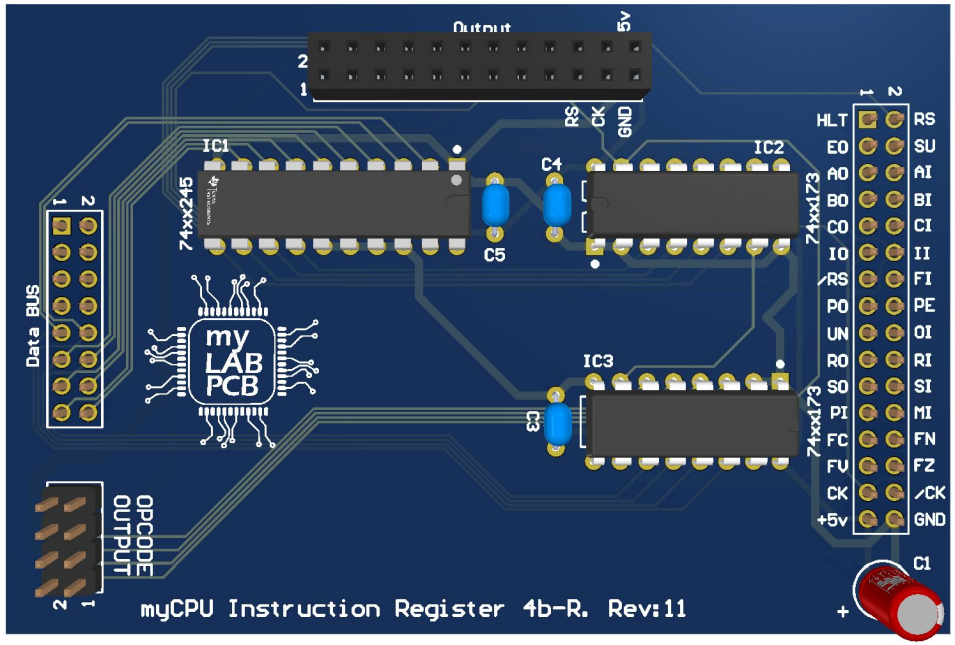
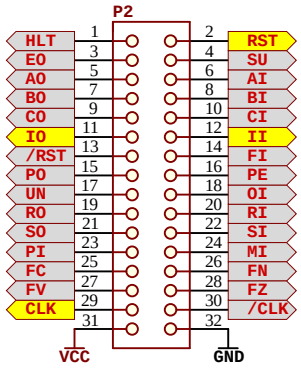
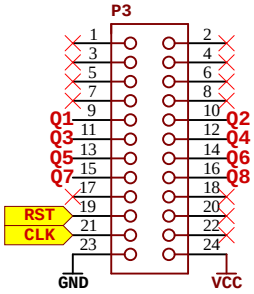

Output
5v
2
1
RS
CK
GND
IC1
74xx245
C5
C4
IC2
74xx173
Data BUS
my
LAB
PCB
IC3
C3
74xx173
OPCODE
OUTPUT
HLT
EO
AO
BO
CO
IO
/RS
PO
UN
RO
SO
PI
FC
FV
CK
+5v
RS
SU
AI
BI
CI
II
FI
PE
OI
RI
SI
MI
FN
FZ
/CK
GND
C1
+
myCPU Instruction Register 4b-R. Rev:11

