

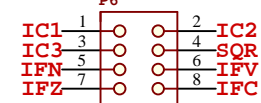
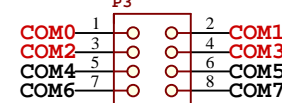
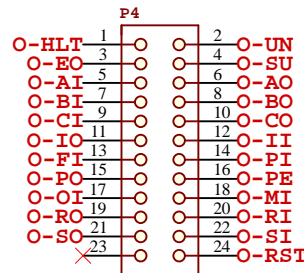
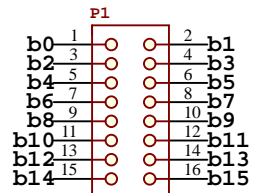
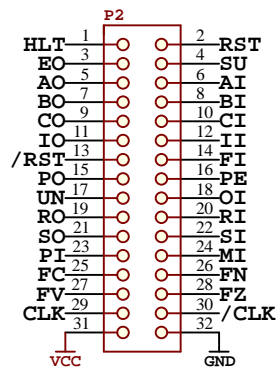
Control BUS Connector Top

Data BUS Connector Top

CSM Connector

Instruction Register Connector

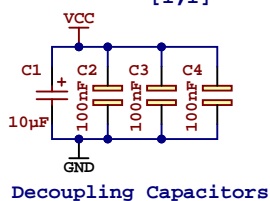
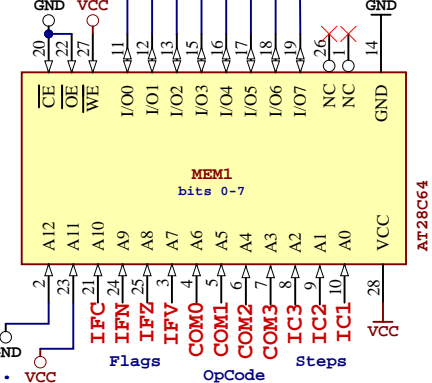
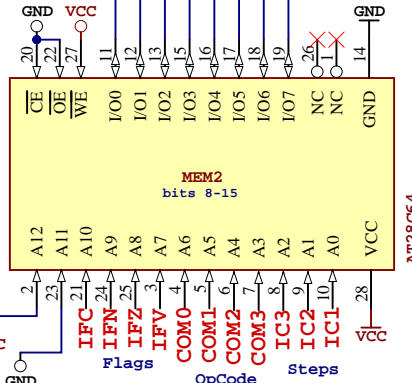
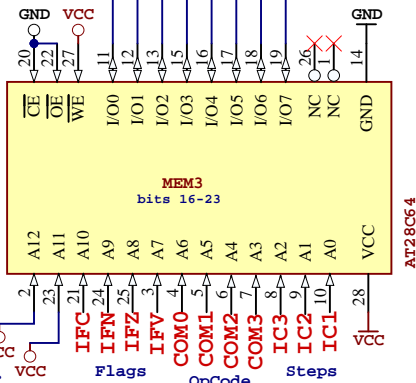
Flags register + Sequencer Connector



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

Flags inputs (IFN,IFV,IFZ,IFC) come from the Flag Register, there are not the current values of FV,FZ,FN,FC placed on the control BUS but the values stored in the Flags register.

Bit order goes from I/O0 to I/O7



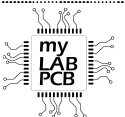
Memory selector set which microinstruction part, of the entire microinstruction, are stored in each memory module: MEM1 holds the less significative byte of bits 0-7, MEM2 holds the byte 8-15 and MEM3 holds byte 16-23

