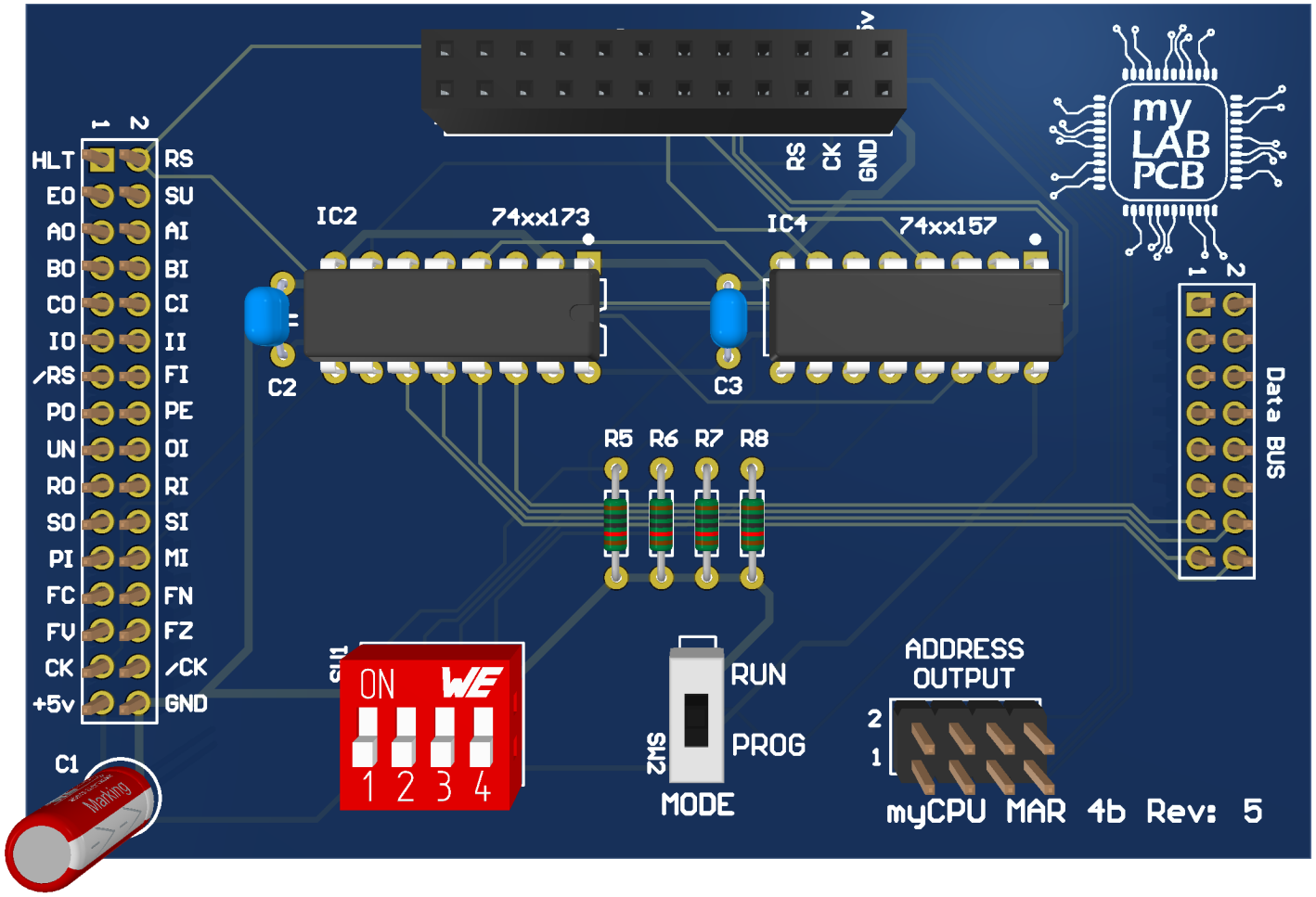
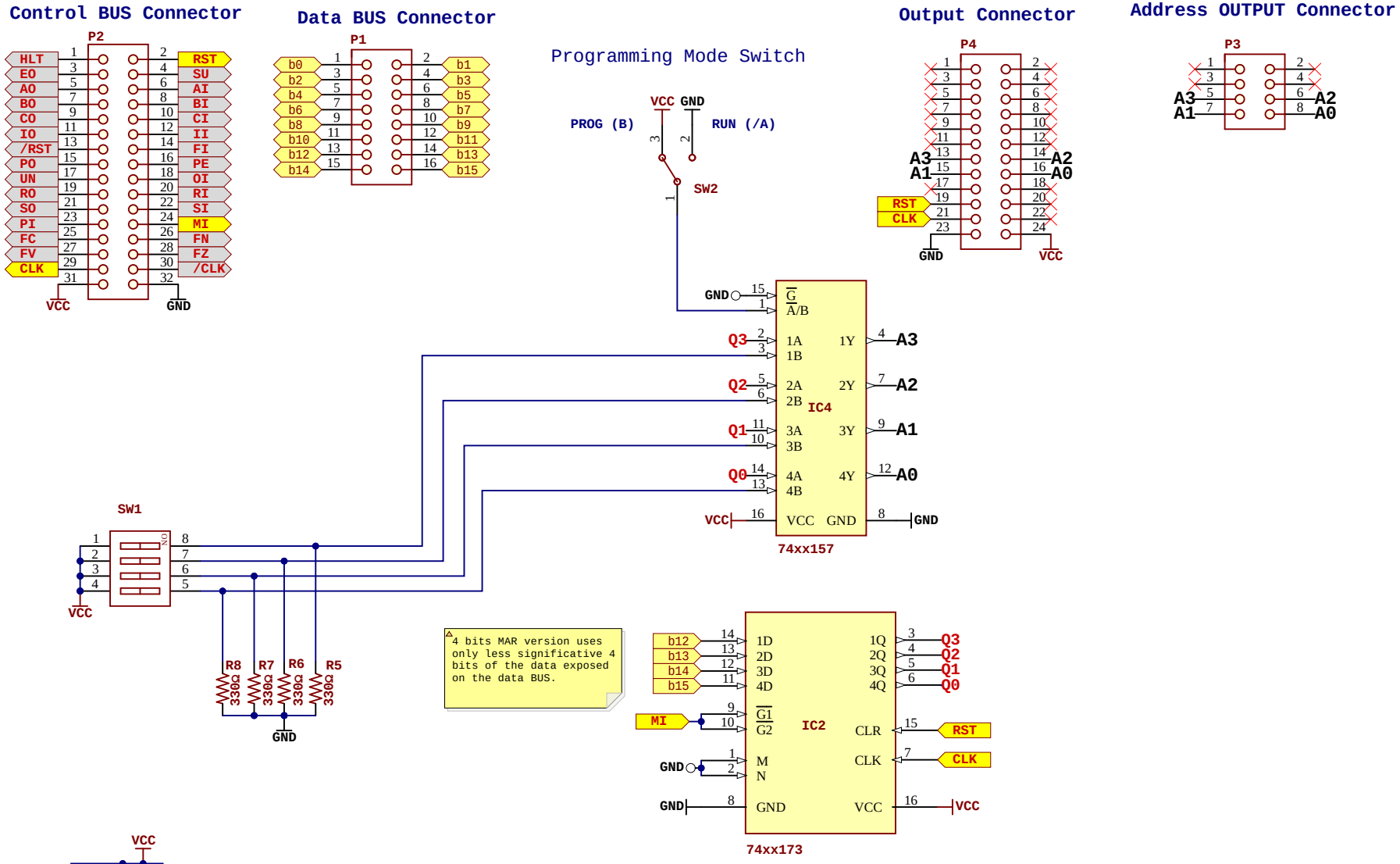
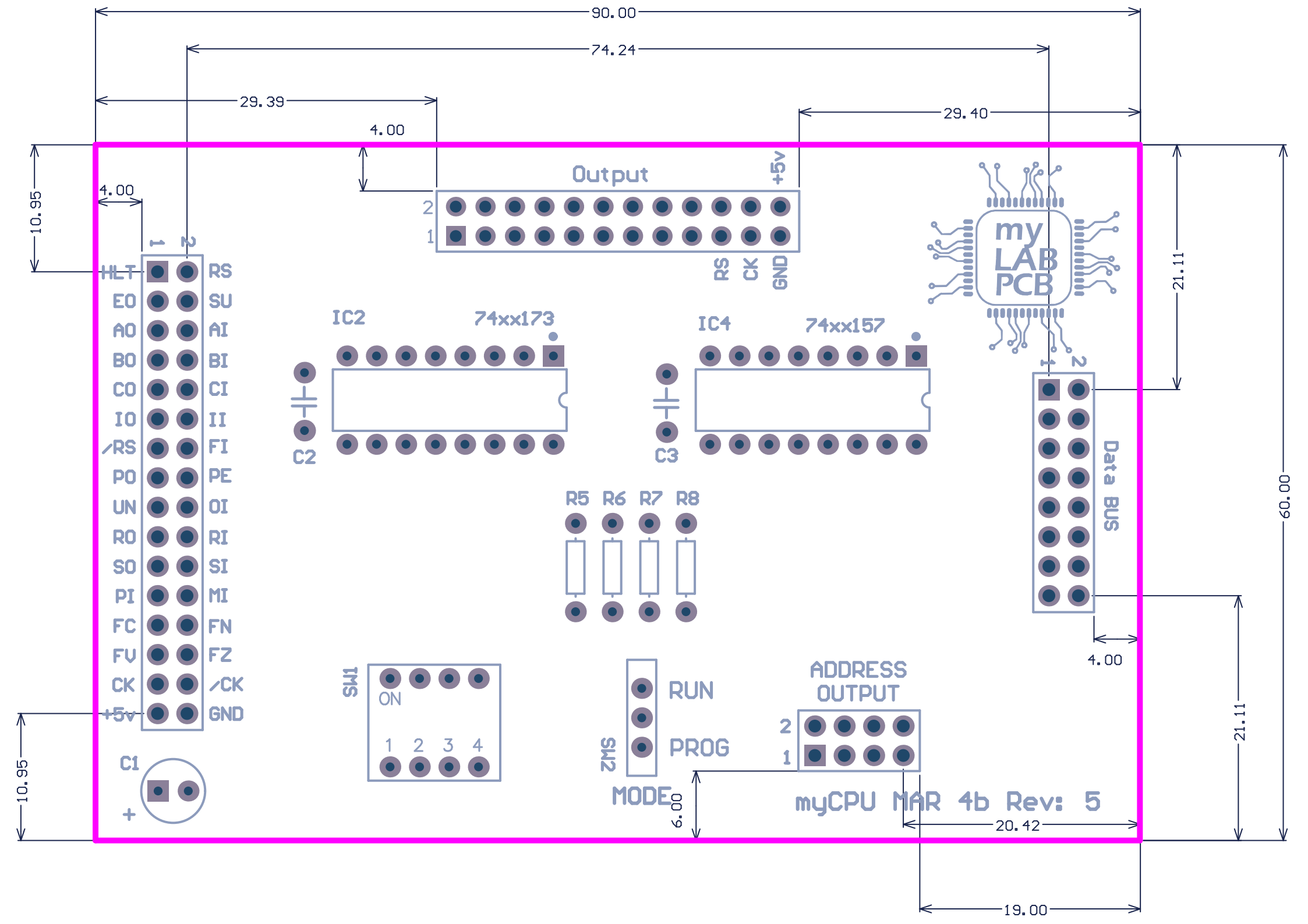
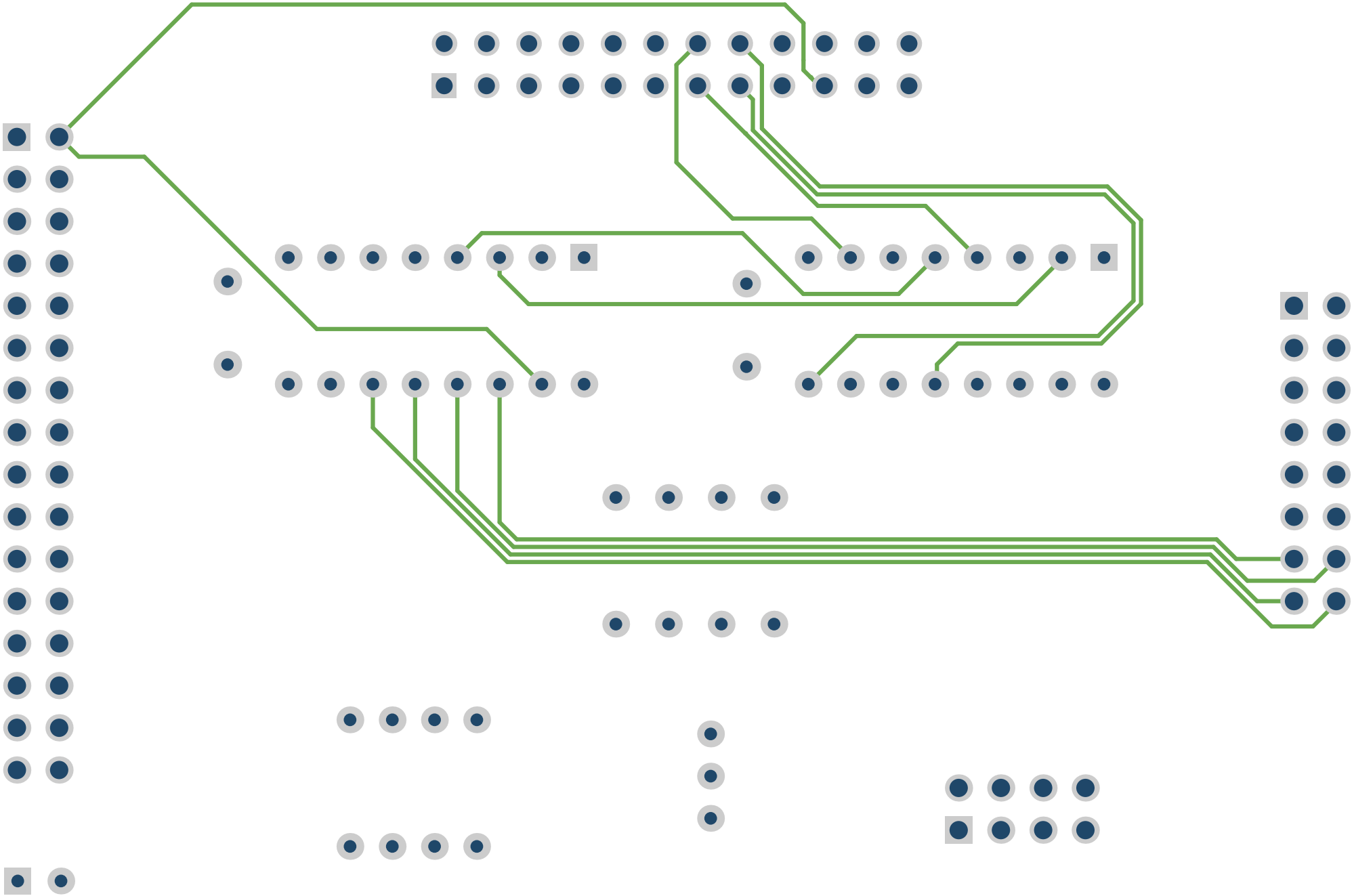
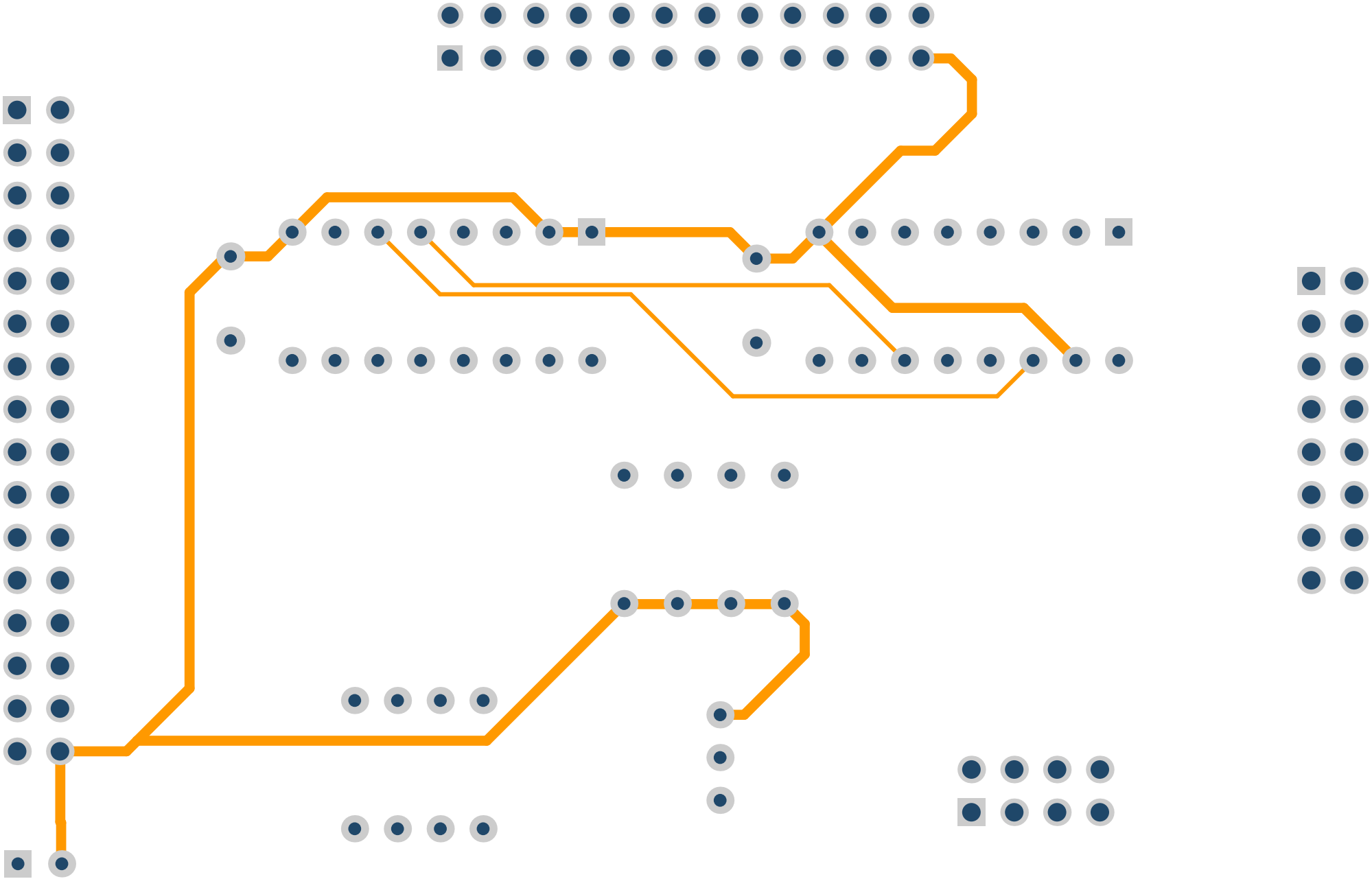
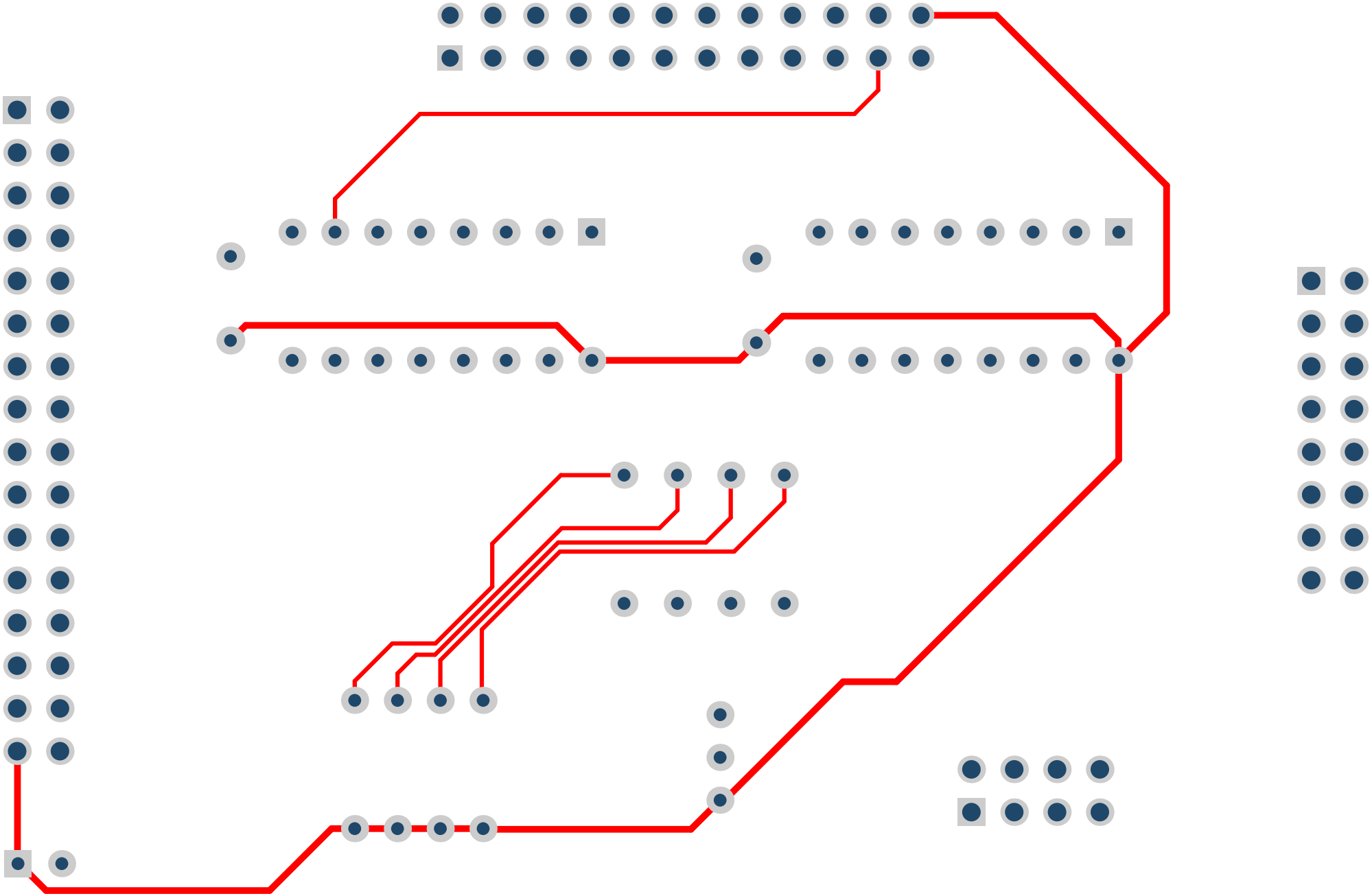

1
2
HLT
EO
AO
BO
CO
IO
/RS
PO
UN
RO
SO
PI
FC
FV
CK
+5v
RS
SU
AI
BI
CI
II
FI
PE
OI
RI
SI
MI
FN
FZ
/CK
GND