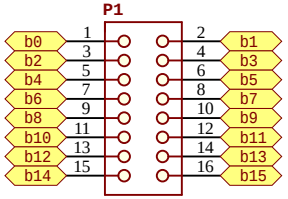
Control BUS Connector



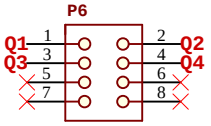
OUTPUT Connector

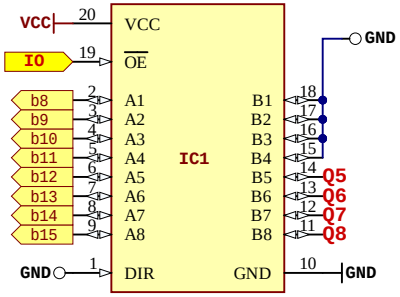


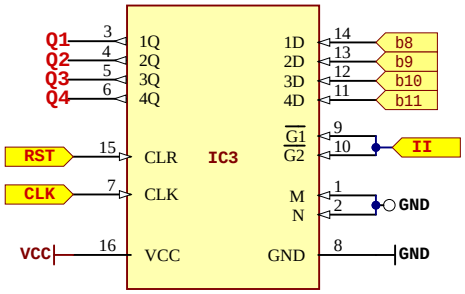
Data BUS Connector

