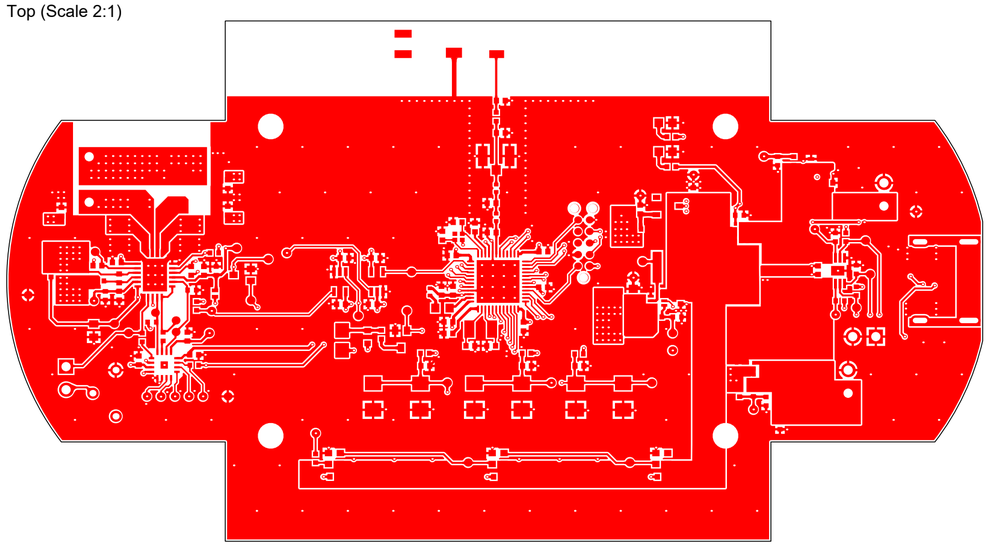
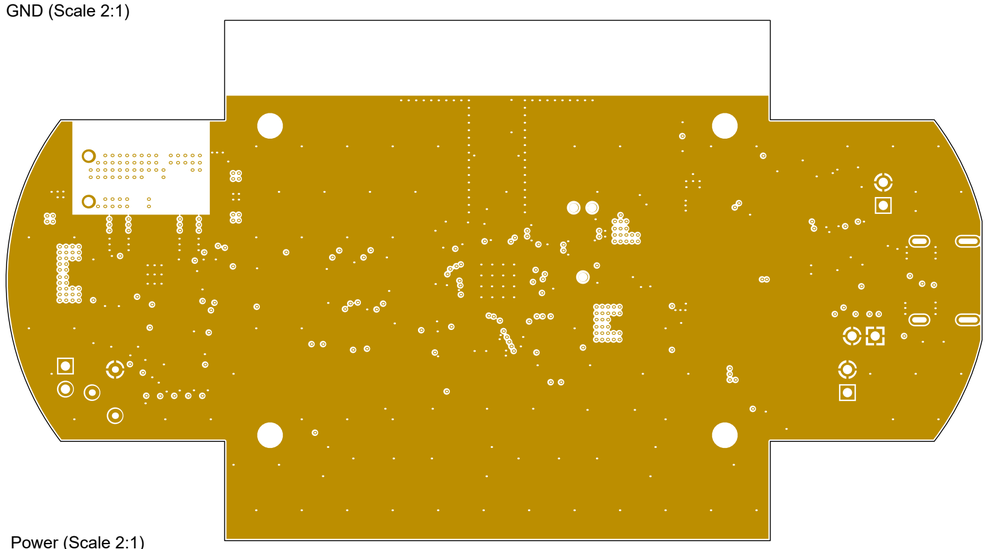
Fabrication View / Notes

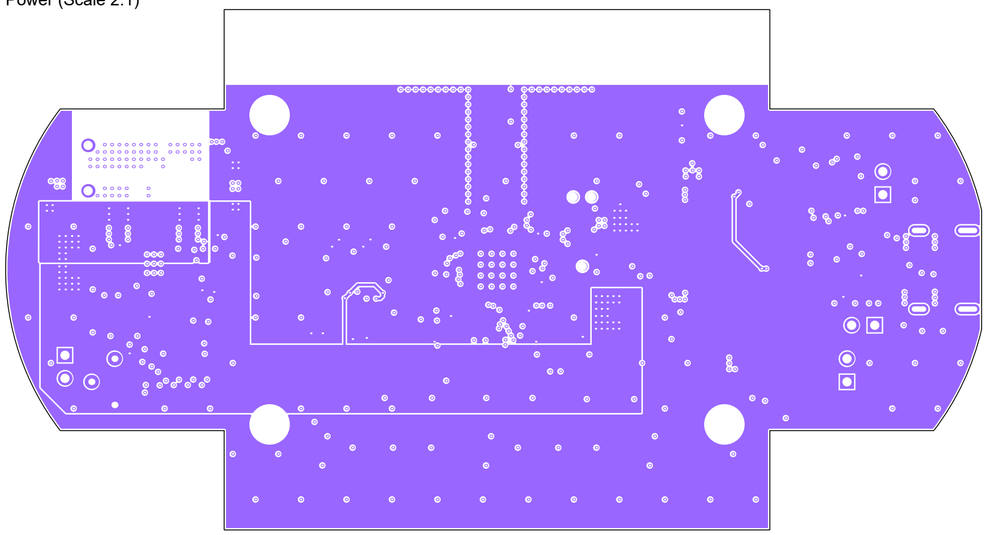
Top (Scale 2:1)