RS
CK
GND
IC2
74xx173
IC4
74xx157
C1
C2
C3
R5
R6
R7
R8
ON
WE
1 2 3 4
SW1
SW2
RUN
PROG
MODE
ADDRESS
OUTPUT
2
1
Data BUS
myCPU MAR 4b Rev: 5

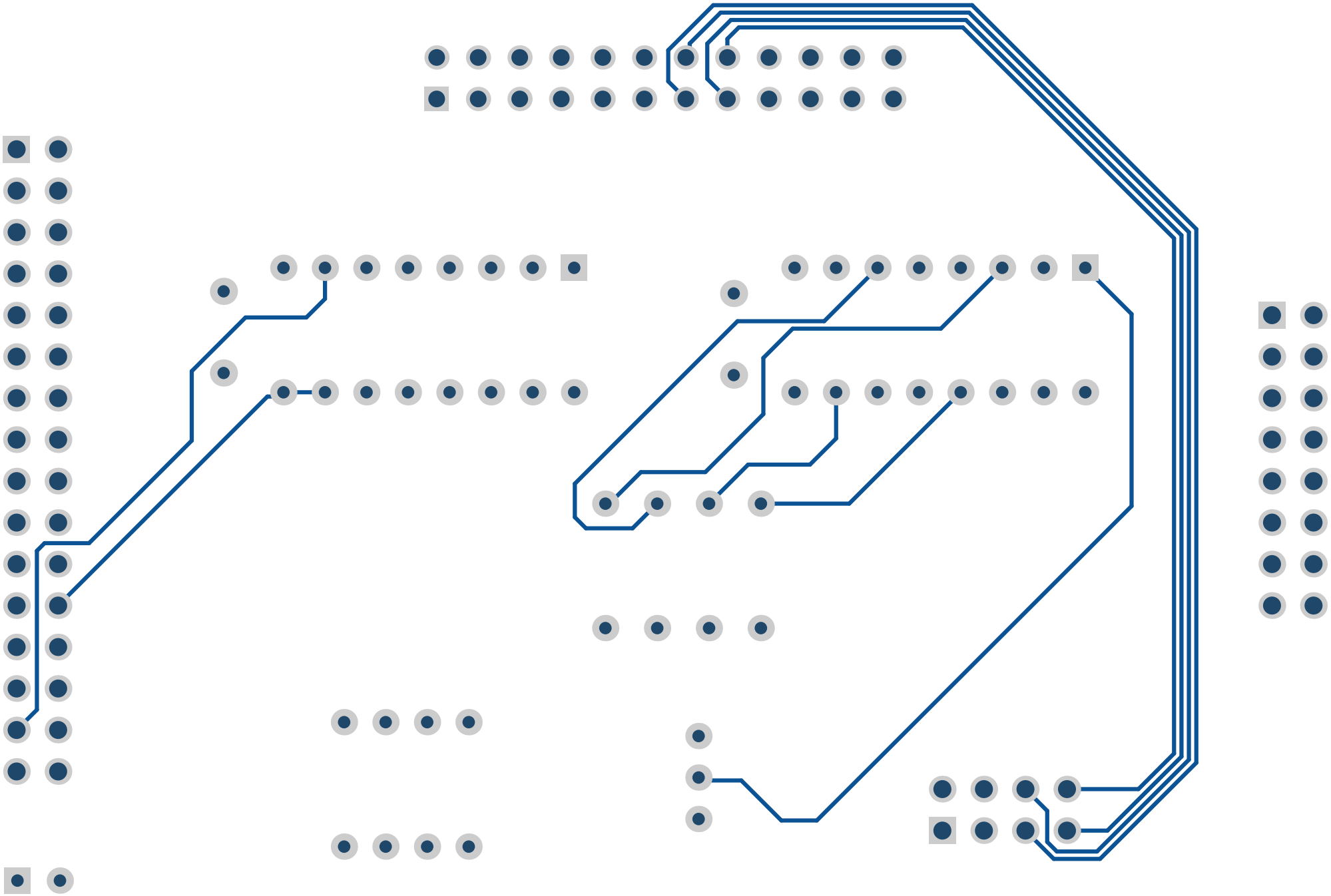

Control BUS Connector
P2
HLT
EO
AO
BO
CO
IO
/RST
PO
UN
RO
SO
PI
FC
FV
CLK
RST
SU
AI
BI
CI
II
FI
PE
OI
RI
SI
MI
FN
FZ
/CLK
VCC
GND
Data BUS Connector
P1
b0
b2
b4
b6
b8