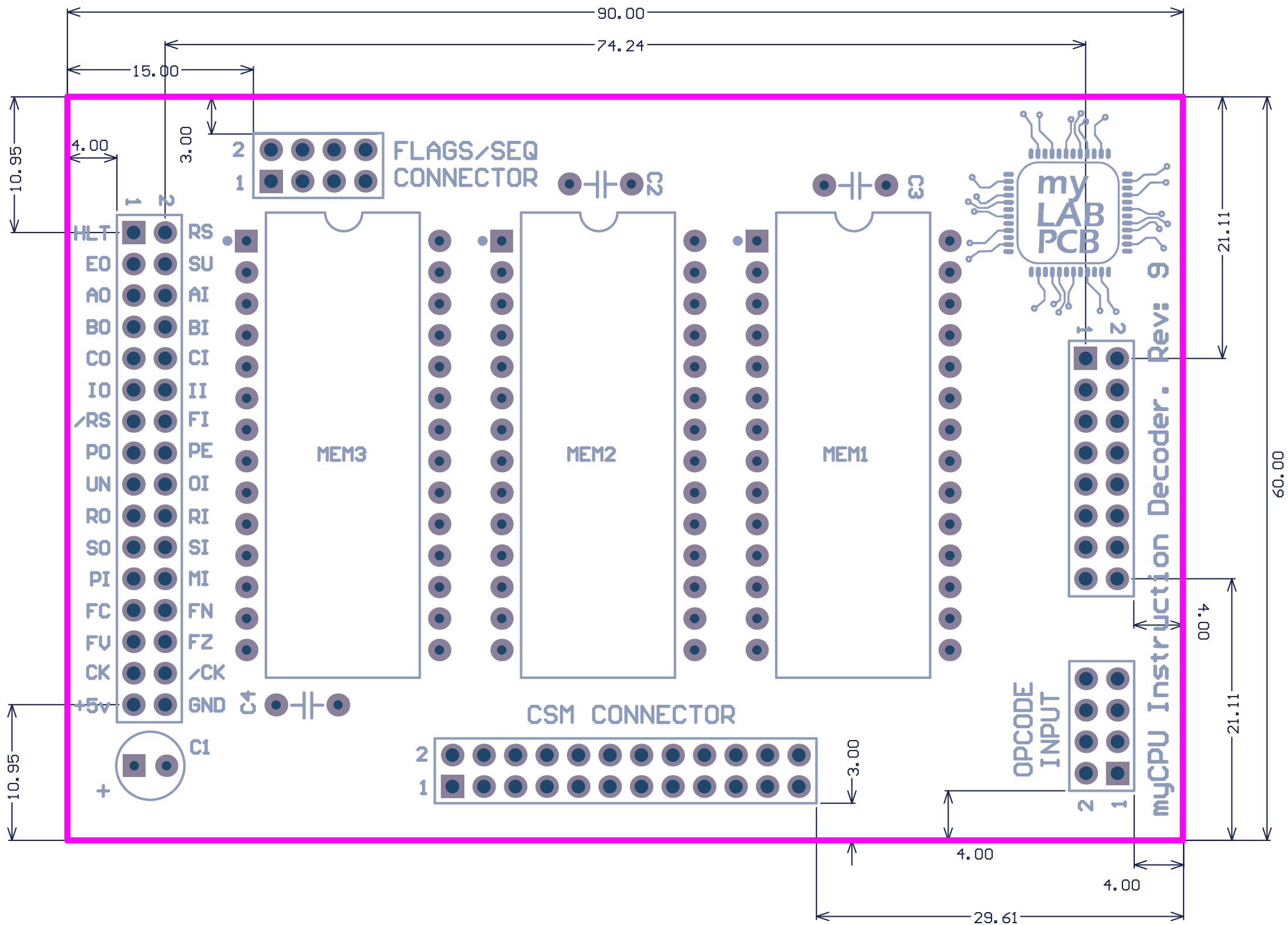
Project: myCPU Instruction Decoder module

