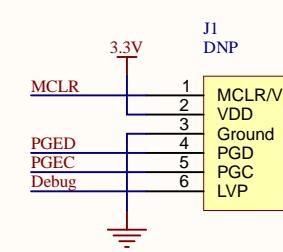
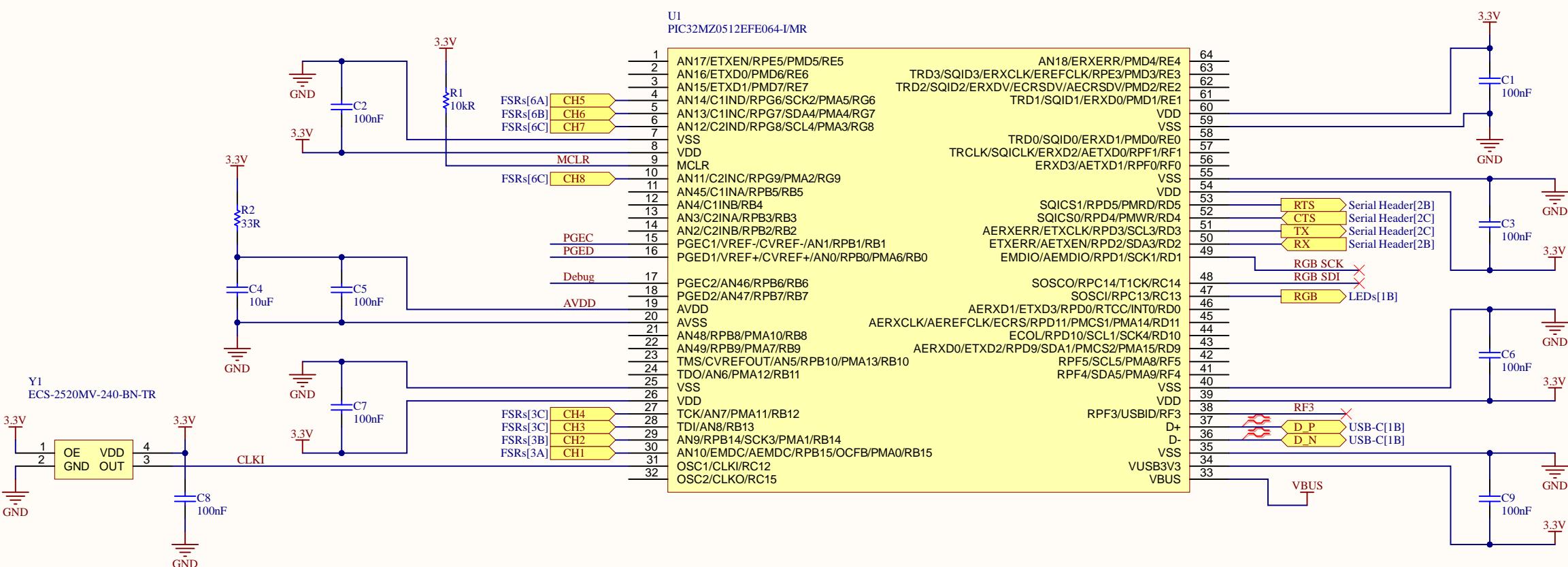
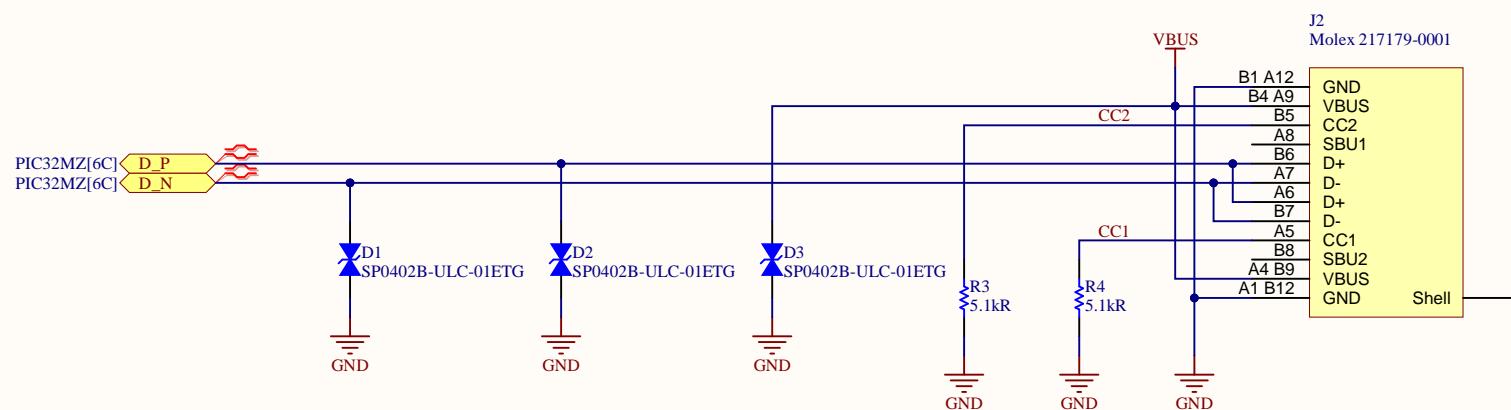


△ Filter cutoff frequency of **R2**, **C4** and **C5** = 476 Hz
Measured **AVDD** current = 470uA. Voltage drop through 33R = 16mV
RF3 functionality may be compromised by USBID regardless of configuration
RGB SDI requires PIC32MZ internal pull-down to ensure **RGB** is idle low.
RGB SCK will output SCK1 regardless of PPS configuration.





TITLE
USB-C.SchDoc

SIZE	PROJECT	VERSION
A4	Twintig Tap Pads	v1.0.1
VARIANT	[No Variations]	SHEET 2 OF 6
AUTHOR	Seb Madwick	DATE 8/27/2025

A

A

B

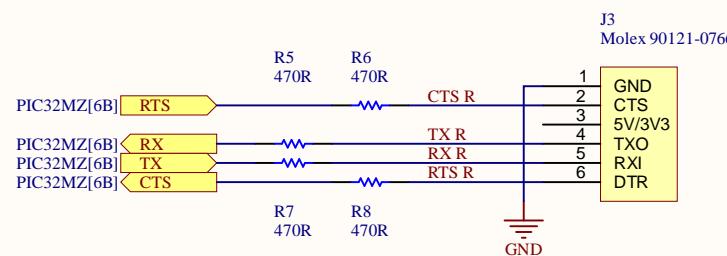
B

C

C

D

D



TITLE
Serial Header.SchDoc

SIZE	PROJECT	VERSION
A4	Twintig Tap Pads	v1.0.1
VARIANT	Sheets	OF
[No Variations]	3	6
AUTHOR	DATE	
Seb Madwick	8/27/2025	