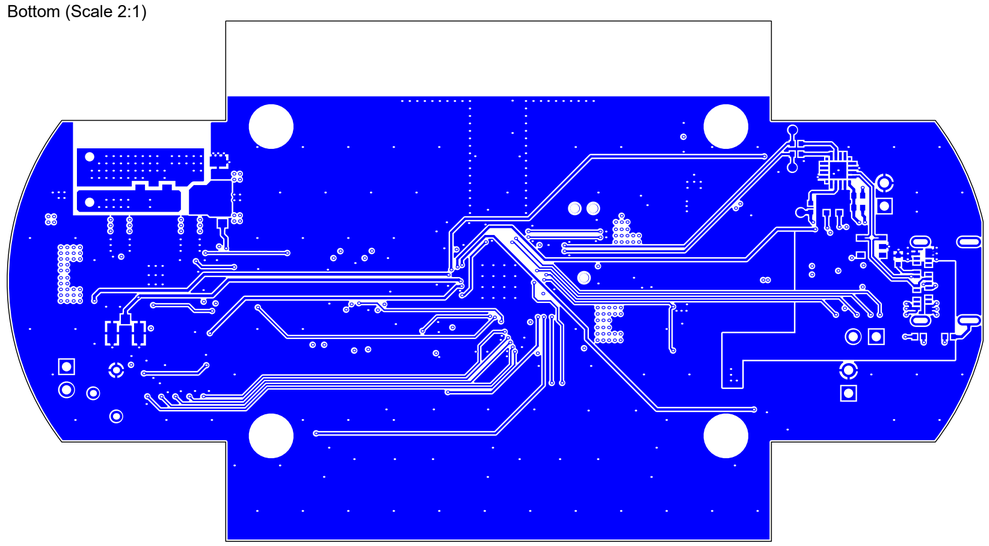
GND (Scale 2:1)



Power (Scale 2:1)



Bottom (Scale 2:1)



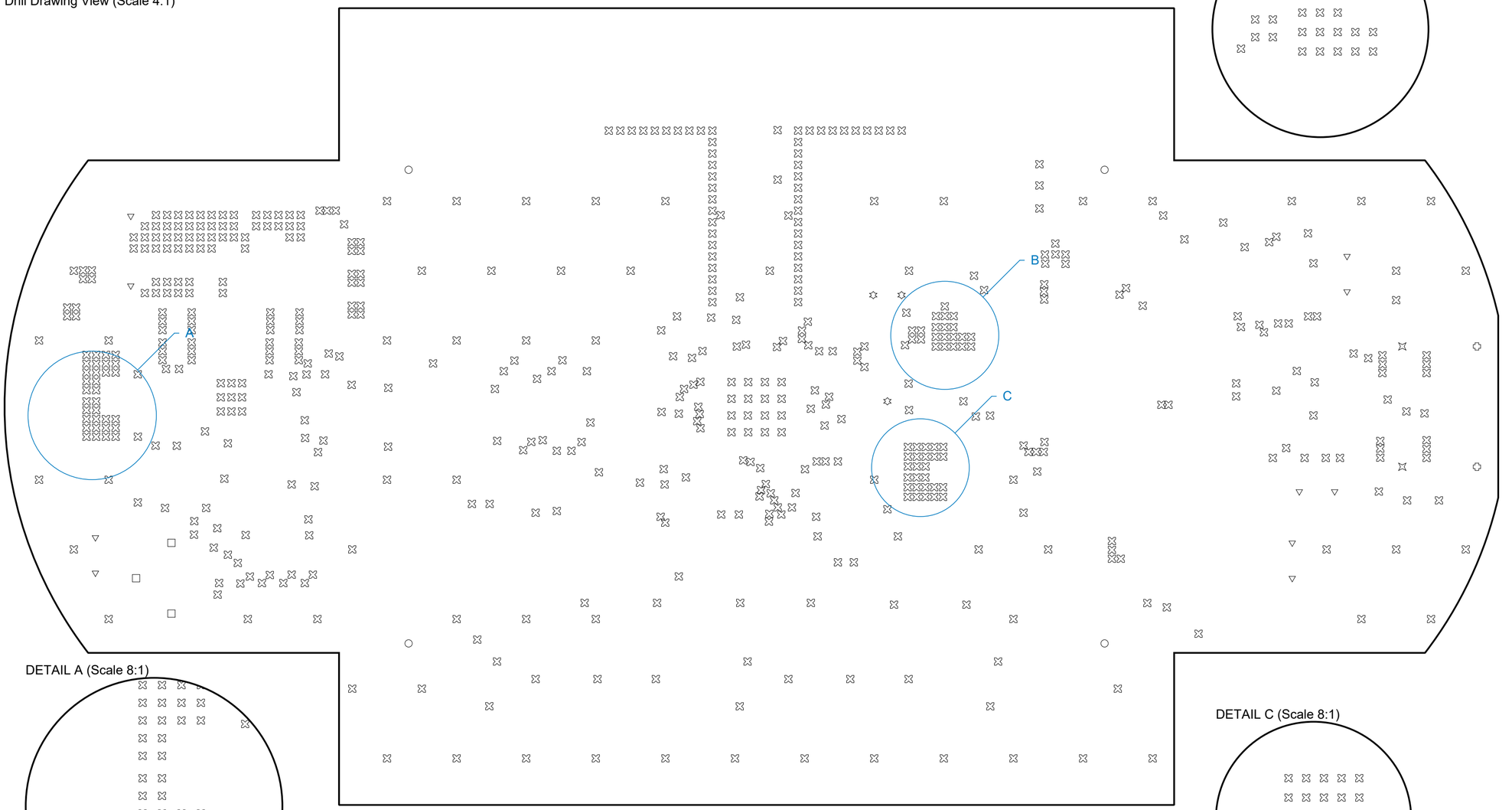
Notes: Unless otherwise specified, all dimensions are in mm.

1. Board material is FR4 RoHS 140°C Tg or higher.
2. RoHS compliant materials to be used for lead-free assembly process. Finished boards shall be free of oils, lubricants or other contaminants.
3. Minimum trace width/spacing is 0.152 mm / 0.152 mm.
4. Surface finish must be ENIG (Electroless Nickel Immersion Gold).
   - Electroless nickel thickness: 3 - 6um (refer to IPC-4552).
   - Immersion gold thickness: 0.05um minimum.
5. Layer stack can be modifed. Final stackup to be approved by Focus.
6. All boards to pass 100% continuity test for opens and shorts.
7. Impedance control and verification is only required if an impedance table is provided. Refere to the table for the final characteristic impdance of different traces. Fabricator may modify designed trace width.
8. The serial number format to be placed in silkscreen in the space marked by SN. The serial number format is as follows: VerMay.VerMin.Rev-XXXX. VerMay is the major version which is 1, VerMin is the minor version which is 2 and XXXX is the number assigned to the board for its identification, starting in 0001.
9. Silkscreen (overlay) is white.
10. Soldermask colour is black.
11. Manufacturer must provide final gerber files before starting production.