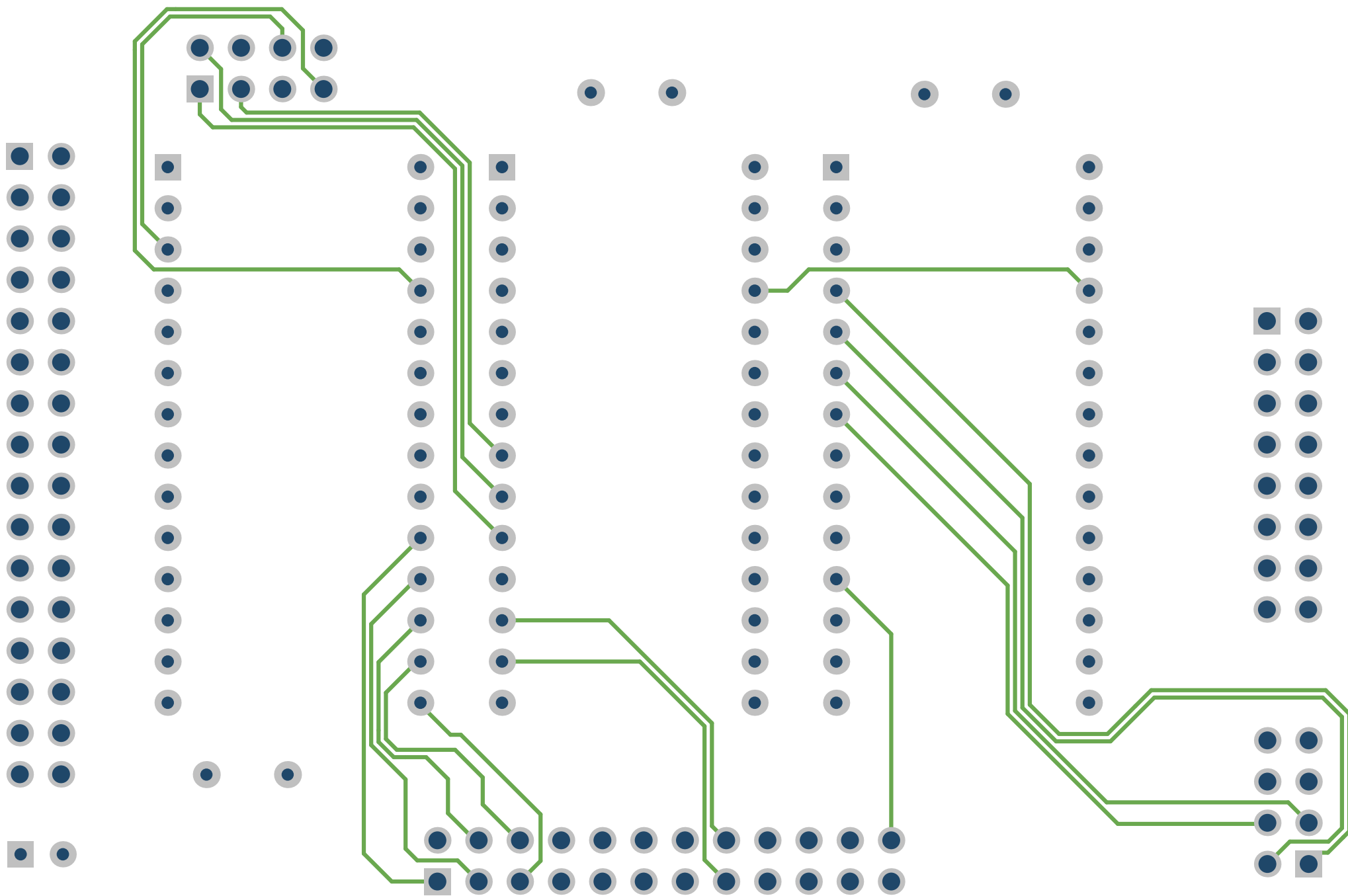
Revision: 9

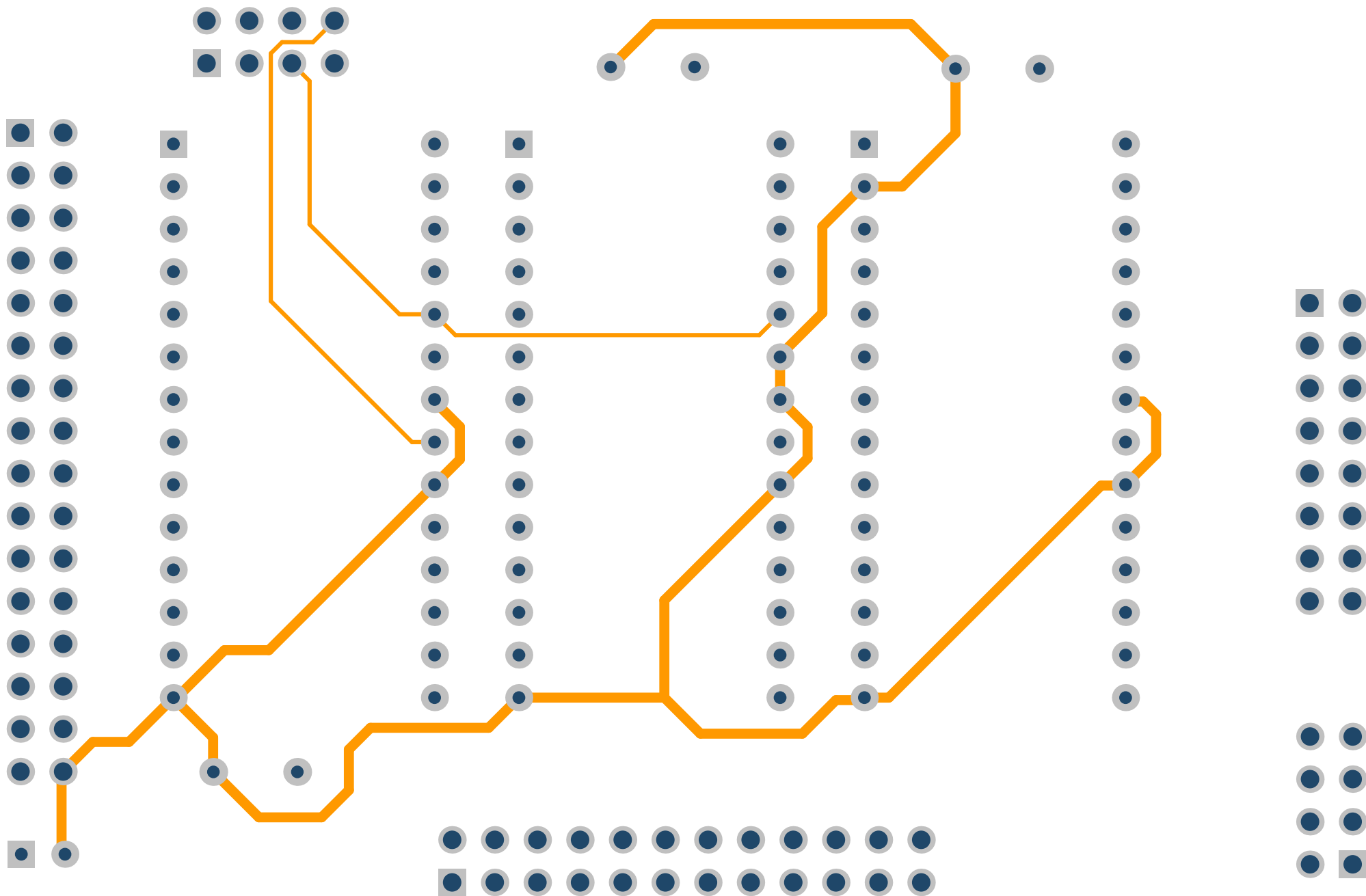