A

A

B

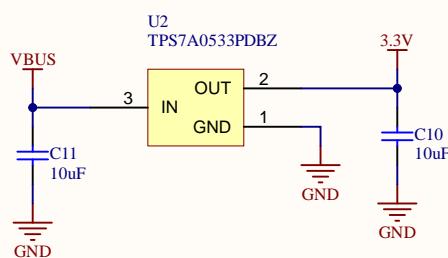
B

C

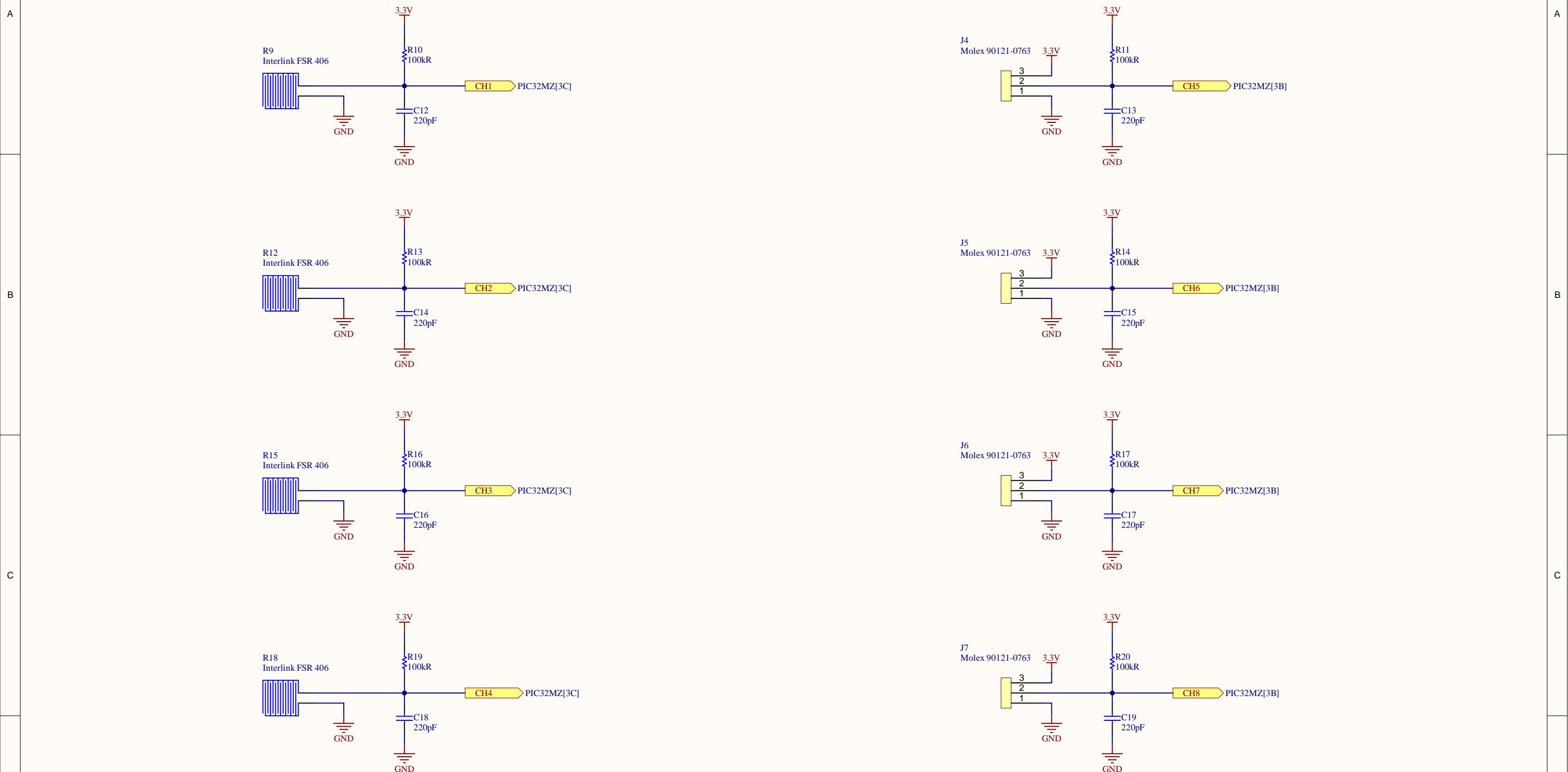
C

D

D



TITLE		
Voltage Regulator.SchDoc		
SIZE		
A4	PROJECT	VERSION
	Twintig Tap Pads	v1.0.1
VARIANT	[No Variations]	SHEET 4 OF 6
AUTHOR	Seb Madwick	DATE 8/27/2025



△ Interlink FSR 406 resistance measured as >1GR with no force and 6MR with 50g weight
Low-pass filter cutoff frequency of 100kR and 220pF = 7.24kHz

TITLE		FSRs.SchDoc	
SIZE	PROJECT	A3	VERSION
		Twintig Tap Pads	v1.0.1
VARIANT	[No Variations]	SHEET 5 OF 6	
AUTHOR	Seb Madgwick	DATE	8/27/2025