FOCUS	Project: WPTChargerMain.PrjPcb
Title: **Draftman**	Ver: 1 .2
Design by: **Mathias Ferreira**	Date: **28/08/2024**
Reviewed by: **Julian Evia**	Date: **28/08/2024**
Comments:	

Drill drawings

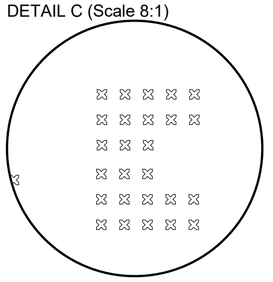
Drill Drawing View (Scale 4:1)



DETAIL A (Scale 8:1)

DETAIL B (Scale 8:1)

DETAIL C (Scale 8:1)



Drill Table

Symbol	Count	Hole Size	Plated	Hole Tolerance
⊠	577	0.20mm	Plated	
□	3	0.71mm	Plated	
✡	3	0.99mm	Non-Plated	
▽	10	1.02mm	Plated	
⊠	2	1.60mm	Plated	
✣	2	2.10mm	Plated	
○	4	2.30mm	Non-Plated	
	601 Total			

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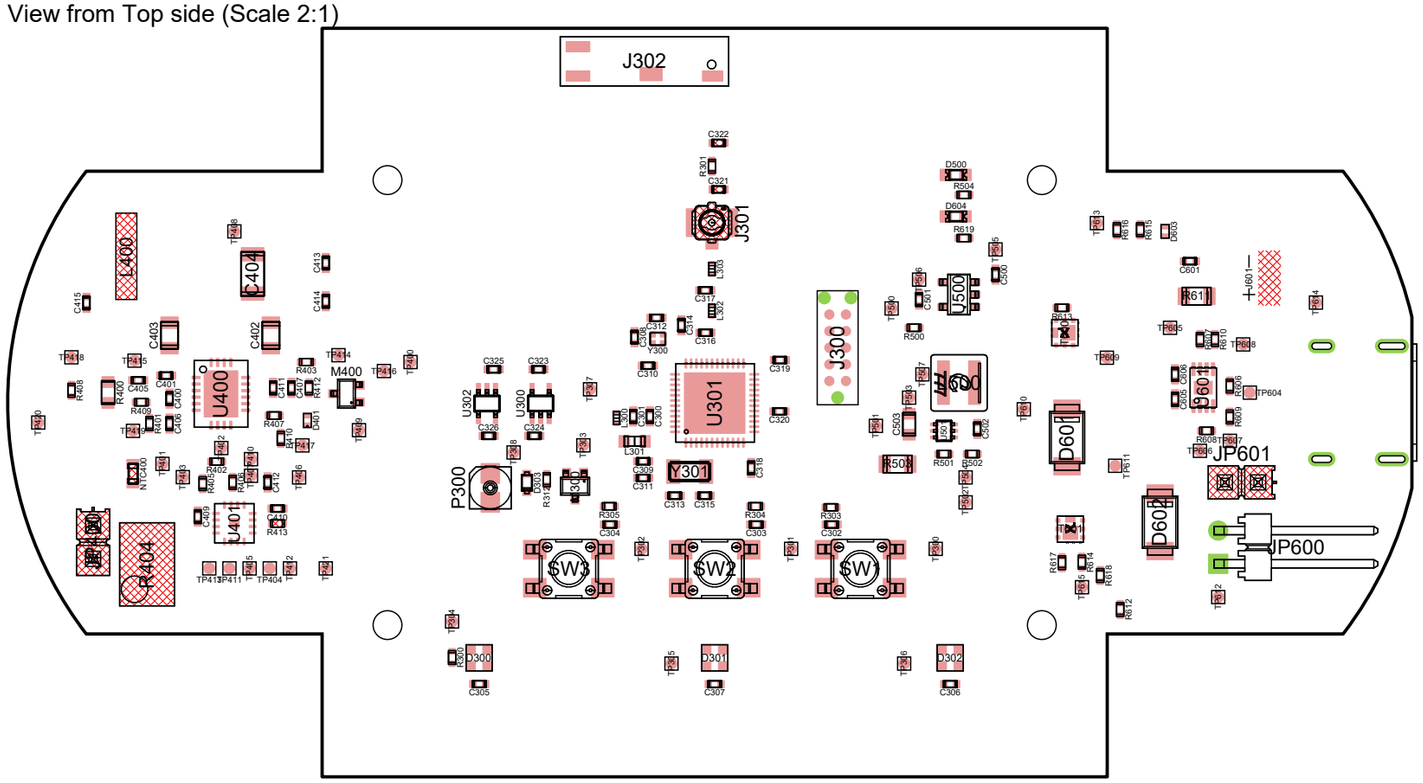
Comments:	

Assembly View:

