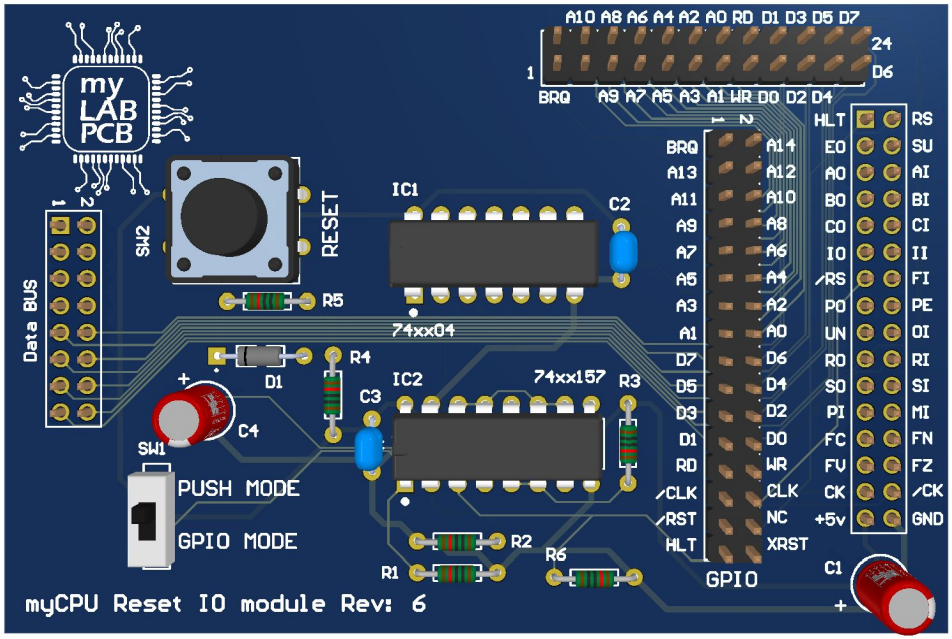
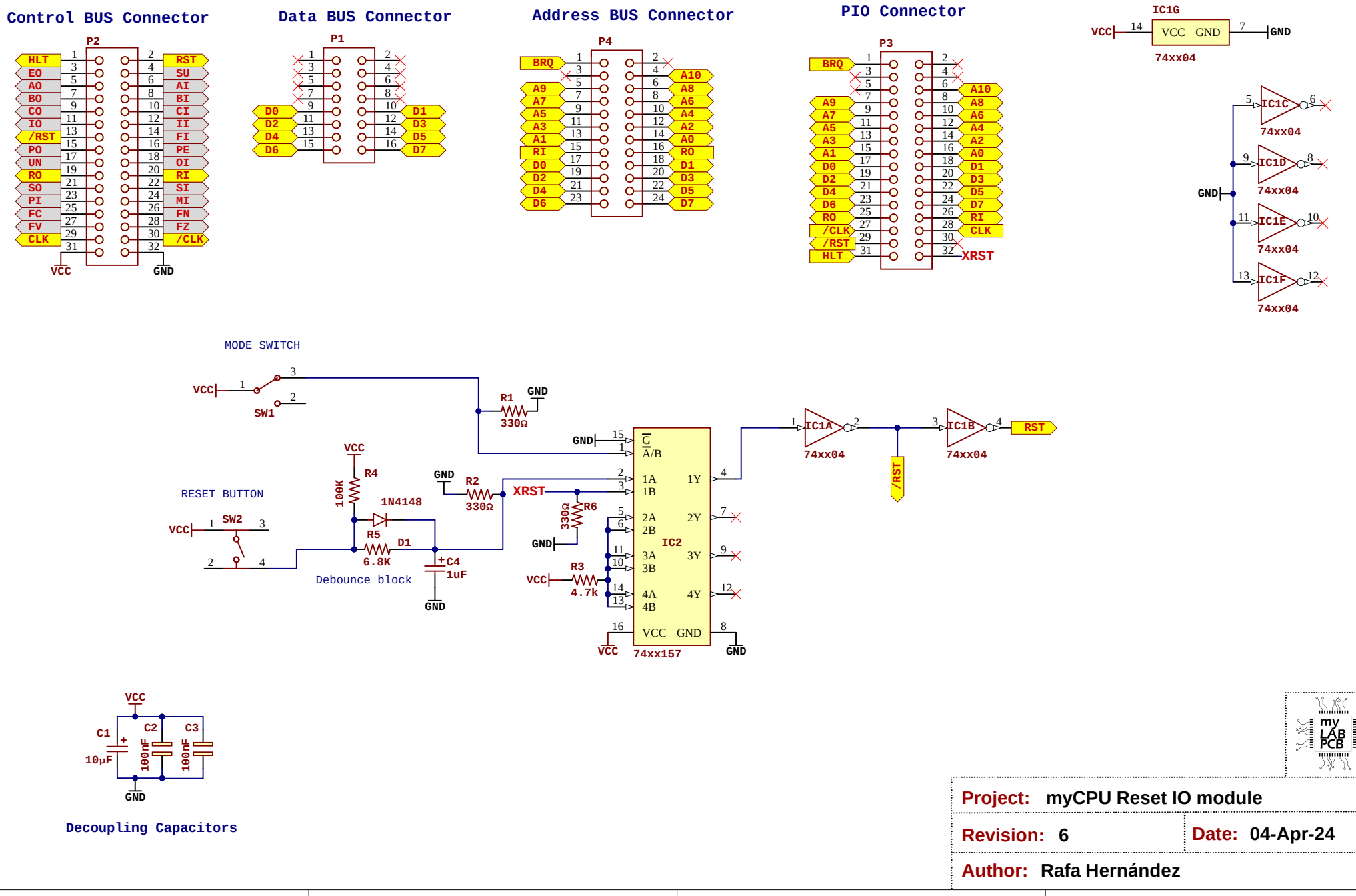
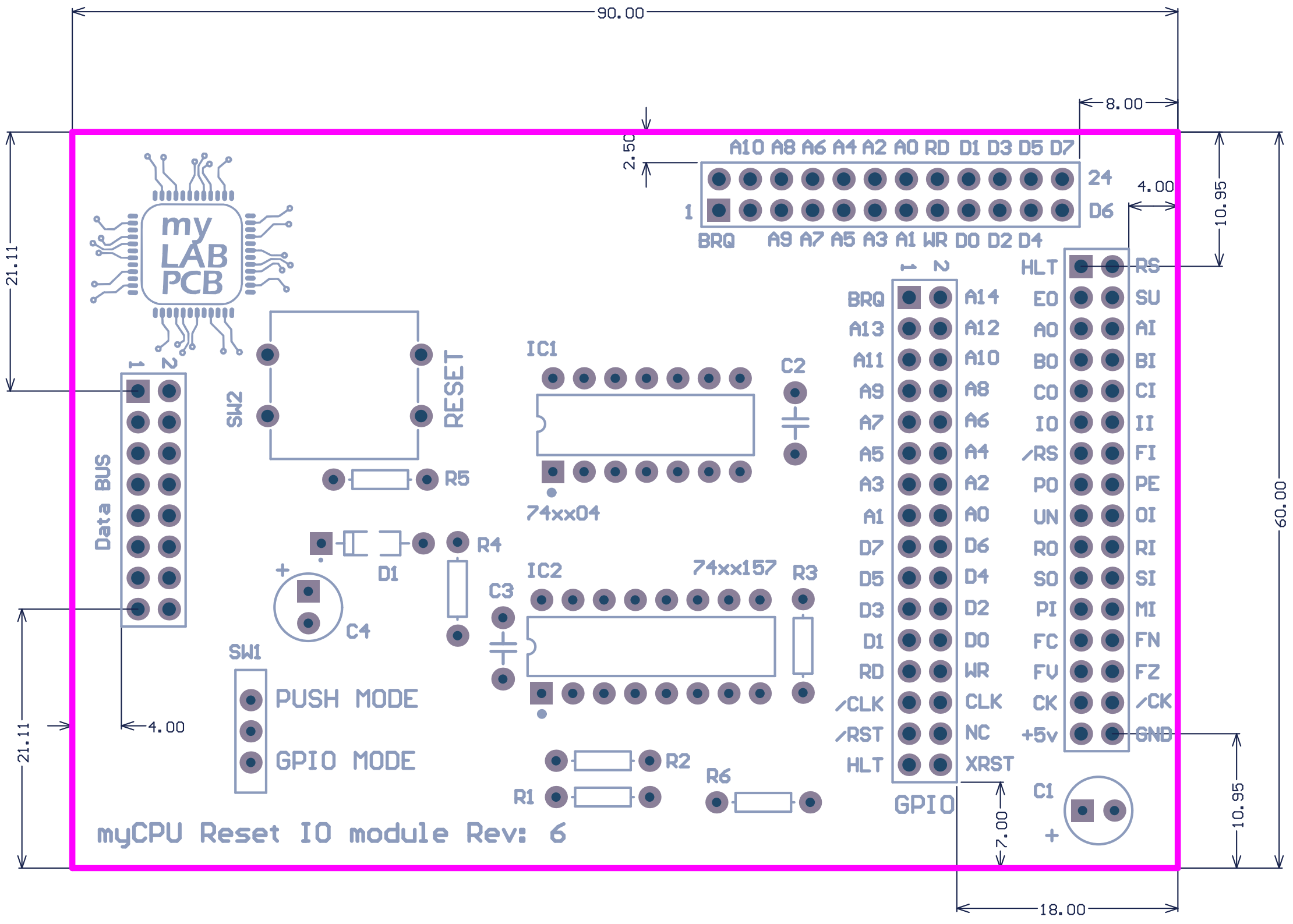
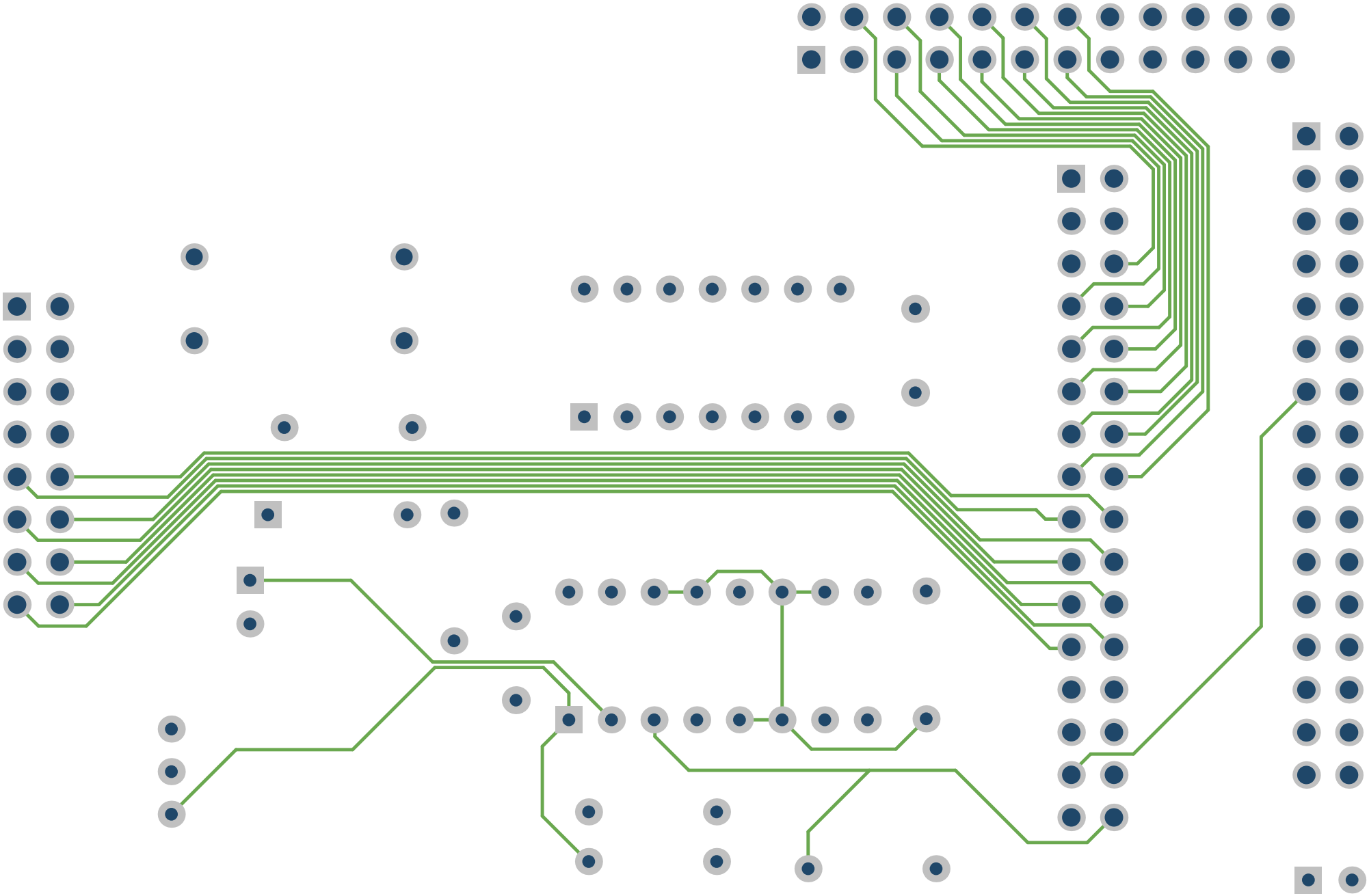
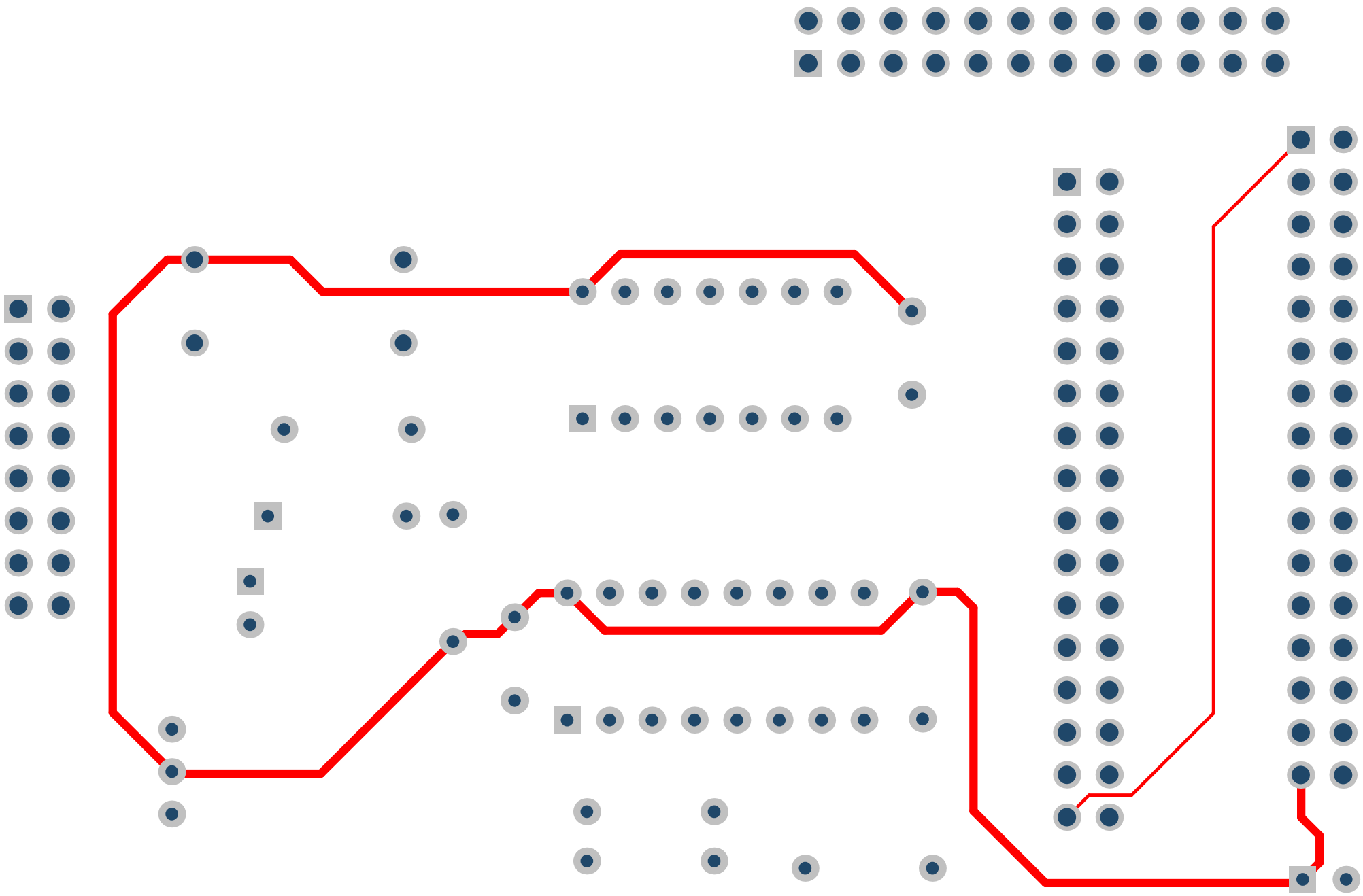
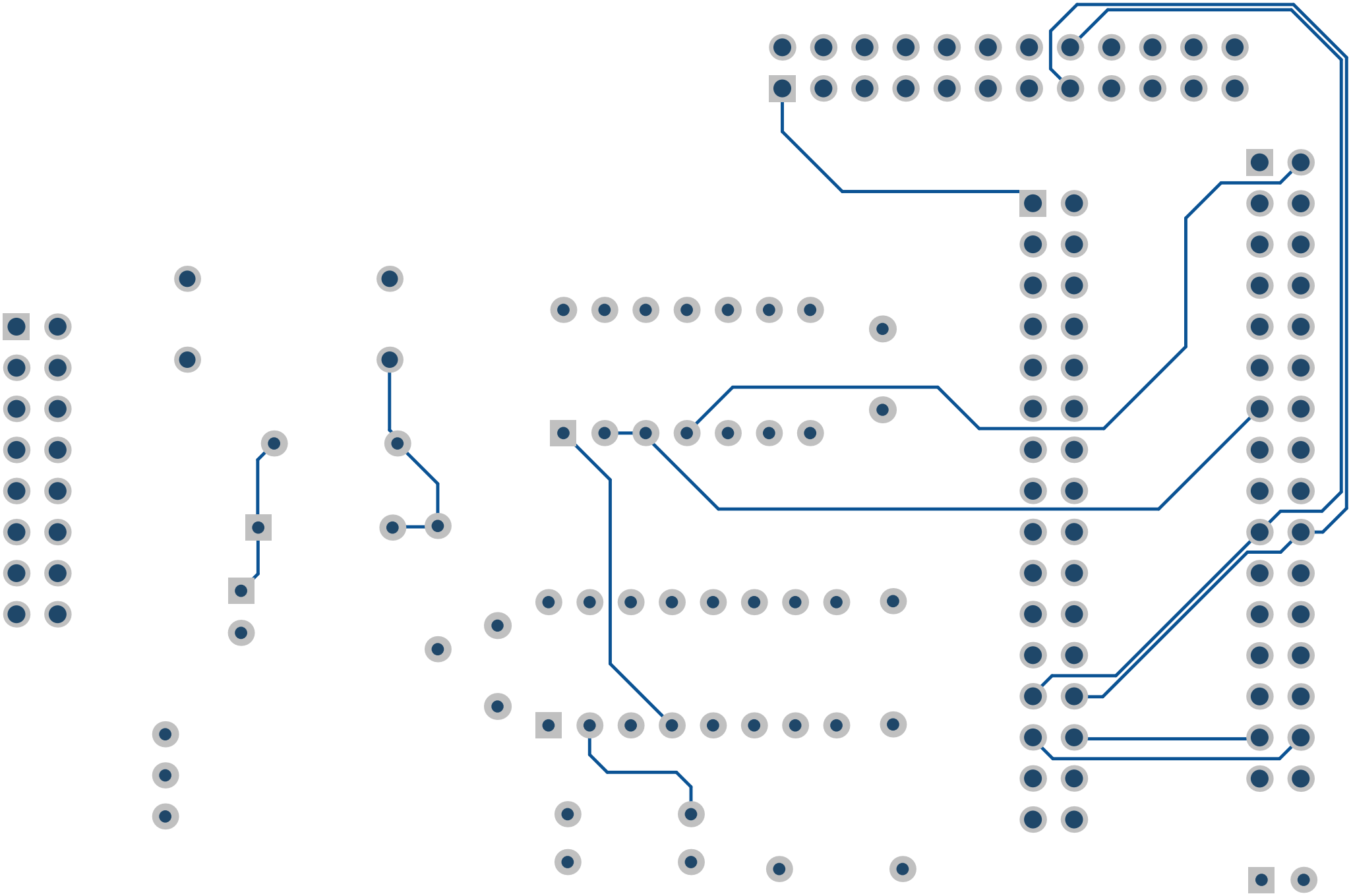

my
LAB
PCB
A10 A8 A6 A4 A2 A0 RD D1 D3 D5 D7
1
24
D6
BRQ A9 A7 A5 A3 A1 WR D0 D2 D4
Data BUS
SW2
RESET
R5
IC1
74xx04
C2
R4
D1
C4
SW1
PUSH MODE
GPIO MODE
IC2
74xx157
C3
R3
R2
R1
R6
BRQ A14
A13 A12
A11 A10
A9 A8
A7 A6
A5 A4
A3 A2
A1 A0
D7 D6
D5 D4
D3 D2
D1 D0