A

A

B

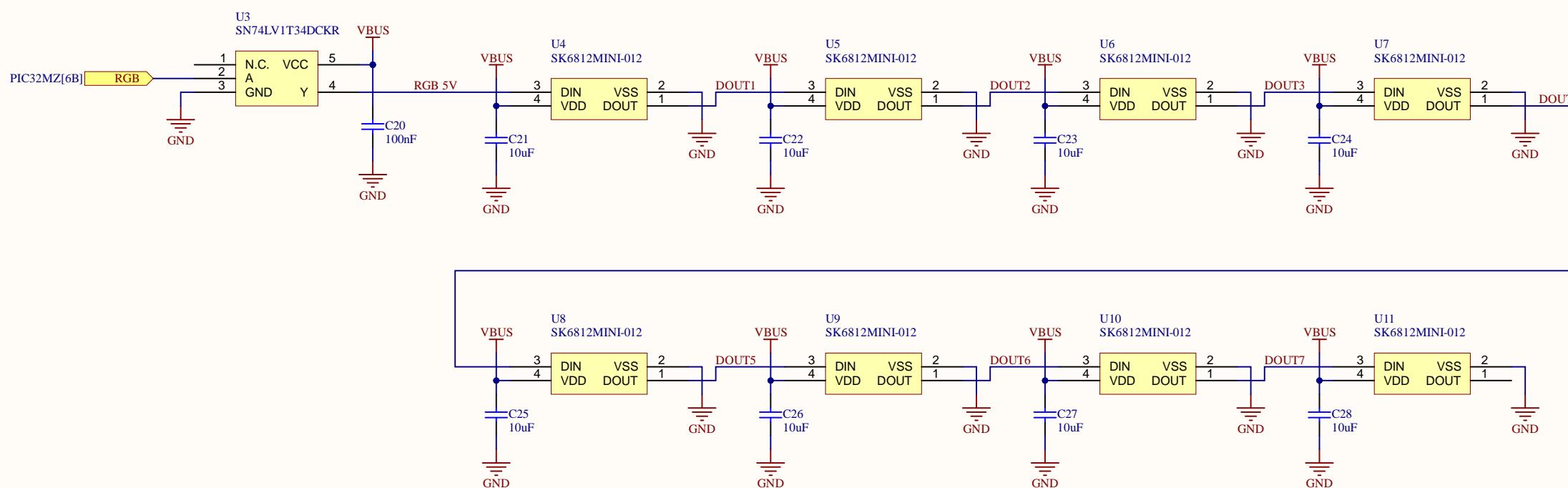
B

C

C

D

D



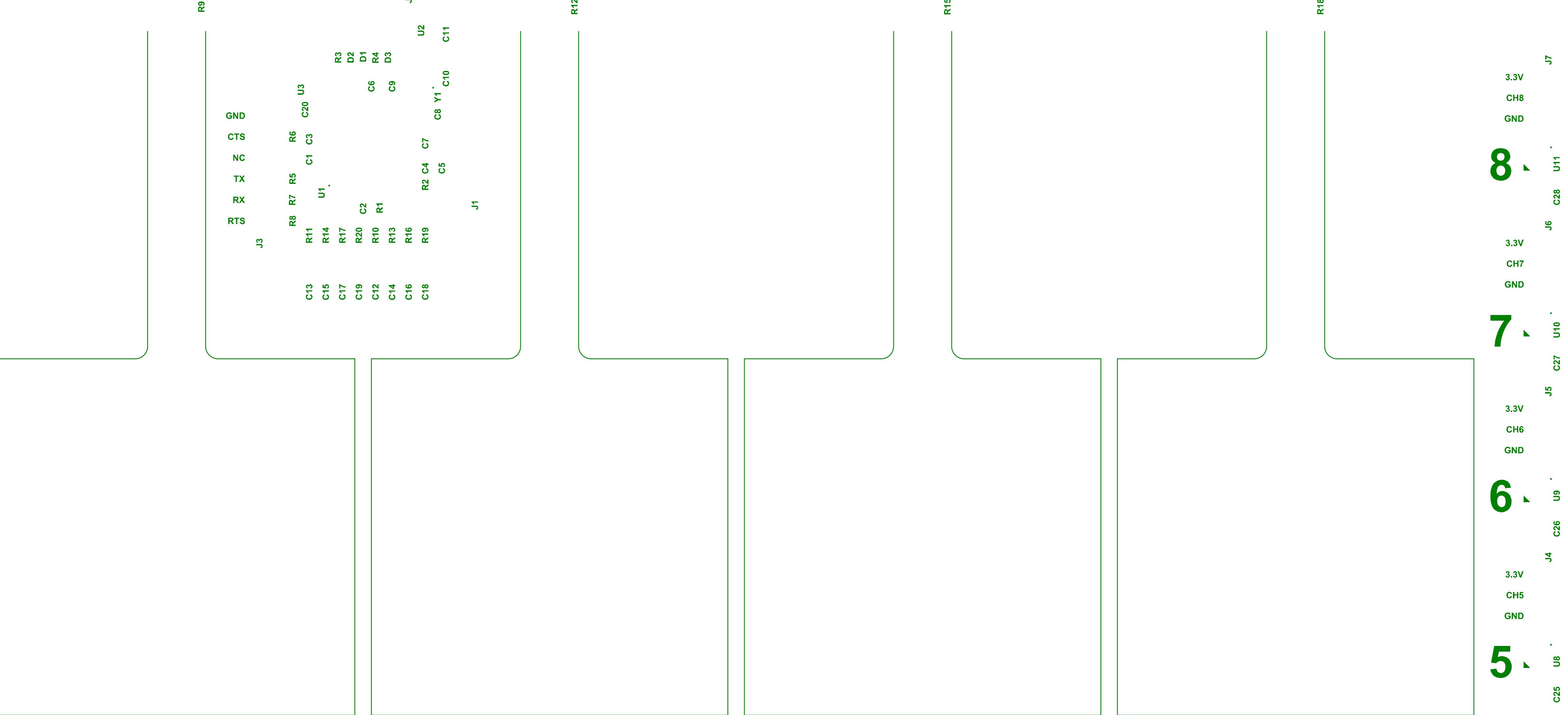
Twintig Tap Pads v1.0.1

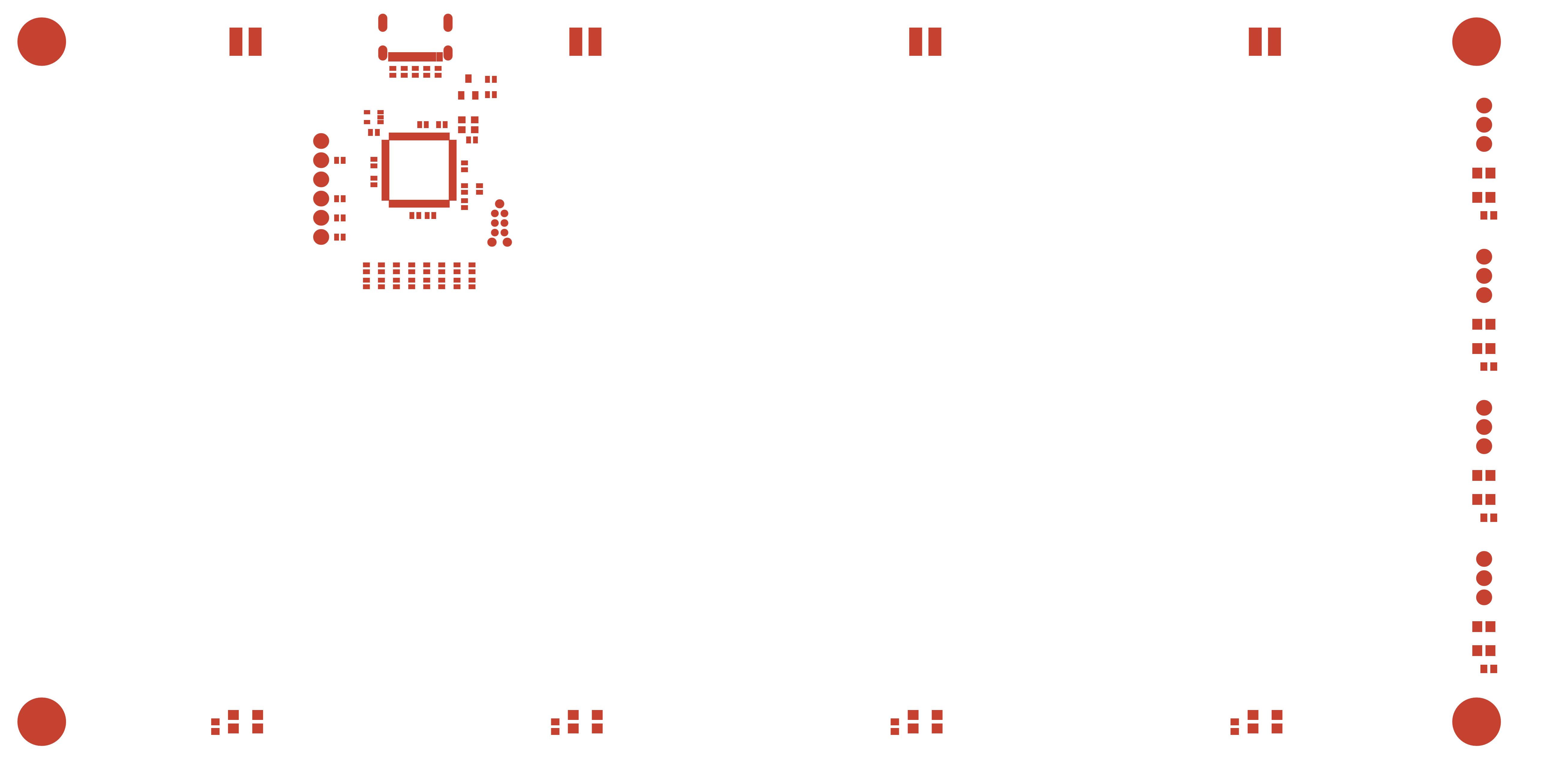
C21 U4

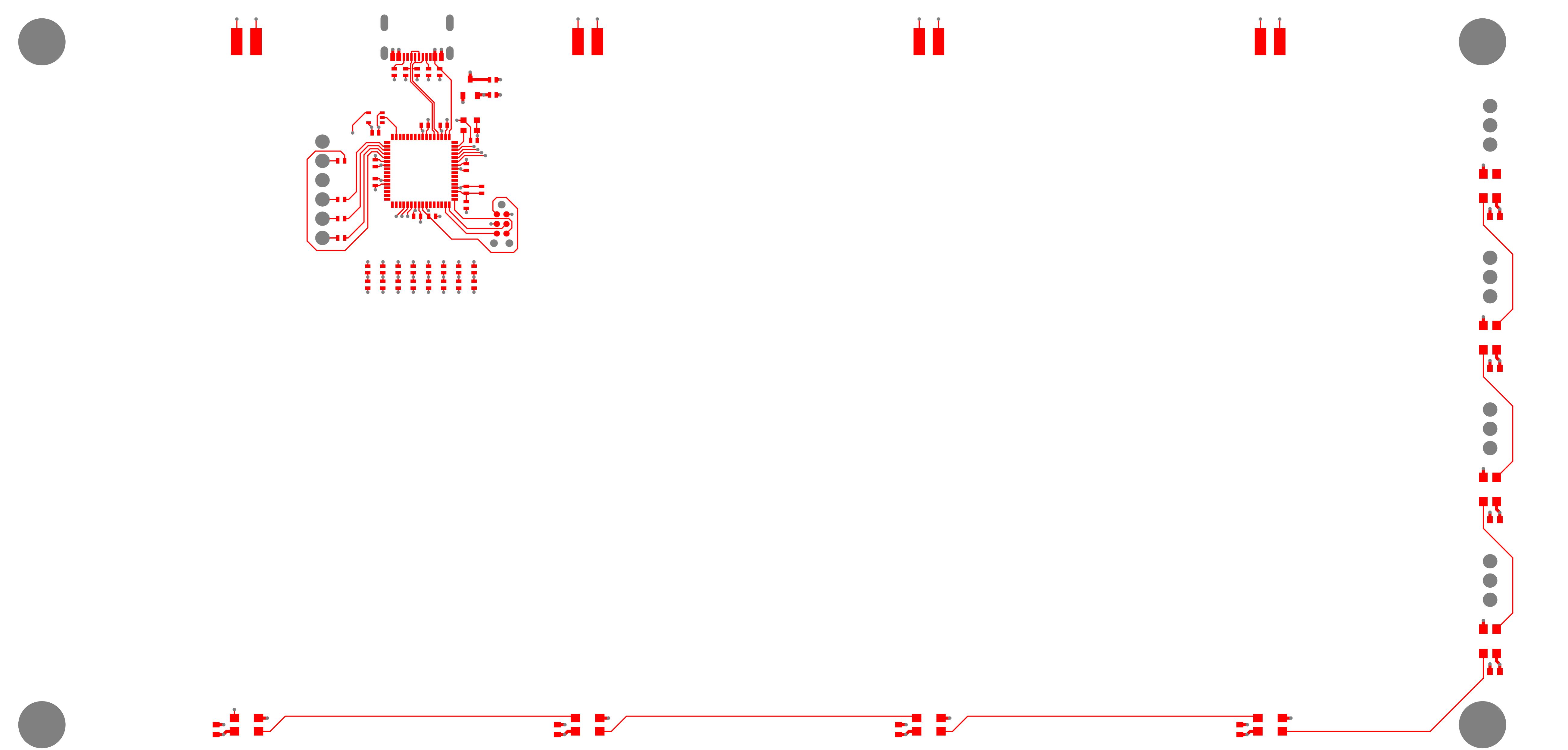
C22 U5

3