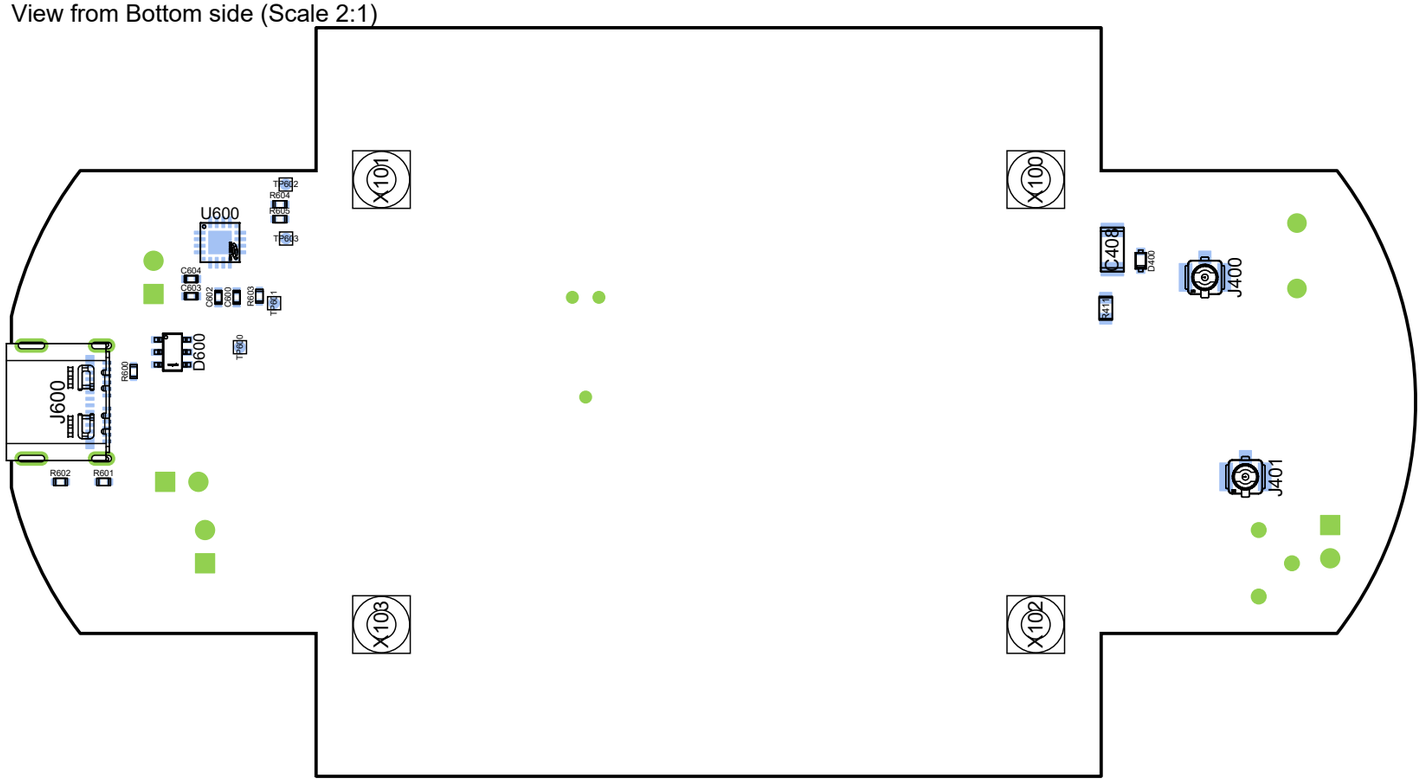
Notes:

12. DNP components are hatched over in the Assembly Views.

View from Top side (Scale 2:1)



View from Bottom side (Scale 2:1)



FOCUS	Project: WPTChargerMain.PrjPcb
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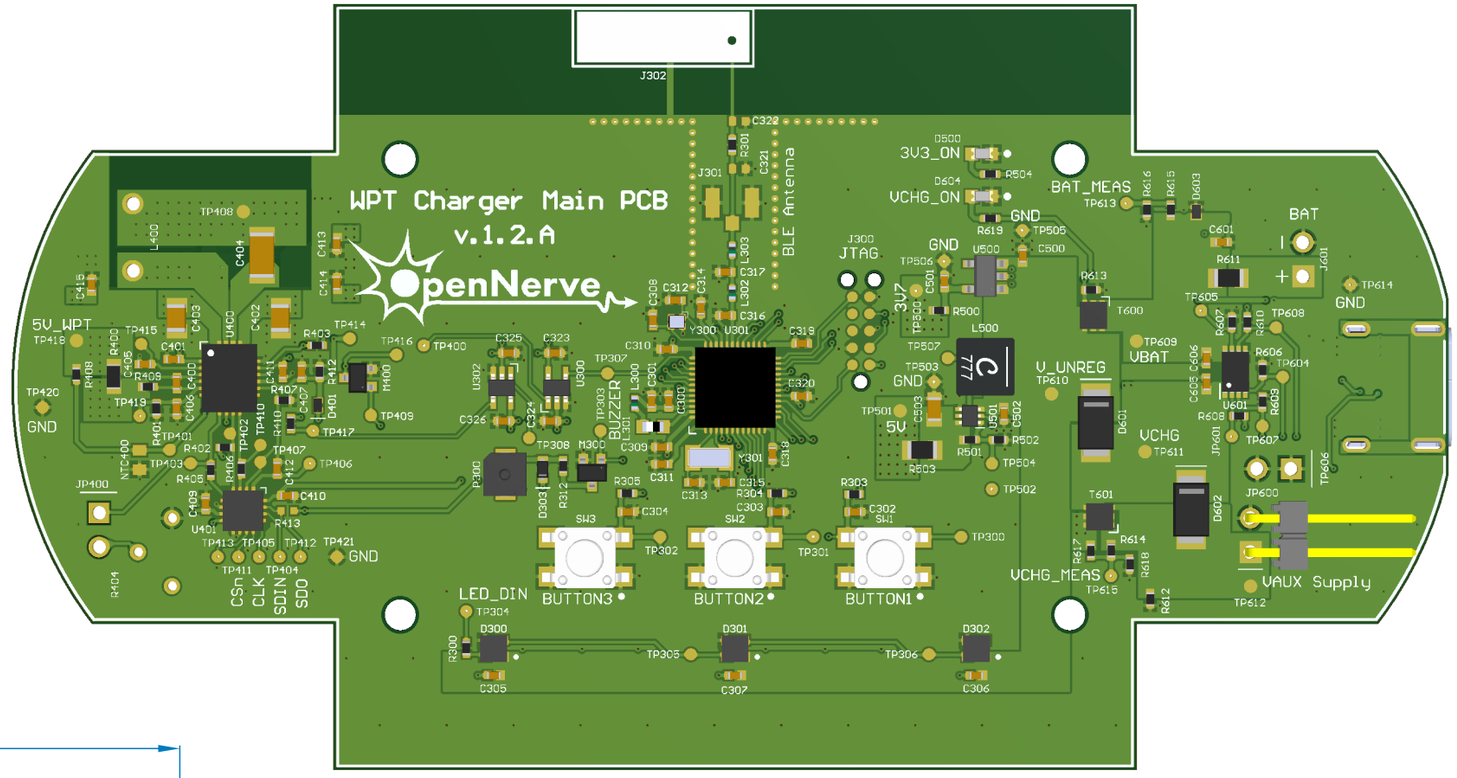
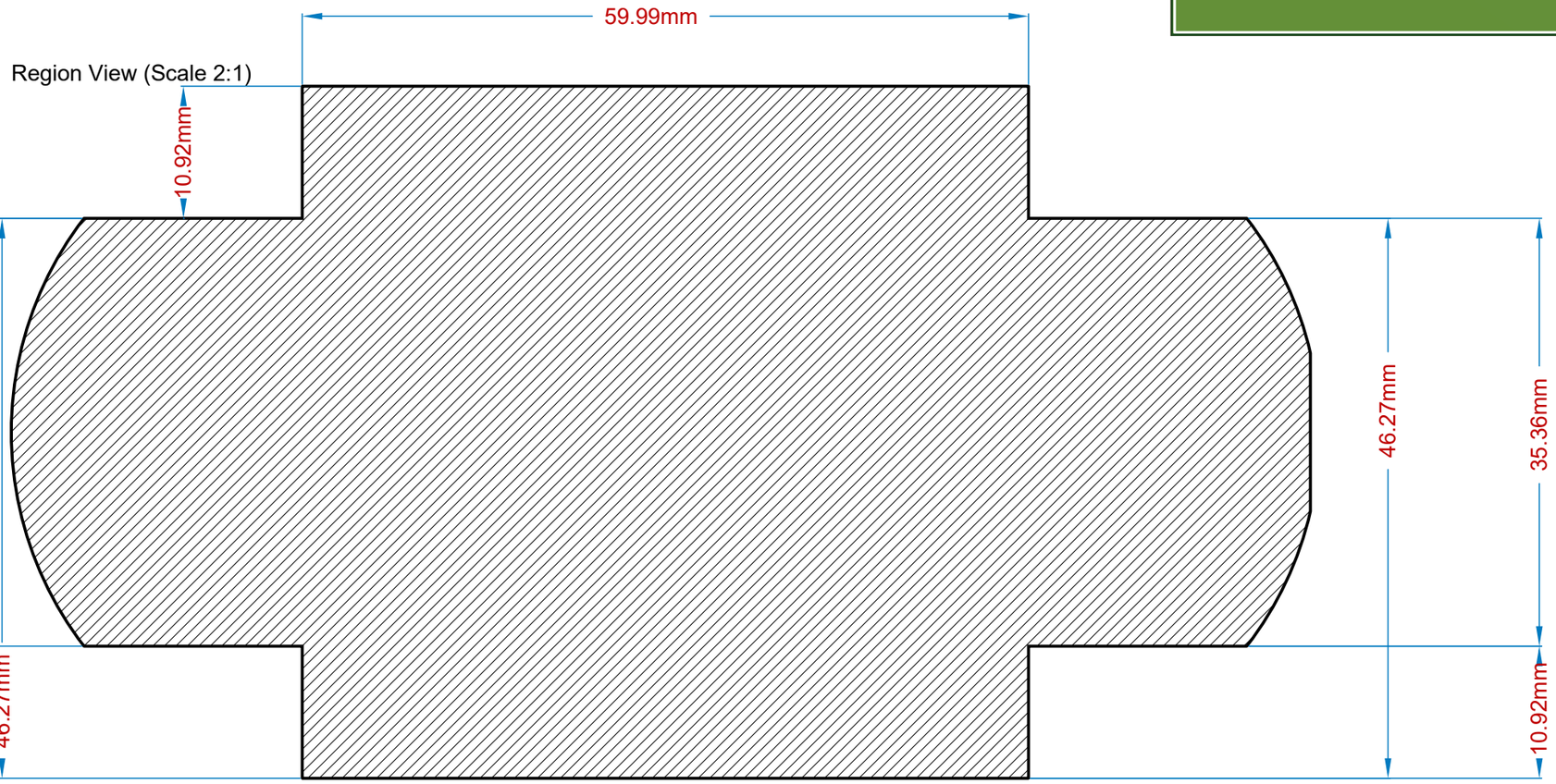
Comments:	