RD WR
/CLK CLK
/RST NC
HLT +5v
XRST
GPIO
HLT RS
EO SU
AO AI
BO BI
CO CI
IO II
/RS FI
PO PE
UN OI
RO RI
SO SI
PI MI
FC FN
FV FZ
CK /CK
GND
C1
myCPU Reset IO module Rev: 6


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
D0 D2 D4 D6
D1 D3 D5 D7
Address BUS Connector
P4
BRQ A9 A7 A5 A3 A1 RI D0 D2 D4 D6
A10 A8 A6 A4 A2 A0 RO D1 D3 D5 D7
PIO Connector
P3
BRQ A9 A7 A5 A3 A1 D0 D2 D4 D6 RO /CLK /RST HLT
A10 A8 A6 A4 A2 A0 D1 D3 D5 D7 RI CLK XRST
IC1G
VCC GND
74xx04
IC1C IC1D IC1E IC1F
74xx04
MODE SWITCH
SW1
R1 330Ω
RESET BUTTON
SW2
R4 100K
1N4148
R5 6.8K
D1
R2 330Ω
XRST
R6 330Ω
R3 4.7k
C4 1uF
Debounce block
IC2
74xx157
IC1A IC1B
74xx04
/RST
RST
C1 10µF
C2 100nF
C3 100nF
Decoupling Capacitors
Project: myCPU Reset IO module
Revision: 6
Date: 04-Apr-24
Author: Rafa Hernández


90.00
8.00
2.50
21.11
10.95
4.00
60.00
A10 A8 A6 A4 A2 A0 RD D1 D3 D5 D7
24
1
D6
BRQ A9 A7 A5 A3 A1 WR D0 D2 D4
my LAB PCB
Data BUS
SW2
RESET
R5
IC1
74xx04
C2
D1
R4
C4
IC2
74xx157
C3
R3
SW1
PUSH MODE
GPIO MODE
R2
R1
R6