Date: 03-Jun-23

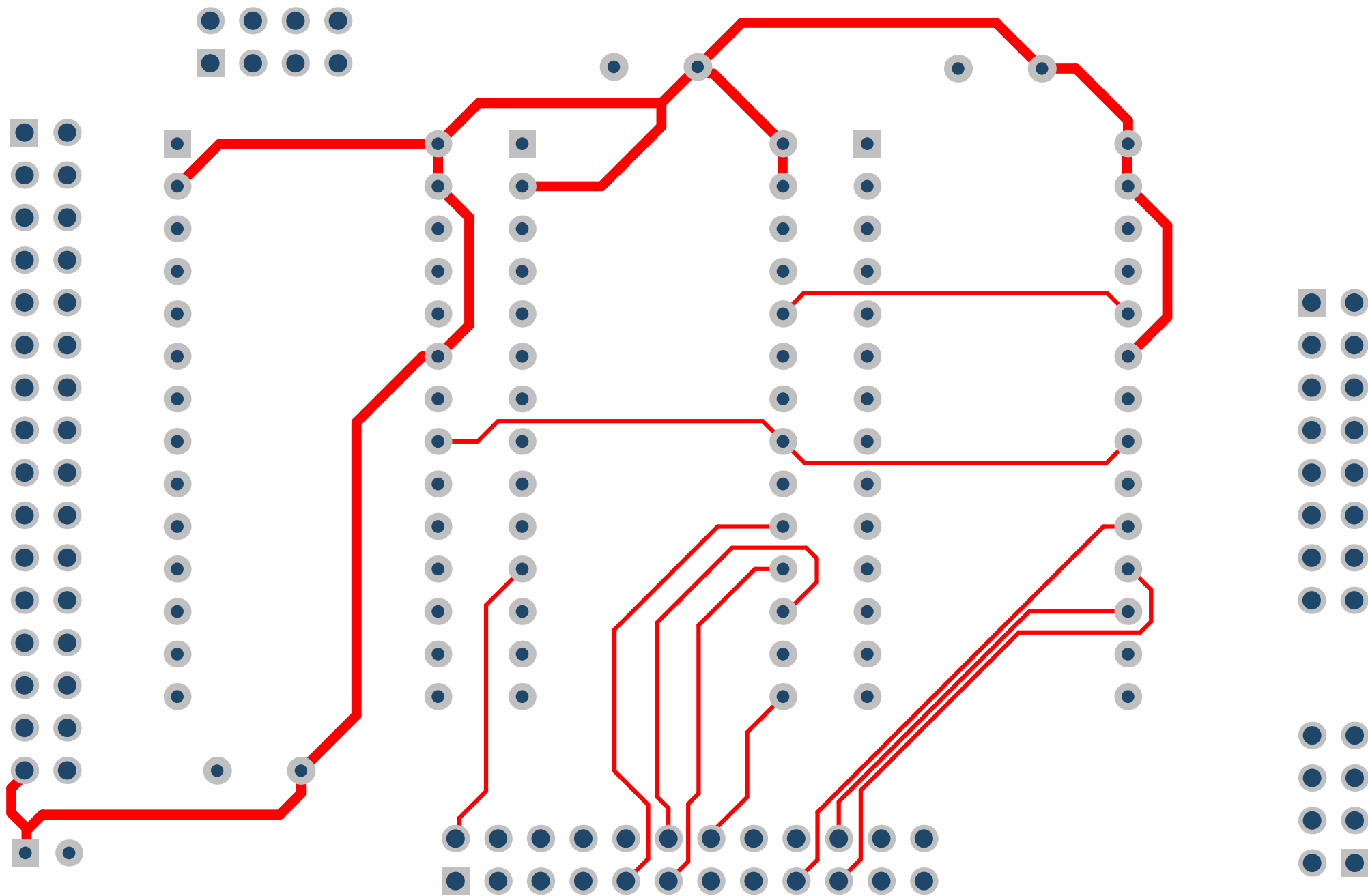
Author: Rafa Hernández