Dimensions

Realistic View



Region View (Scale 2:1)



FOCUS	Project: WPTChargerMain.PrjPcb
Title: **Draftman**	Ver: 1 .2
Design by: **Mathias Ferreira**	Date:**28/08/2024**
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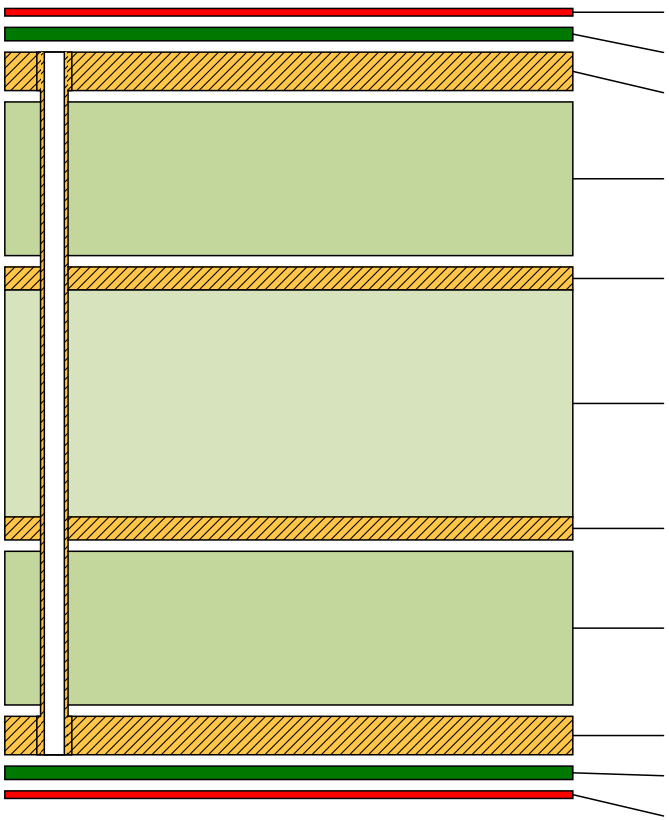
Comments:	

Stackup

Layer Stack Legend



Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Top Overlay			Legend	GTO
Surface Material	Top Solder	0.02mm	Solder Resist	Solder Mask	GTS
Copper	**Top**	**0.05mm**		**Signal**	**GTL**
Prepreg		*0.20mm*	*FR-4*	*Dielectric*	
Copper	**GND**	**0.03mm**		**Signal**	**G1**
Core		*0.97mm*	*FR-4*	*Dielectric*	
Copper	**Power**	**0.03mm**		**Signal**	**G2**
Prepreg		*0.20mm*	*FR-4*	*Dielectric*	
Copper	**Bottom**	**0.05mm**		**Signal**	**GBL**
Surface Material	Bottom Solder	0.02mm	Solder Resist	Solder Mask	GBS
	Bottom Overlay			Legend	GBO