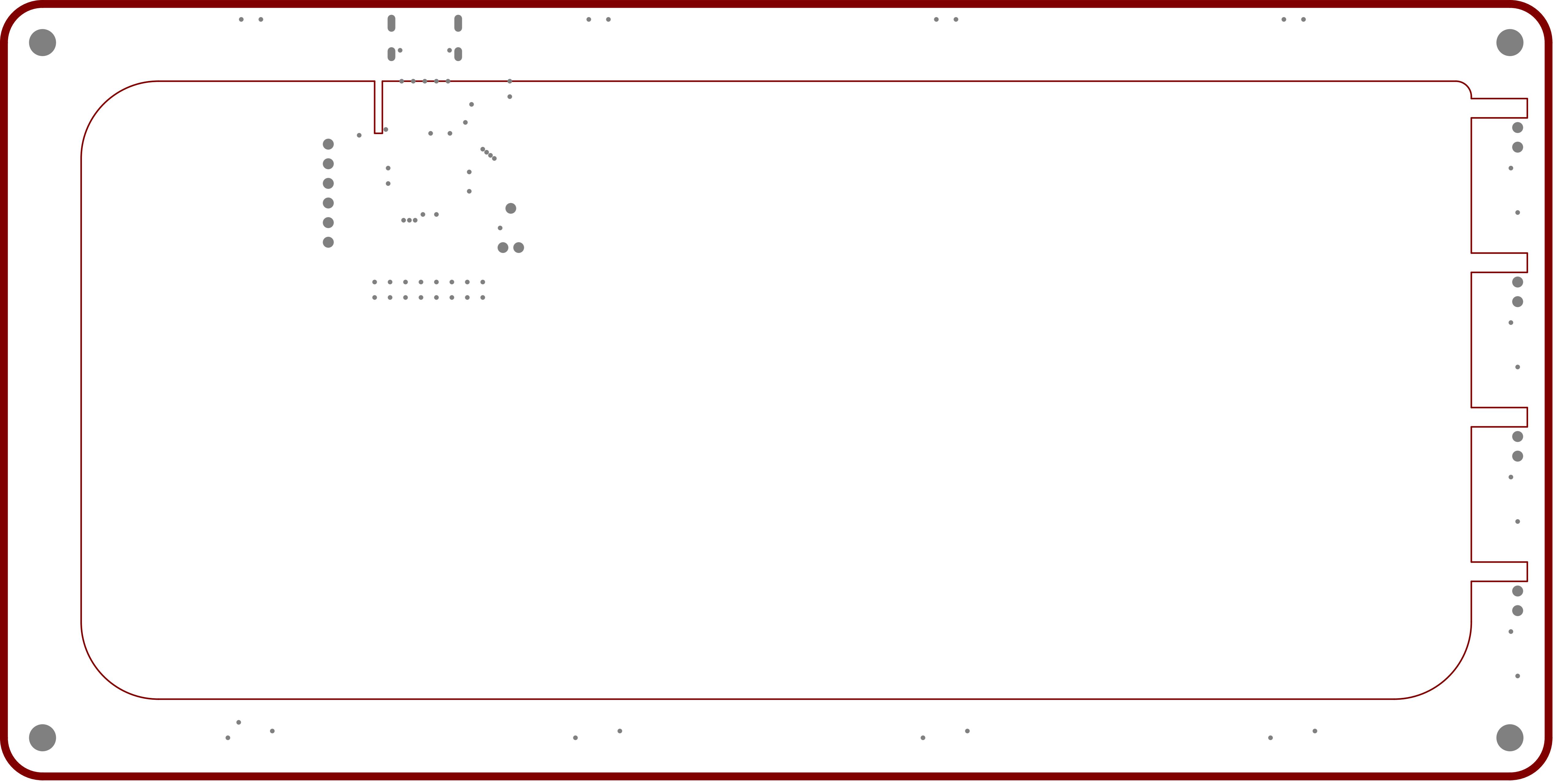
4

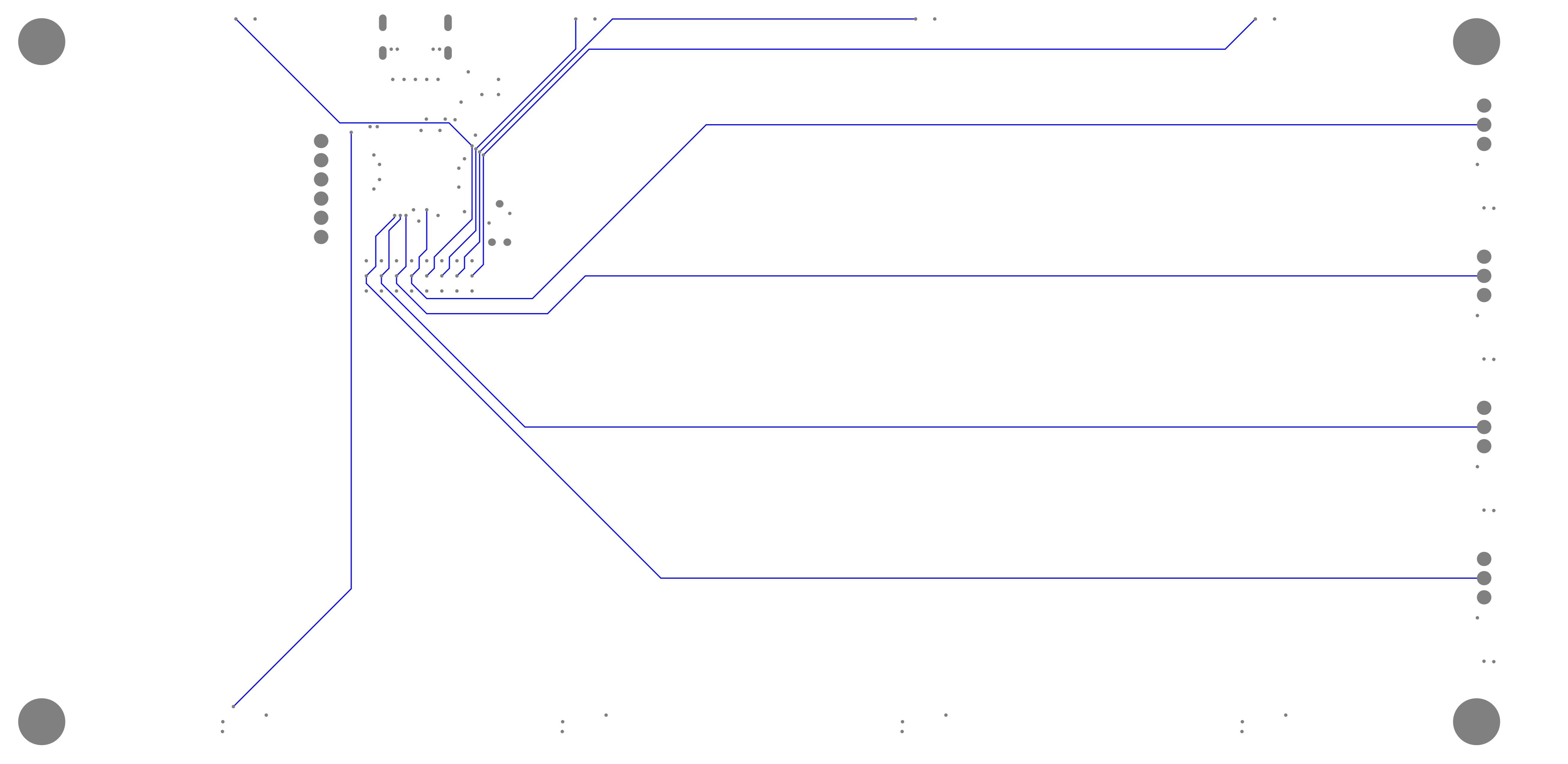




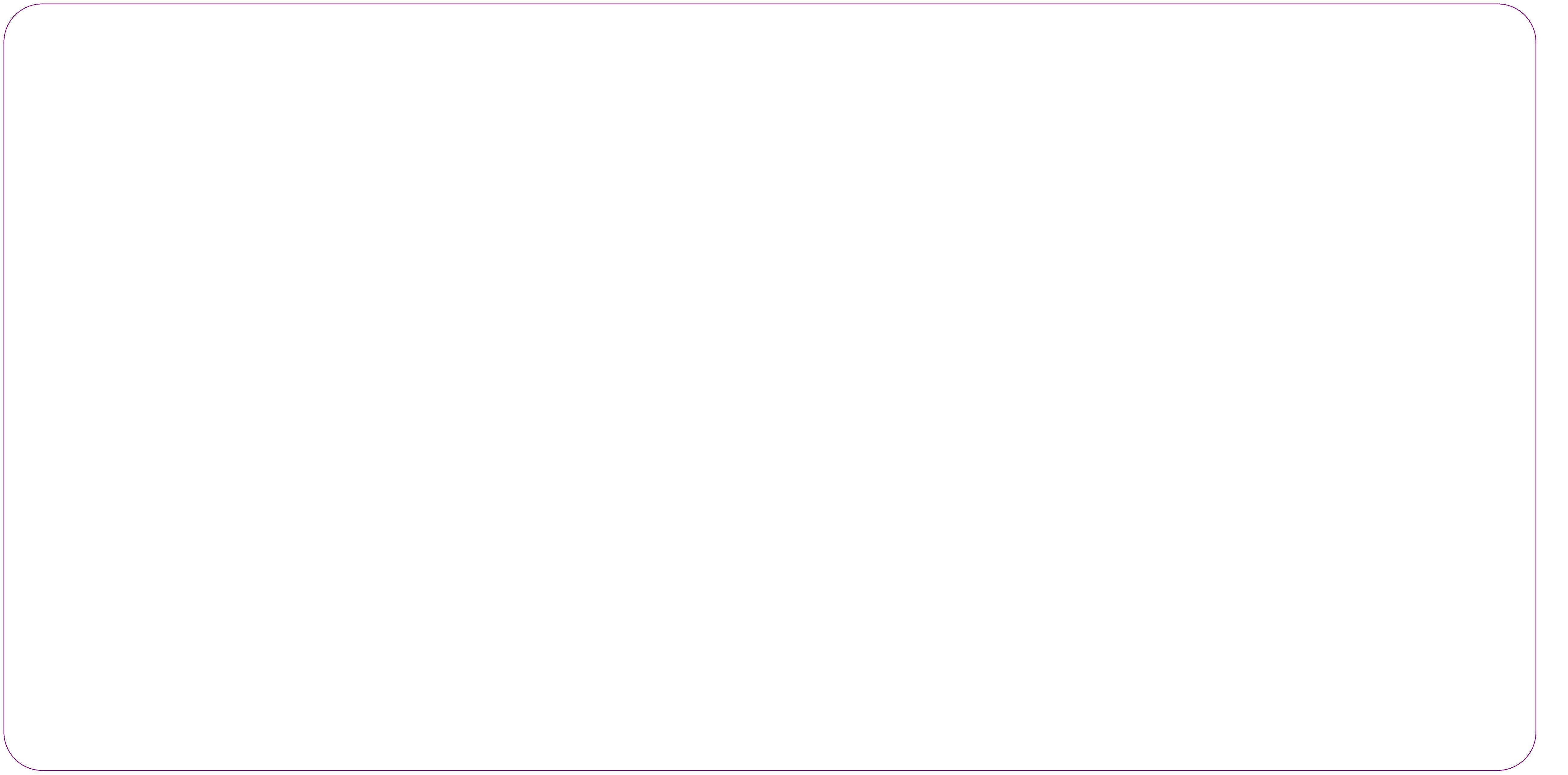




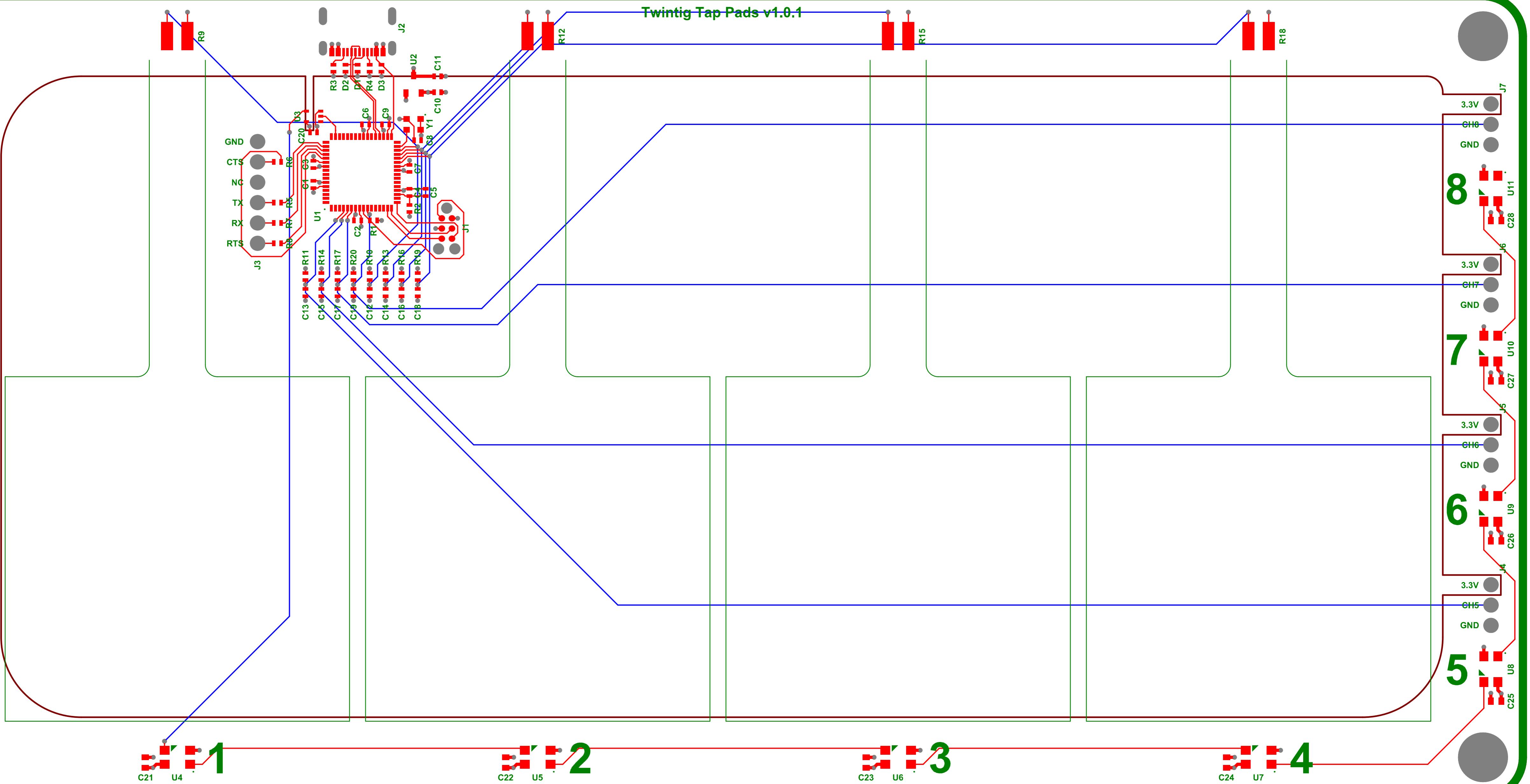




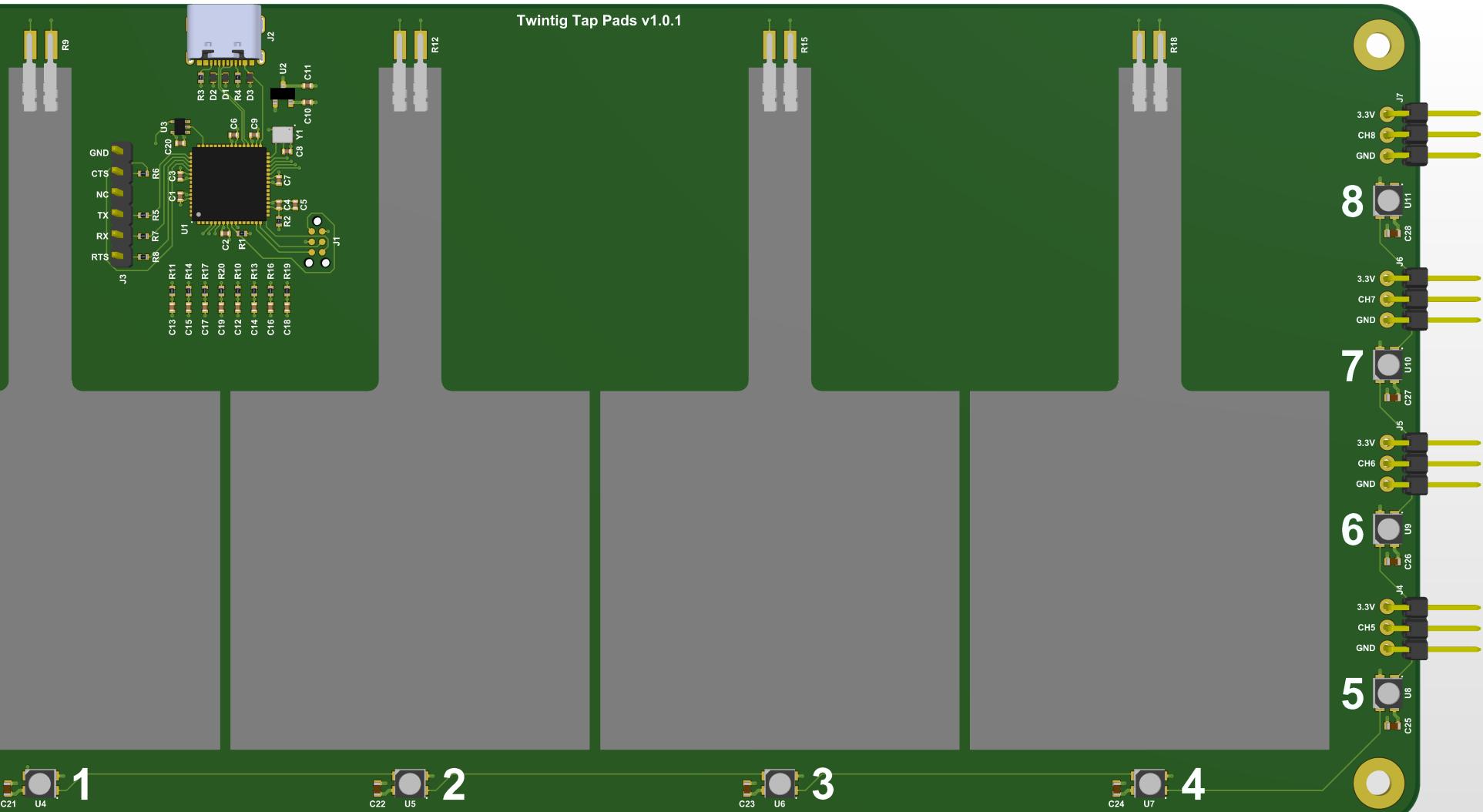


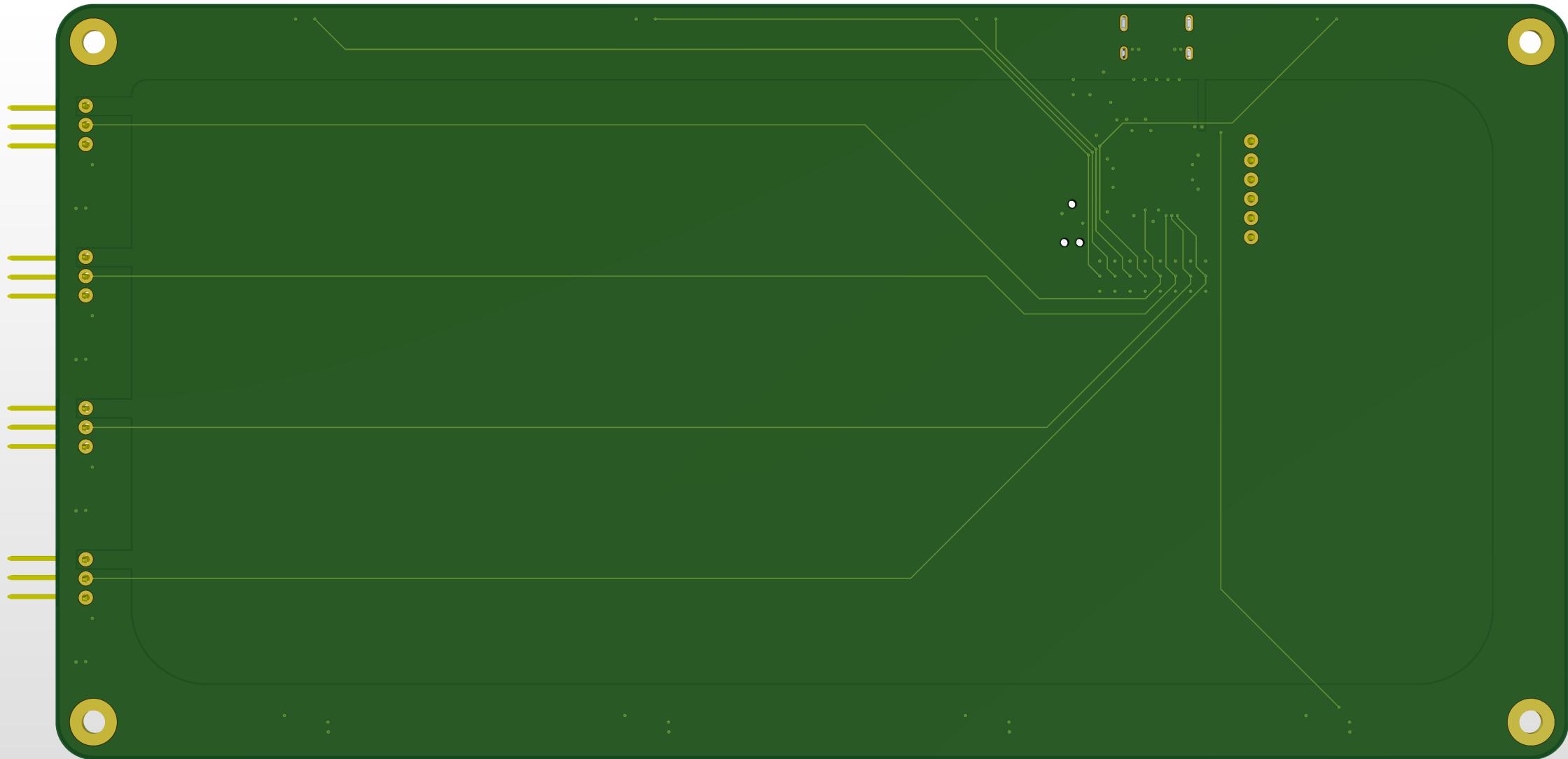