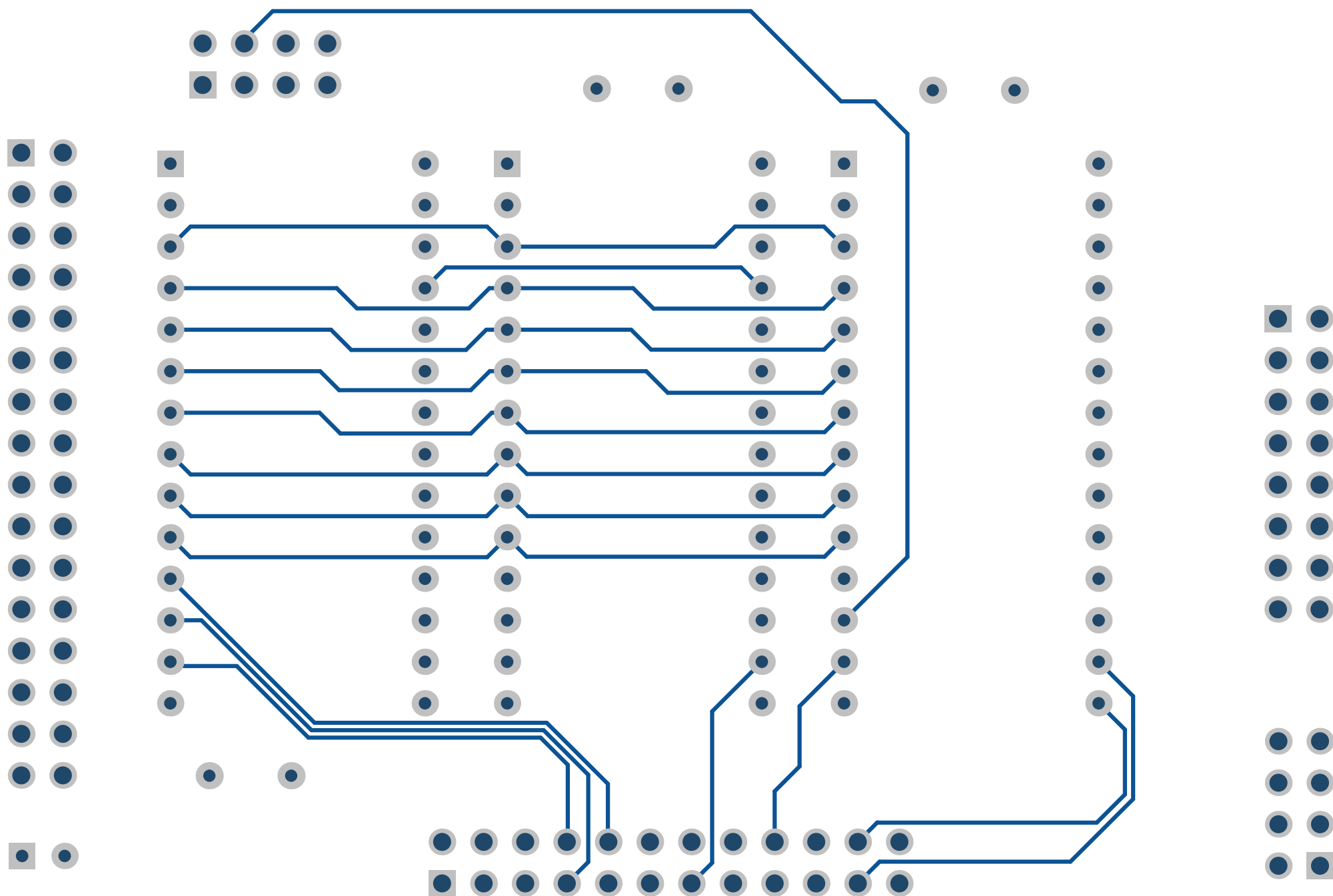














Bill of Materials

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 μ 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