Total thickness: 1.57mm

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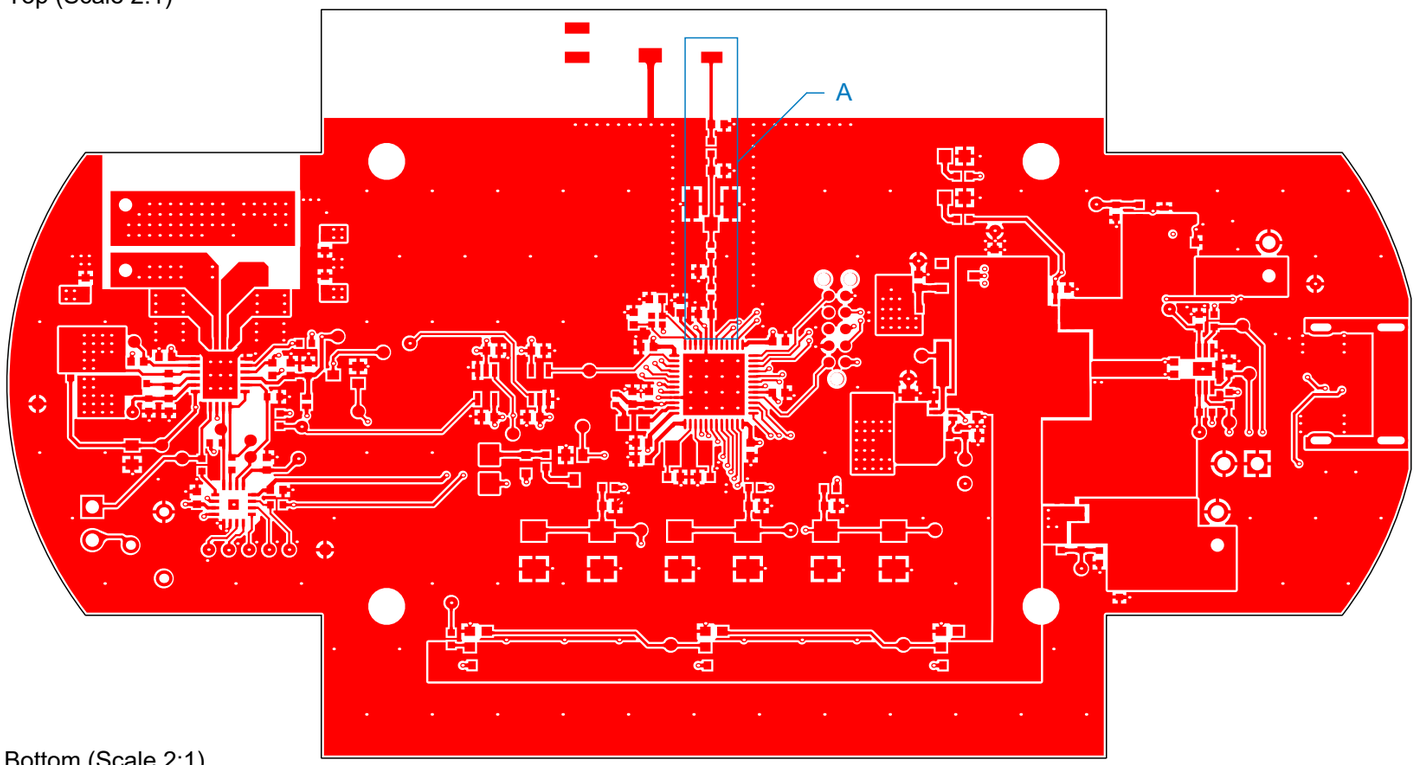
Comments:	