b10
b12
b14
b1
b3
b5
b7
b9
b11
b13
b15
Programming Mode Switch
VCC
GND
PROG (B)
RUN (/A)
SW2
Output Connector
P4
A3
A1
A2
A0
RST
CLK
GND
VCC
Address OUTPUT Connector
P3
A3
A1
A2
A0
SW1
VCC
R8
R7
R6
R5
330Ω
GND
IC4
G
A/B
1A
1B
2A
2B
3A
3B
4A
4B
1Y
2Y
3Y
4Y
VCC
GND
Q3
Q2
Q1
Q0
A3
A2
A1
A0
74xx157
4 bits MAR version uses only less significative 4 bits of the data exposed on the data BUS.
IC2
1D
2D
3D
4D
1Q
2Q
3Q
4Q
G1
G2
M
N
CLR
CLK
GND
VCC
MI
RST
CLK
74xx173
C1
10µF
C2
100nF
C3
100nF
Decoupling Capacitors
my LAB PCB
Project: myCPU MAR Module 4 bits
Revision: 5
Date: 15-Jul-24
Author: Rafa Hernández


90.00
74.24
29.39
29.40
4.00
10.95
4.00
Output
+5v
2
1
RS
CK
GND
my
LAB
PCB
21.11
60.00
IC2