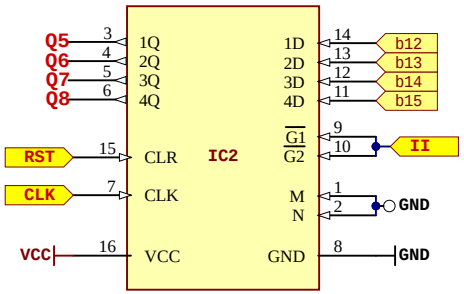


Instruction Decoder Connector

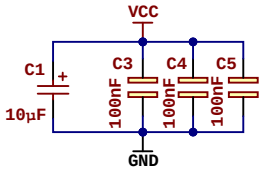






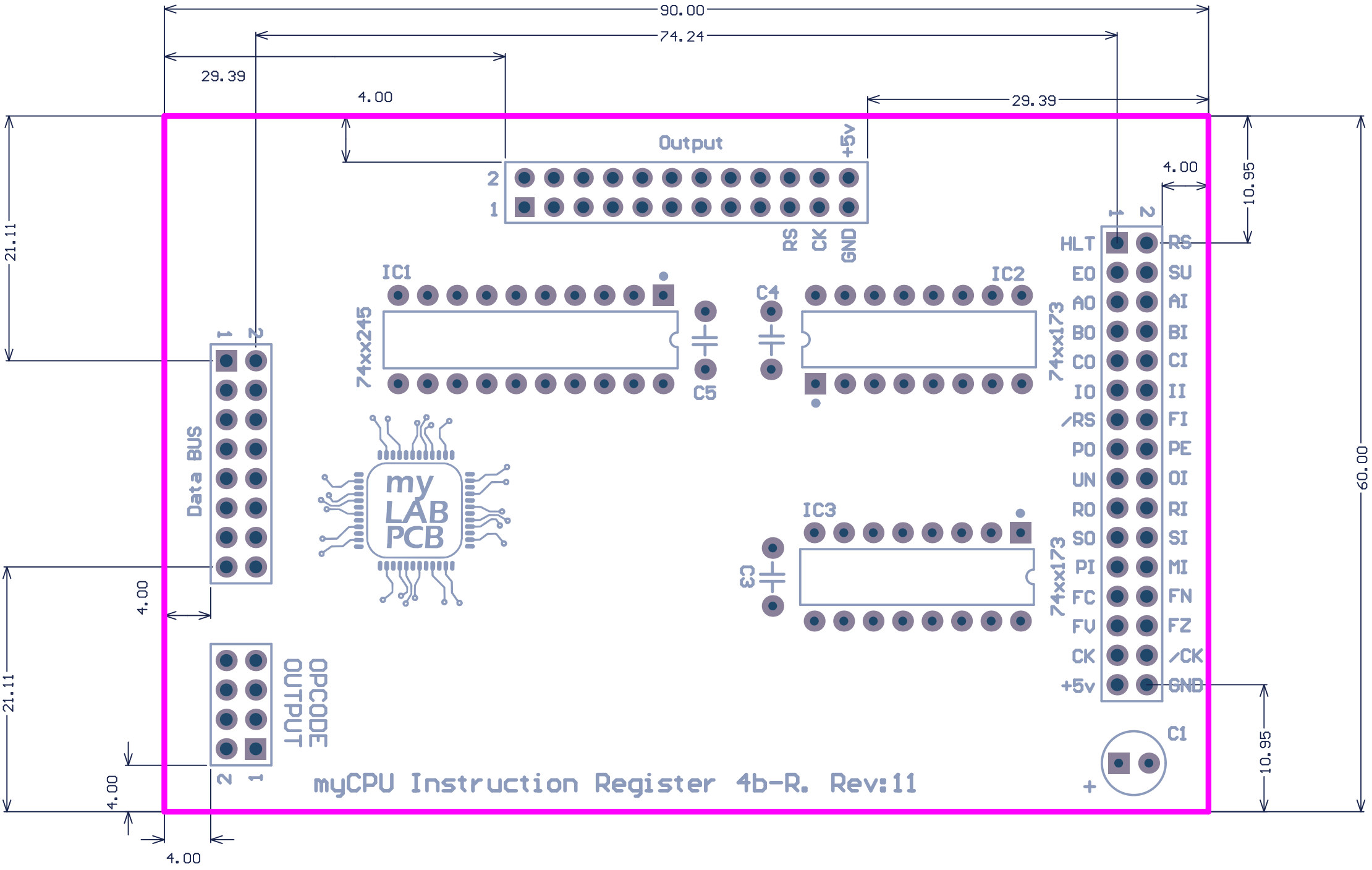


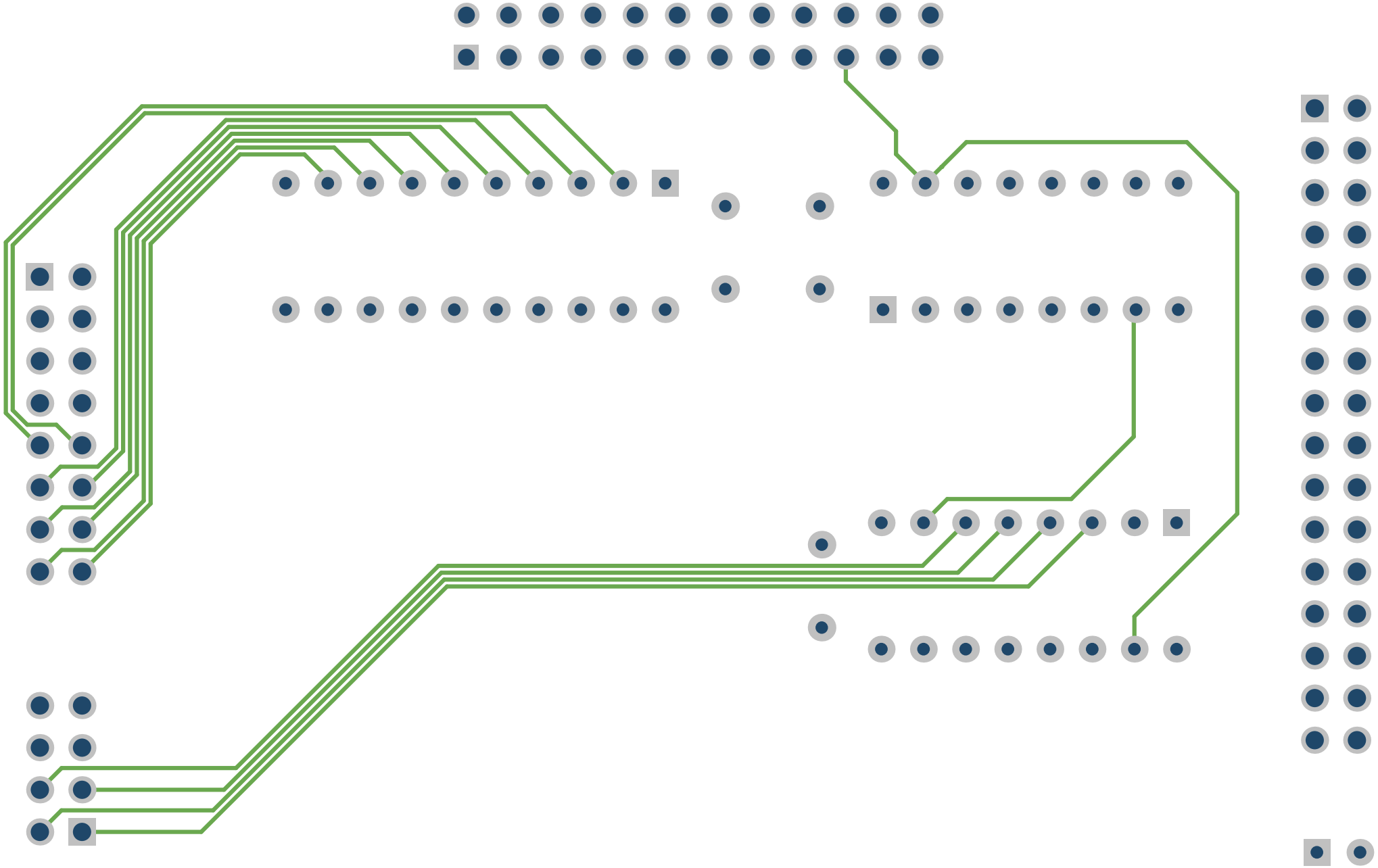
A 4+4 bits register module. Most significative word correspond to instruction opcode and is shared with Instruction decoder, less significative word correspond to operand and is exposed to data BUS when an IO signal is received. Bit weigth goes from Q8 (less) to Q1 (most)

