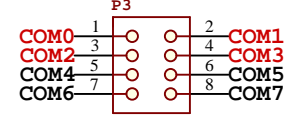
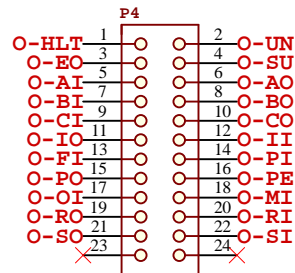
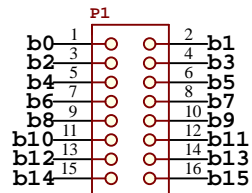
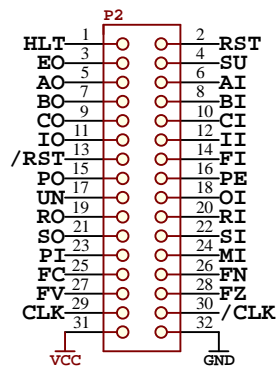


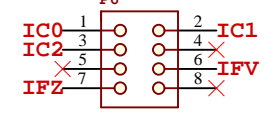
Control BUS Connector Top Data BUS Connector TopControl Logic Decoder Connector

Instruction Register Connector

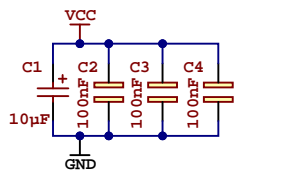
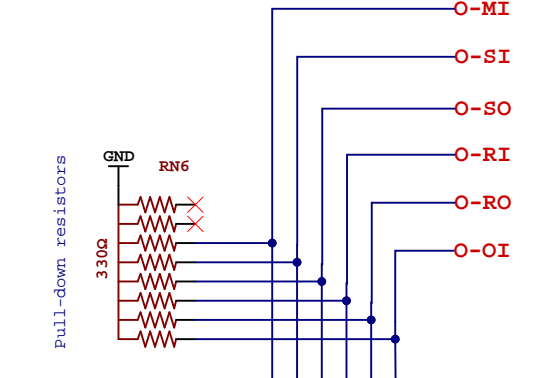
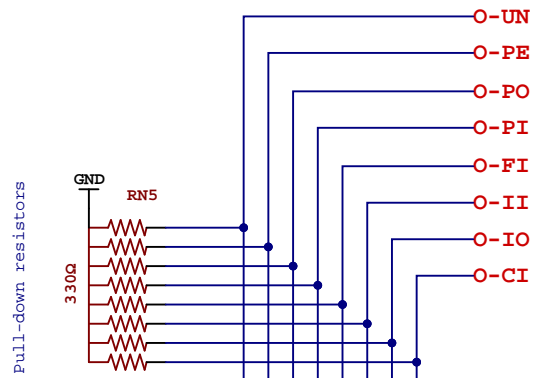
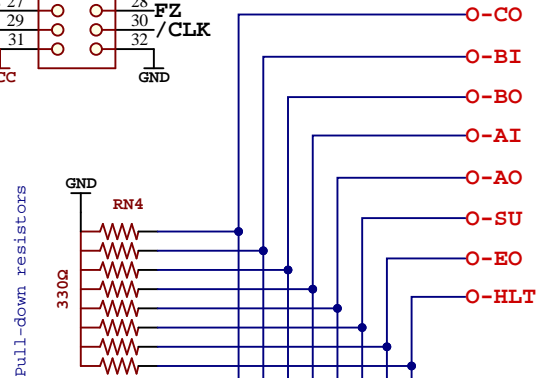
Flags register + Steps counter Connector



Decoder use the most significative word stored in the instruction register which correspond with the command OPCODE.



Flags signals used are IFV, IFZ which are stored in the Flag Register not the current values of FV and FZ which come through the control BUS.