Impedance Control

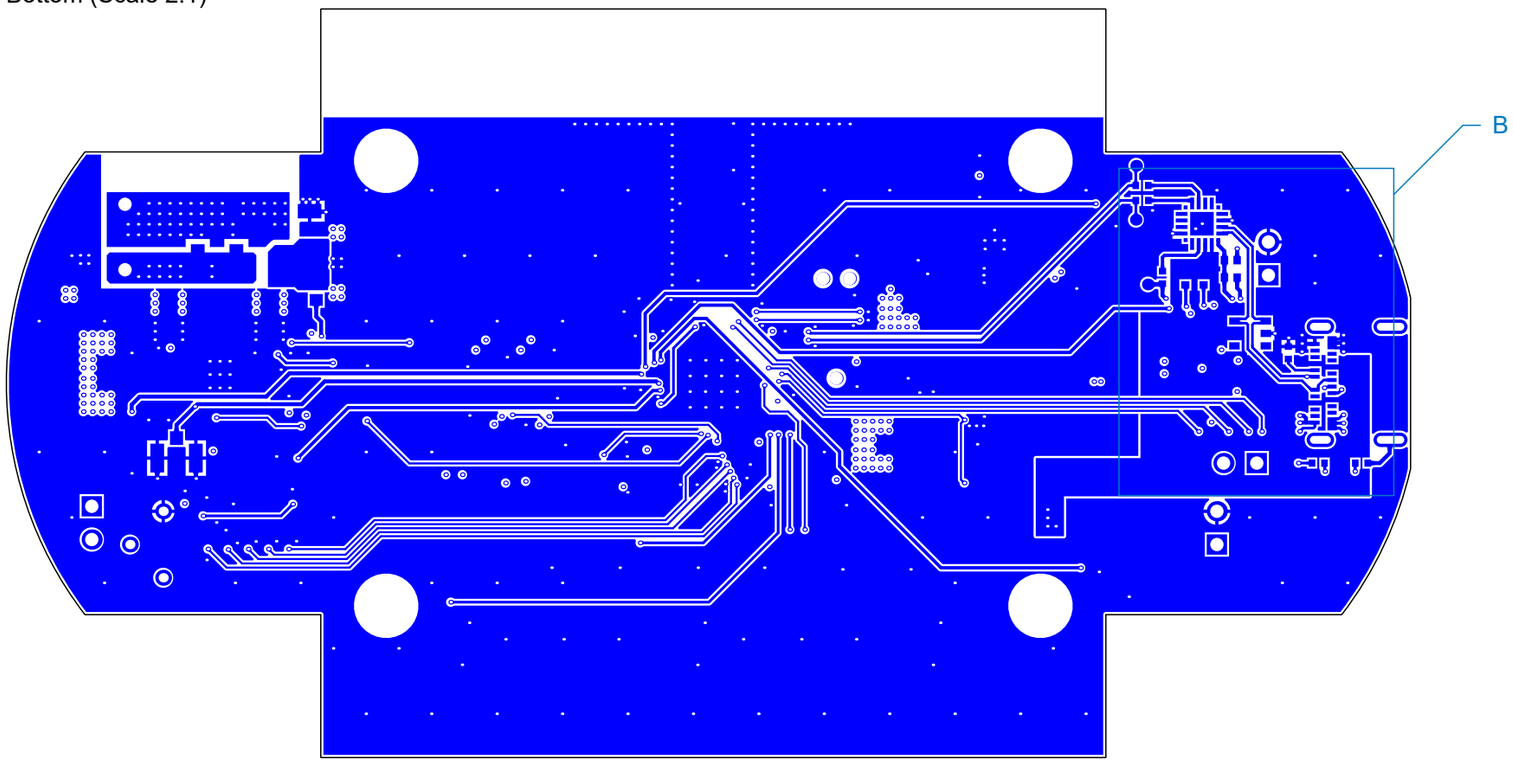
Transmission Line Structure Table

Impedance Id	Transmission Line	Target Impedance	Calculated Impedance	Trace layer	Wide Trace Width	Narrow Trace Width	Gap	Reference layers	Substack	Clearance	Target Tolerance
2	Coated Coplanar Waveguide With Ground	50	50.00	Top	0.25mm	0.25mm		GND	Board Layer Stack	0.15mm	10%
3	Diff Coated Coplanar Waveguide With Ground	90	90.01	Bottom	0.20mm	0.20mm	0.15mm	Power	Board Layer Stack	0.15mm	10%

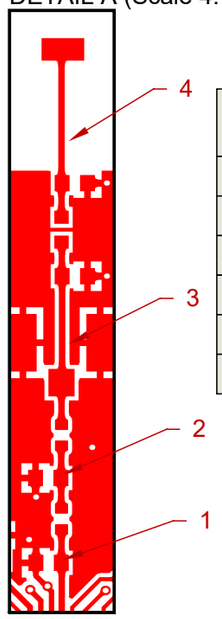
Top (Scale 2:1)



Bottom (Scale 2:1)



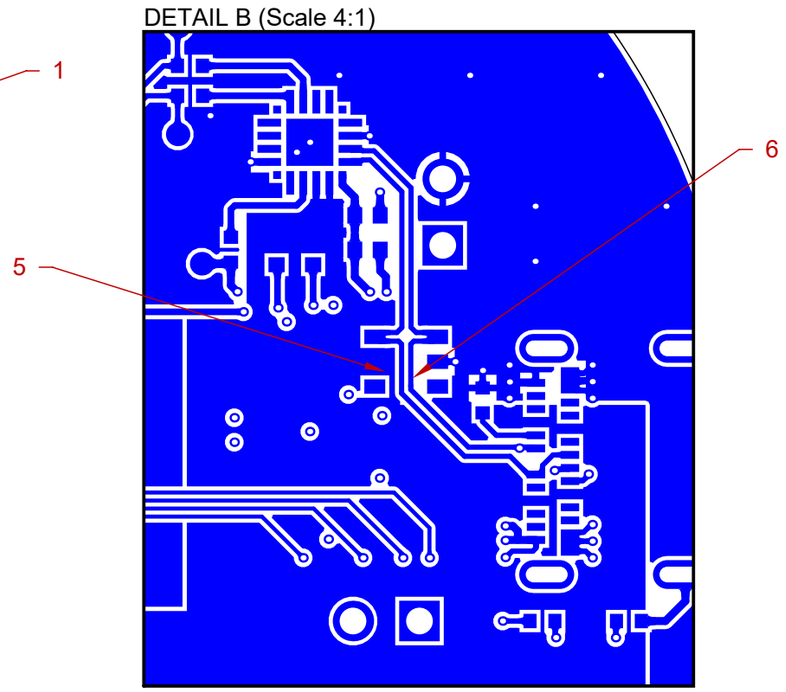
DETAIL A (Scale 4:1)



Controled impedance nets for the Break Awaya

Net name	Impdance Id	Detail Reference	Note number
USB_P	3	B	6
USB_N	3	B	5
ANT_MCU	2	A	1
NetC317_2	2	A	2
ANT+	2	A	3
ANT_PCB+	2	A	4

DETAIL B (Scale 4:1)