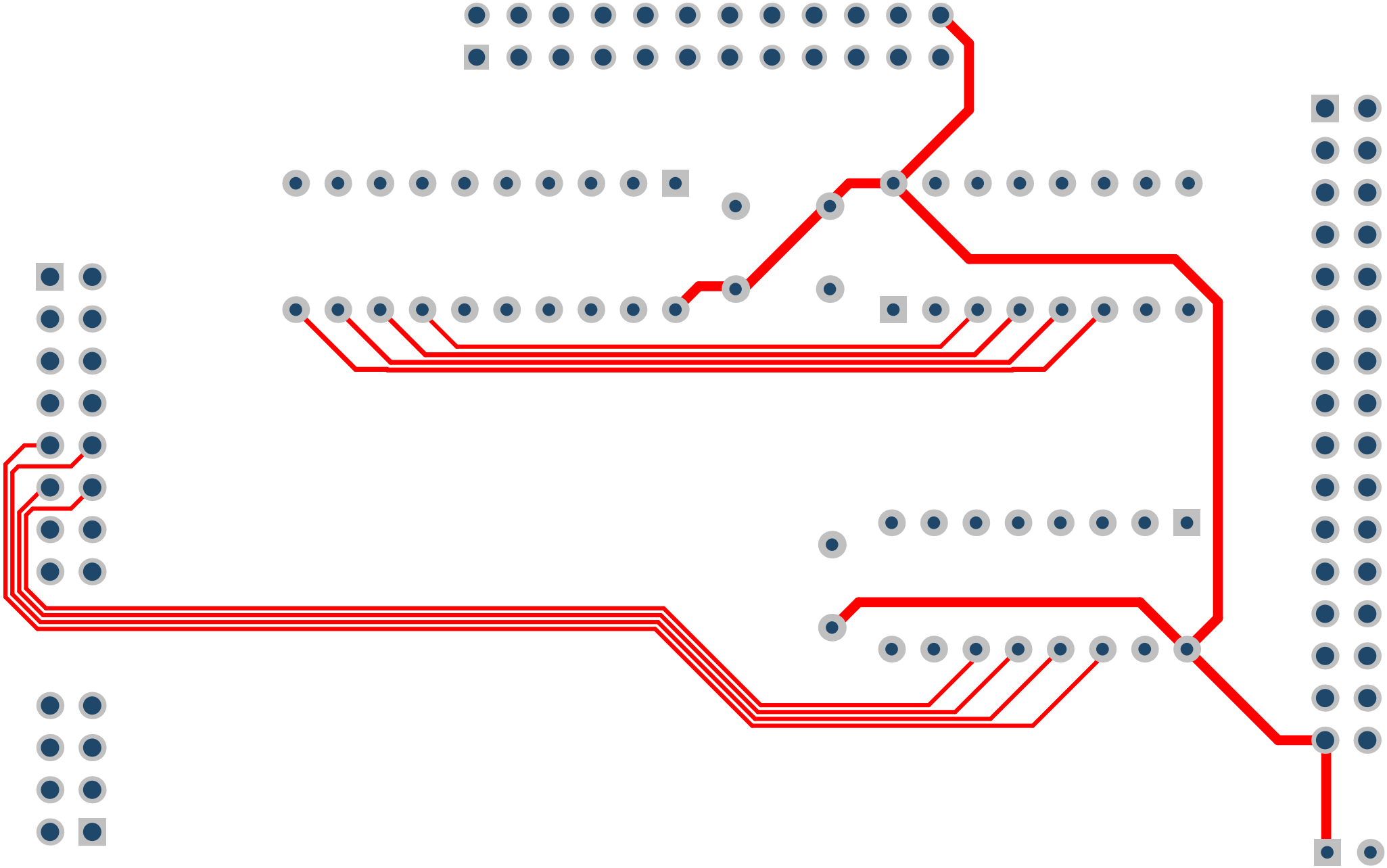


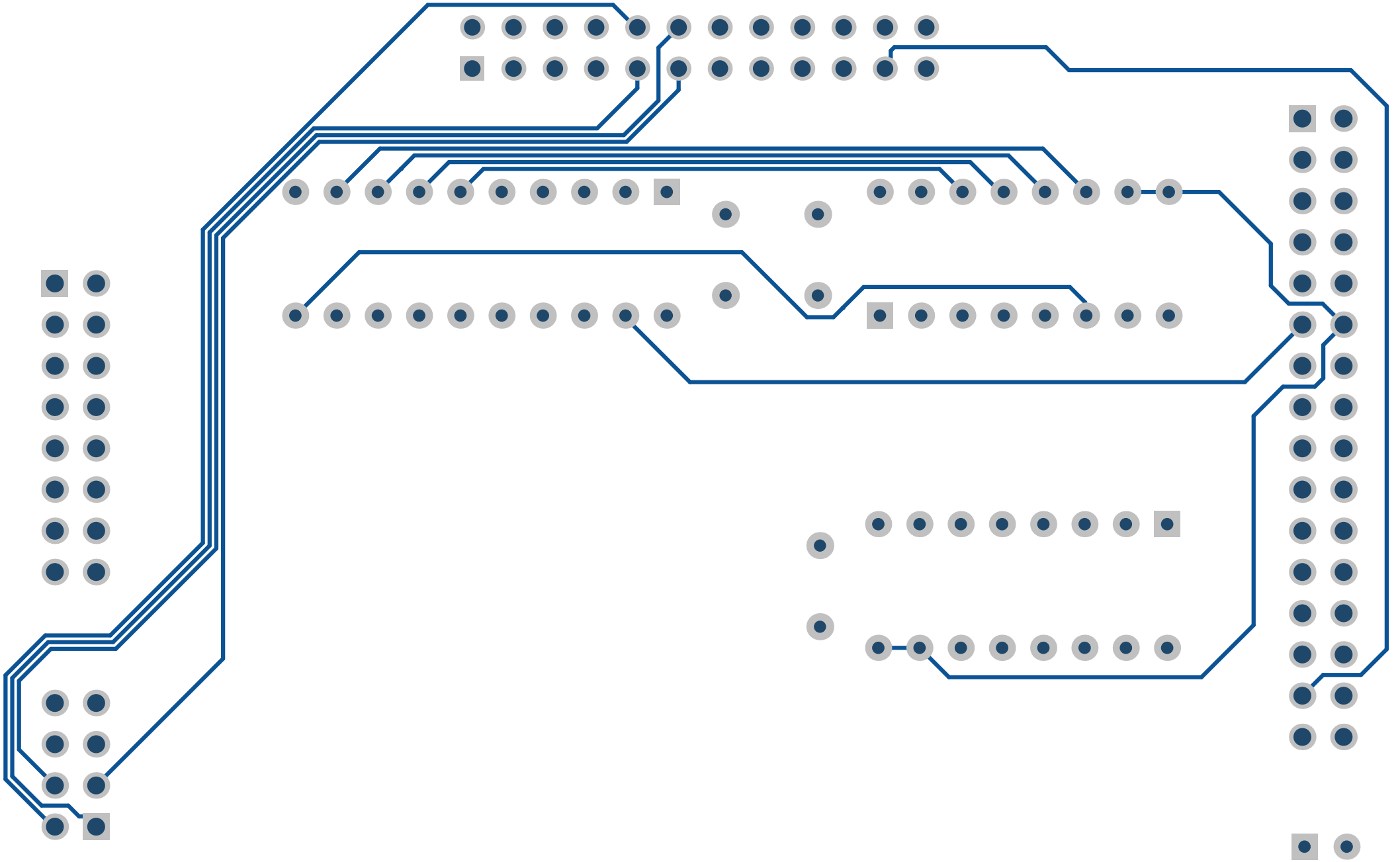
Decoupling Capacitors

Project: myCPU Instruction Register 4+4 bit R	
Revision: 11	**Date:** 15-Jul-24
Author: Rafa Hernández	


90.00
74.24
29.39
4.00
29.39
21.11
Output
+5v
2
1
RS
CK
GND
4.00
10.95
60.00
IC1
74xx245
C5
C4
IC2
74xx173
HLT
EO
AO
BO
CO
IO
/RS
PO
UN
RO
SO
PI
FC
FV
CK
+5v
RS
SU
AI
BI
CI
II
FI
PE
OI
RI
SI
MI
FN
FZ
/CK
GND
Data BUS
my
LAB
PCB
IC3
C3
OPCODE
OUTPUT
C1
+
myCPU Instruction Register 4b-R. Rev:11







Bill of Materials

myCPU Instruction Register 4+4 bit

Description	Value	Q
Electrolytic capacitor 16v/50v	10µF	1
Ceramic capacitor	100nF	3
Non inverting bus transceiver	74xx245	1
4-bit D-Type Register with 3 state outputs	74xx173	2
Pin Header, THT, pitch 2.54mm, Dual Row, Vertical	16p	1
Pin Header, THT, pitch 2.54mm, Dual Row, Vertical	32p	1
Socket Header, THT, pitch 2.54mm, Dual Row, Vertical	24p	1
Pin Header, THT, pitch 2.54mm, Dual Row, Vertical	8p	1

Assembly List

myCPU Instruction Register 4+4 bit

Designator	Description	Value
C1	Electrolytic capacitor 16v/50v	10µF
C3	Ceramic capacitor	100nF
C4	Ceramic capacitor	100nF
C5	Ceramic capacitor	100nF
IC1	Non inverting bus transceiver	74xx245
IC2	4-bit D-Type Register with 3 state outputs	74xx173
IC3	4-bit D-Type Register with 3 state outputs	74xx173
P1	Pin Header, THT, pitch 2.54mm, Dual Row, Vertical	16p
P2	Pin Header, THT, pitch 2.54mm, Dual Row, Vertical	32p
P3	Socket Header, THT, pitch 2.54mm, Dual Row, Vertical	24p
P6	Pin Header, THT, pitch 2.54mm, Dual Row, Vertical	8p