BRQ A14
A13 A12
A11 A10
A9 A8
A7 A6
A5 A4
A3 A2
A1 A0
D7 D6
D5 D4
D3 D2
D1 D0
RD WR
/CLK CLK
/RST NC
HLT XRST
GPIO
HLT RS
EO SU
AO AI
BO BI
CO CI
IO II
/RS FI
PO PE
UN OI
RO RI
SO SI
PI MI
FC FN
FV FZ
CK /CK
+5v GND
C1
7.00
18.00
myCPU Reset IO module Rev: 6







Bill of Materials

myCPU Reset IO module

Description	Value	Q
Electrolytic capacitor 16v/50v	10µF	1
Ceramic capacitor	100nF	2
Electrolytic capacitor 16v/50v	1uF	1
Switching Signal Diode	1N4148	1
Hex inverters	74xx04	1
4-Bits 2-Line to 1 Line data selector	74xx157	1
Pin Header, THT, pitch 2.54mm, Dual Row, Vertical, 16p	16p	1
Pin Header, THT, pitch 2.54mm, Dual Row, Vertical, 32p	32p	2
WR-PHD Pin Header, THT, pitch 2.54mm, Dual Row, Vertical, 24p	24p	1
Resistor Axial	330Ω	3
Resistor Axial	4.7k	1
Resistor Axial	100K	1
Resistor Axial	6.8K	1
Mini slide switch 2 pos, 3 pins	1P2T	1
Tactile button 12 mm		1

Assembly List

myCPU Reset IO module

Designator	Description	Value
C1	Electrolytic capacitor 16v/50v	10µF
C2	Ceramic capacitor	100nF
C3	Ceramic capacitor	100nF
C4	Electrolytic capacitor 16v/50v	1uF
D1	Switching Signal Diode	1N4148
IC1	Hex inverters	74xx04
IC2	4-Bits 2-Line to 1 Line data selector	74xx157
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, 32p	32p
P4	WR-PHD Pin Header, THT, pitch 2.54mm, Dual Row, Vertical, 24p	24p
R1	Resistor Axial	330Ω
R2	Resistor Axial	330Ω
R3	Resistor Axial	4.7k
R4	Resistor Axial	100K
R5	Resistor Axial	6.8K
R6	Resistor Axial	330Ω
SW1	Mini slide switch 2 pos, 3 pins	1P2T
SW2	Tactile button 12 mm	