EEProm 64K, 8K x 8 bits	AT28C64
MEM2	EEProm 64K, 8K x 8 bits	AT28C64
MEM3	EEProm 64K, 8K x 8 bits	AT28C64
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, 24p	24p
P6	Pin Header, THT, pitch 2.54mm, Dual Row, Vertical, 8p	8p