74xx173
IC4
74xx157
C2
C3
R5
R6
R7
R8
1
2
Data BUS
4.00
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
+
SW1
ON
1 2 3 4
RUN
PROG
2MS
MODE
6.00
ADDRESS
OUTPUT
2
1
myCPU MAR 4b Rev: 5
20.42
21.11
10.95
19.00









Bill of Materials

myCPU MAR 4 bits

Description	Value	Q
Electrolytic capacitor 16v/50v	10µF	1
Ceramic capacitor	100nF	2
4-bit D-Type Register with 3 state outputs	74xx173	1
4-Bits 2-Line to 1 Line data selector	74xx157	1
Pin Header, THT, pitch 2.54mm, Dual Row, Vertical	16p	1
Pin Header, THT, pitch 2.54mm, Dual Row, Vertical	32p	1
Pin Header, THT, pitch 2.54mm, Dual Row, Vertical	8p	1
Socket Header, THT, pitch 2.54mm, Dual Row, Vertical	24p	1
Resistor Axial	330	4
DIP switch 4 positions	4p	1
Mini slide switch 2 pos, 3 pins	SP2T	1

Assembly List

myCPU MAR 4 bits

Designator	Description	Value
C1	Electrolytic capacitor 16v/50v	10µF
C2	Ceramic capacitor	100nF
C3	Ceramic capacitor	100nF
IC2	4-bit D-Type Register with 3 state outputs	74xx173
IC4	4-Bits 2-Line to 1 Line data selector	74xx157
P1	Pin Header, THT, pitch 2.54mm, Dual Row, Vertical	16p
P2	Pin Header, THT, pitch 2.54mm, Dual Row, Vertical	32p
P3	Pin Header, THT, pitch 2.54mm, Dual Row, Vertical	8p
P4	Socket Header, THT, pitch 2.54mm, Dual Row, Vertical	24p
R5	Resistor Axial	330
R6	Resistor Axial	330
R7	Resistor Axial	330
R8	Resistor Axial	330
SW1	DIP switch 4 positions	4p
SW2	Mini slide switch 2 pos, 3 pins	SP2T