Twintig Tap Pads v1.0.1

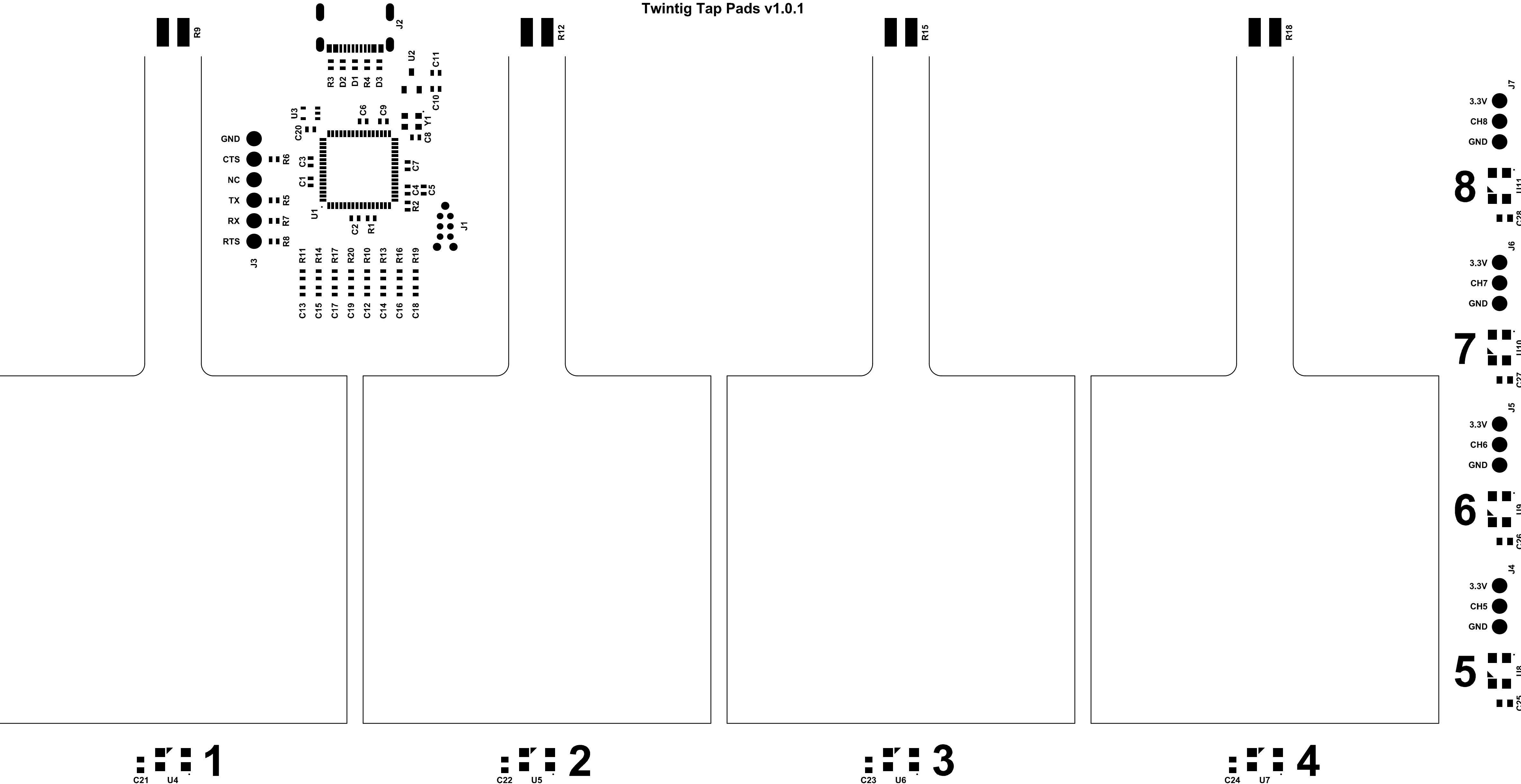


Twintig Tap Pads v1.0.1





Twintig Tap Pads v1.0.1



Designator	Quantity	Comment	Footprint
C1, C2, C3, C5, C6, C7, C8, C9, C20	9	100nF	Capacitor 0402
C4, C10, C11	3	10uF	Capacitor 0402