Decoupling Capacitors

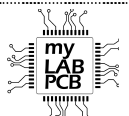
Memory selector set which byte part of the entire microinstruction are stored in the memory:
MEM1 holds the byte 0-7, MEM2 holds the byte 8-15 and MEM3 holds byte 16-23

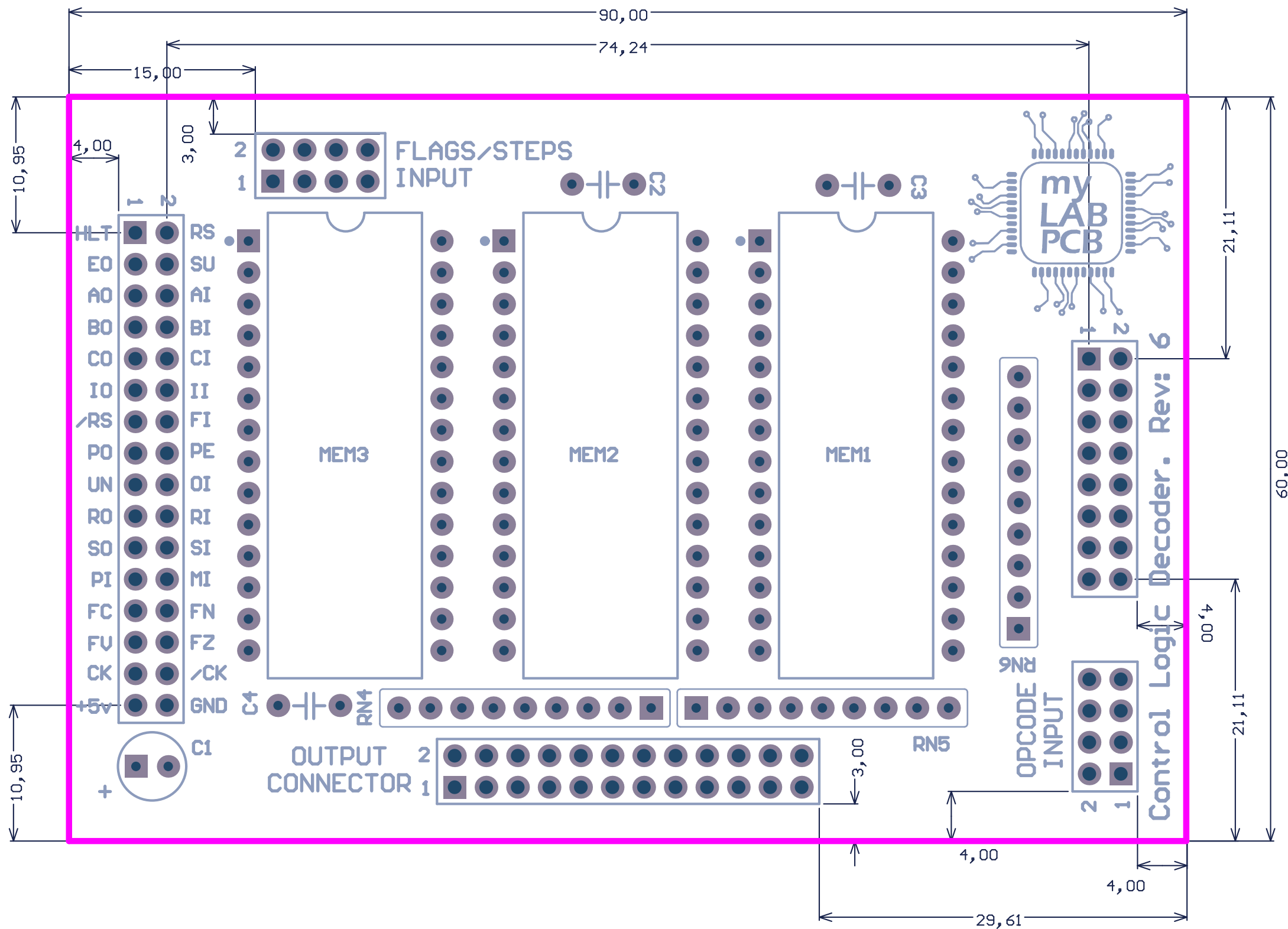
Project: myCPU Instruction Decoder module