FOCUS	Project: WPTChargerMain.PrjPcb
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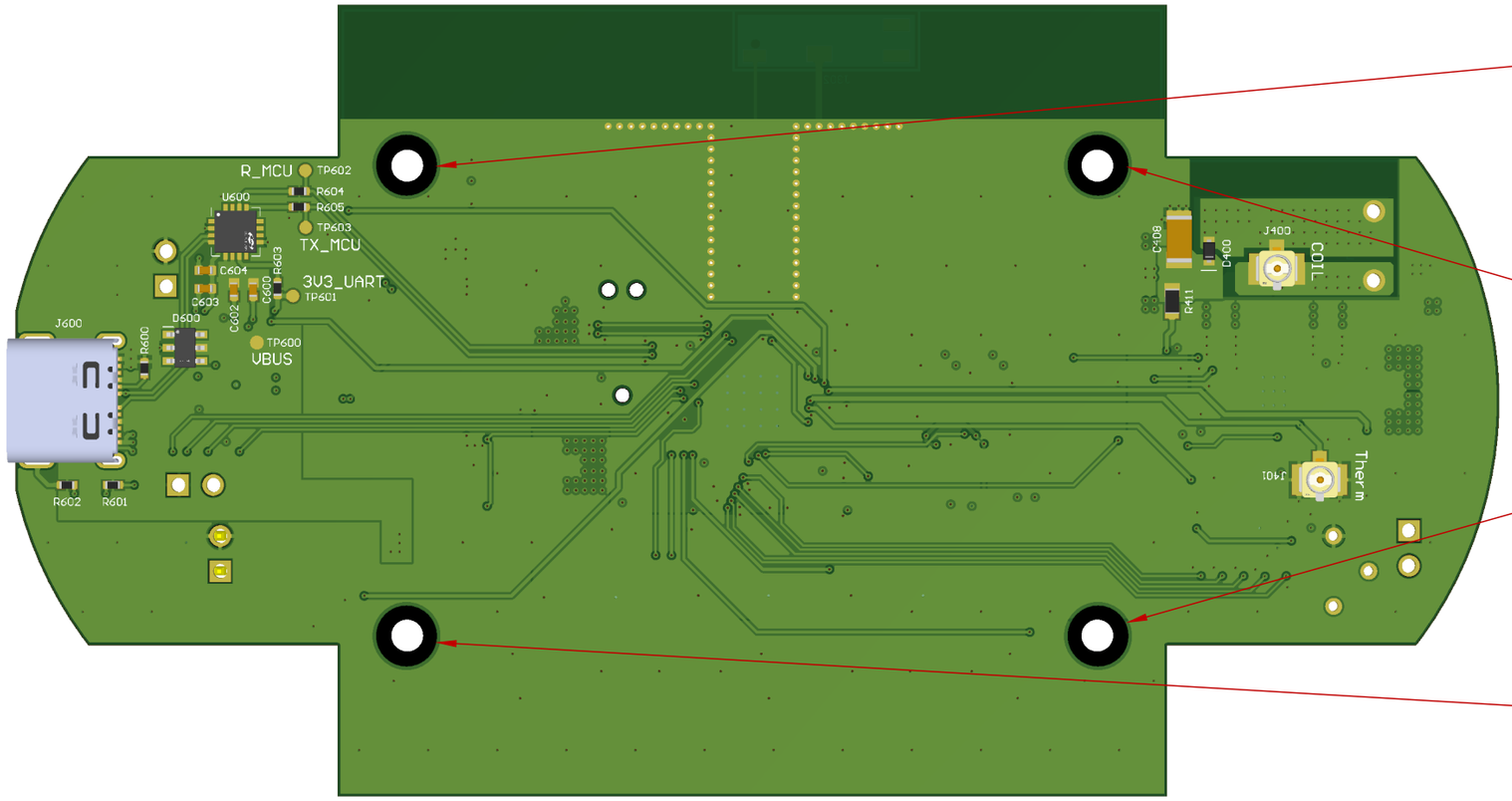
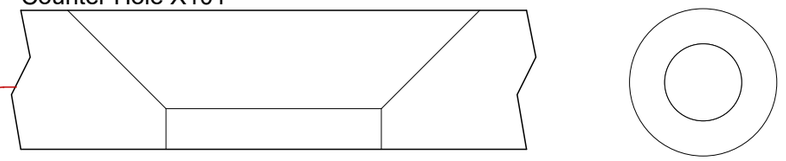
Comments:	

Chamfered holes

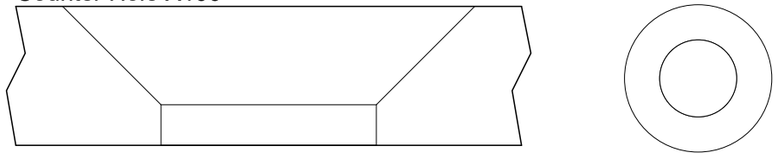
Realistic View



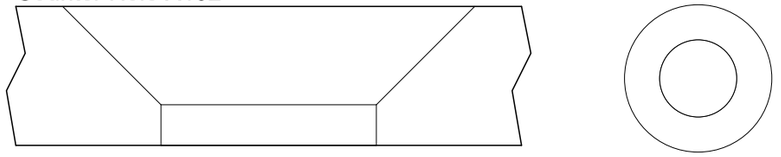
Counter Hole X101



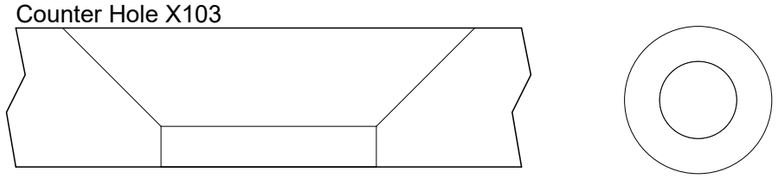
Counter Hole X100

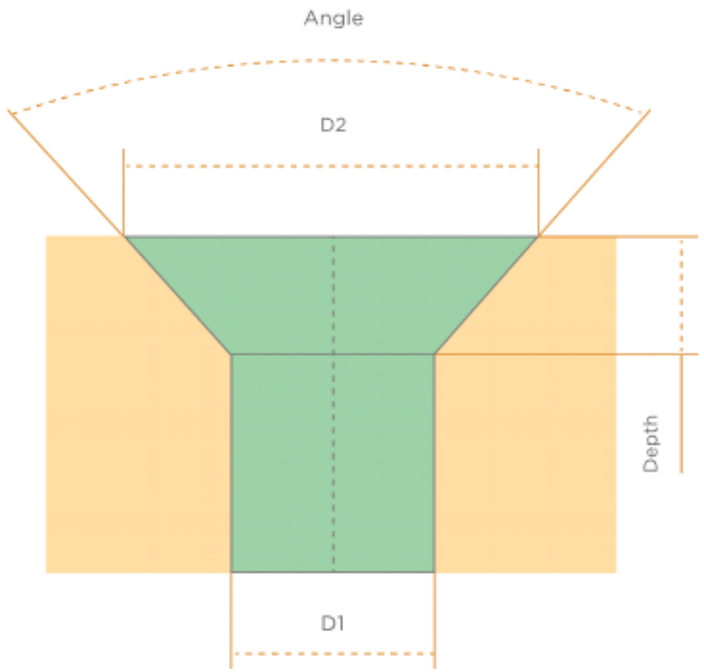


Counter Hole X102



Counter Hole X103





Angle = 90º

D2 = 4.4mm

Depth = 1.05mm

D1 = 2.3mm