C12, C13, C14, C15, C16, C17, C18, C19	8	220pF	Capacitor 0402
C21, C22, C23, C24, C25, C26, C27, C28	8	10uF	Capacitor 0603
D1, D2, D3	3	SP0402B-ULC-01ETG	Diode TVS 0402
J1	1	DNP	Tag Connect No Legs
J2	1	Molex 217179-0001	Molex 217179-0001
J3	1	Molex 90121-0766	Molex 90120-0926
J4, J5, J6, J7	4	Molex 90121-0763	Molex 90121-0763
R1	1	10kR	Resistor 0402
R2	1	33R	Resistor 0402
R3, R4	2	5.1kR	Resistor 0402
R5, R6, R7, R8	4	470R	Resistor 0402
R9, R12, R15, R18	4	Interlink FSR 406	Interlink FSR 406
R10, R11, R13, R14, R16, R17, R19, R20	8	100kR	Resistor 0402
U1	1	PIC32MZ0512EFE064-I/MR	QFN-64
U2	1	TPS7A0533PDBZ	SOT-23
U3	1	SN74LV1T34DCKR	SOT-323-5
U4, U5, U6, U7, U8, U9, U10, U11	8	SK6812MINI-012	SK6812MINI-B-012
Y1	1	ECS-2520MV-240-BN-TR	ECS 2x2.5mm