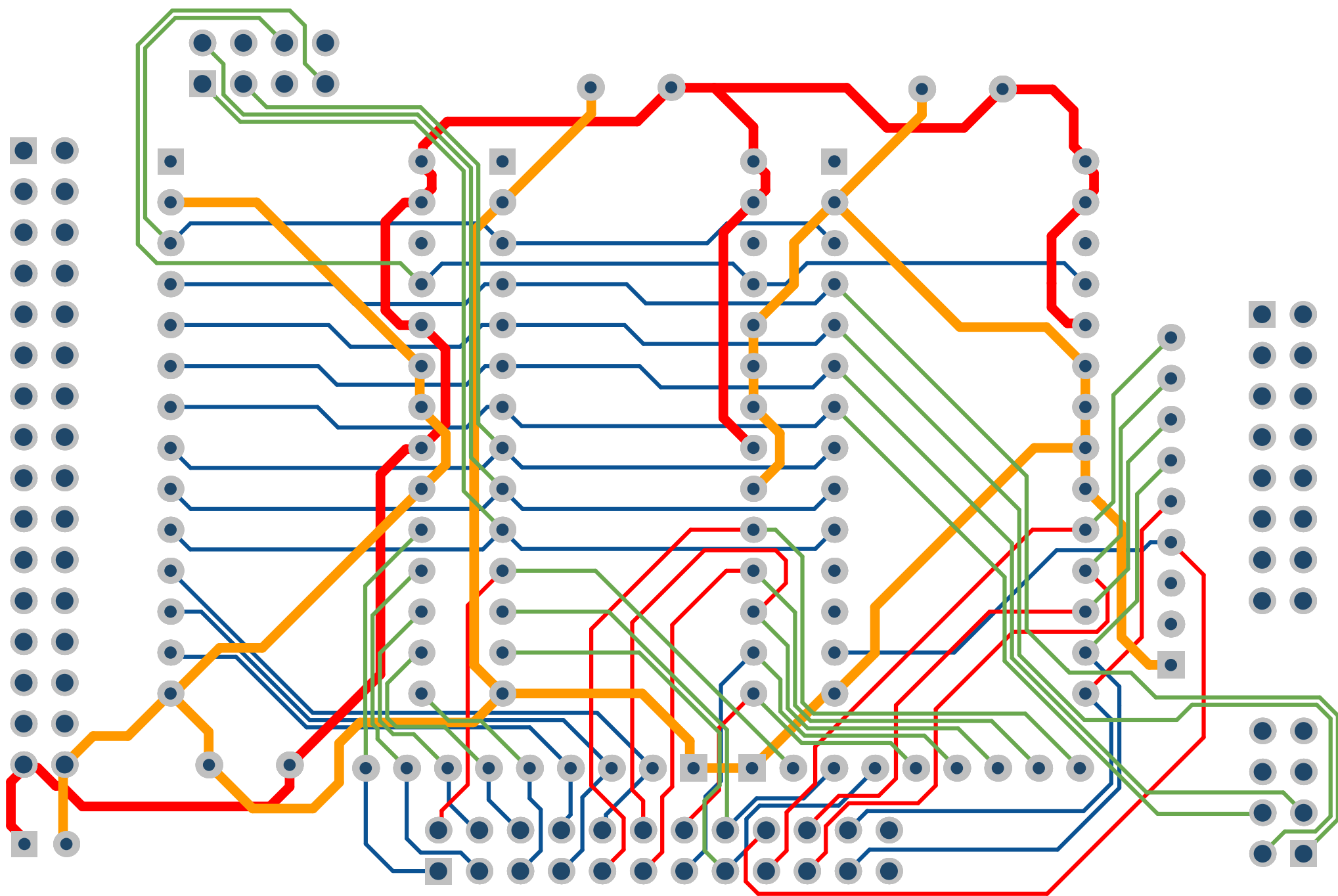
Revision: 6

Date: 17/17/2021

Author: Rafa Hernández









Bill of Materials

Designator	Description	Value	Q
C1	Electrolytic capacitor 16v/50v	10 μ F	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	WR-PHD 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
RN4, RN5, RN6	Resistor array 8 elements,9 pins	330 Ω	3



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
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	WR-PHD Pin Header, THT, pitch 2.54mm, Dual Row, Vertical, 8p	8p
P4	Pin Header, THT, pitch 2.54mm, Dual Row, Vertical, 24p	24p
P6	WR-PHD Pin Header, THT, pitch 2.54mm, Dual Row, Vertical, 8p	8p
RN4	Resistor array 8 elements,9 pins	330 Ω
RN5	Resistor array 8 elements,9 pins	330 Ω
RN6	Resistor array 8 elements,9 pins	330 Ω