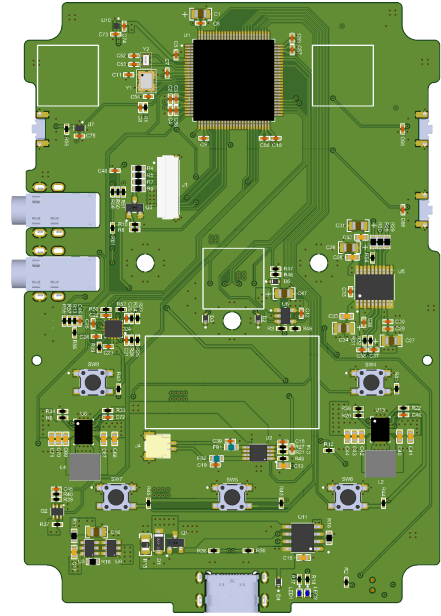


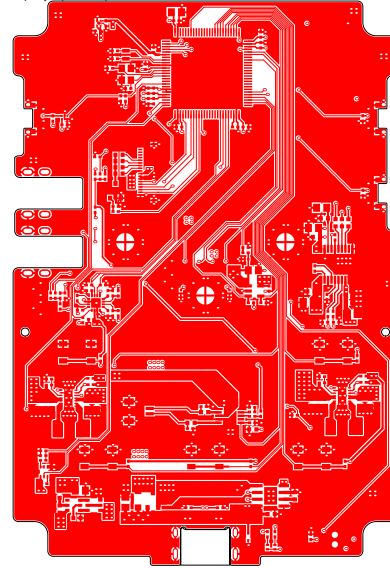
PORTFOLIO

EL HANI Faiçal

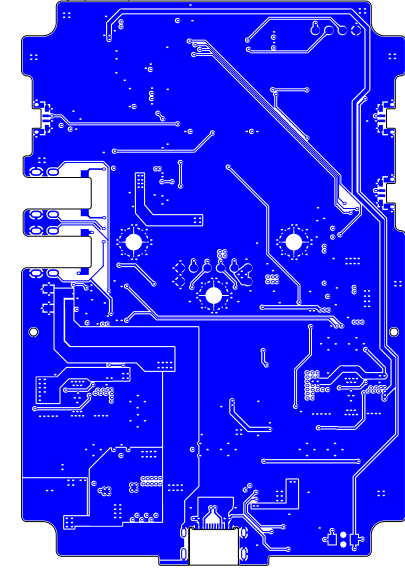
Realistic View



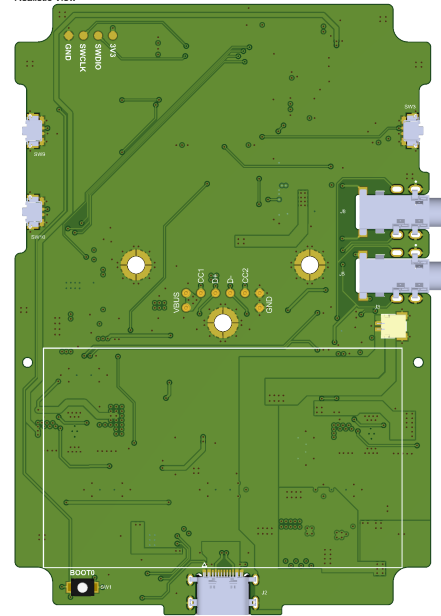
Top Layer (Scale 2:1)



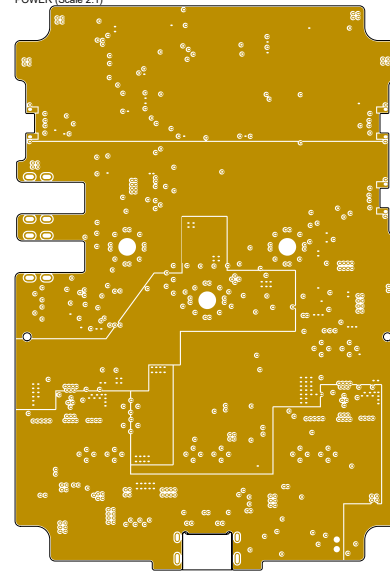
Bottom Layer (Scale 2:1)



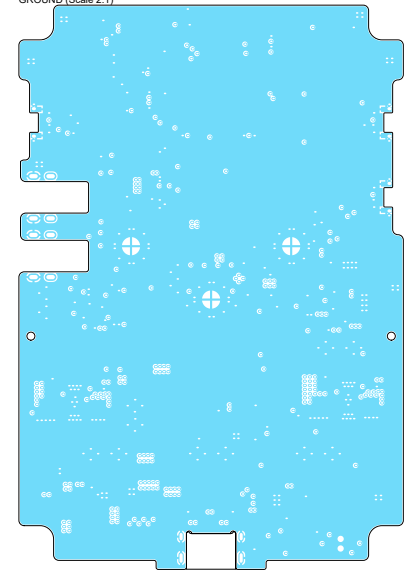
Realistic View



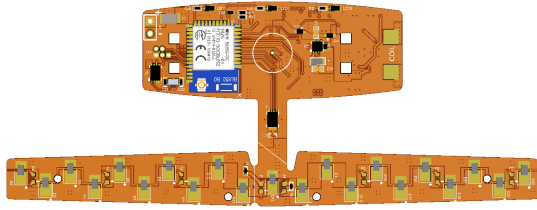
POWER (Scale 2:1)



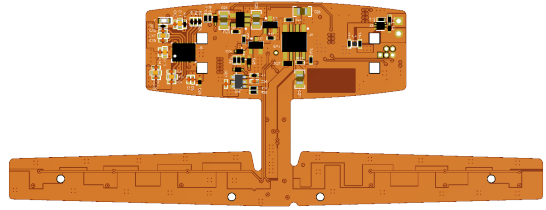
GROUND (Scale 2:1)



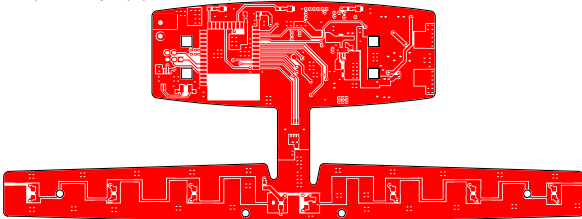
Realistic View



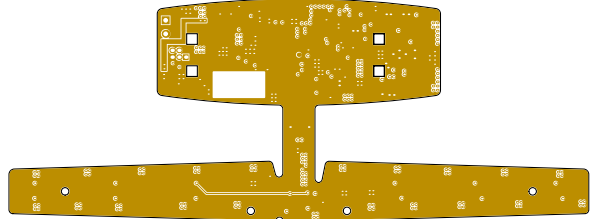
Realistic View



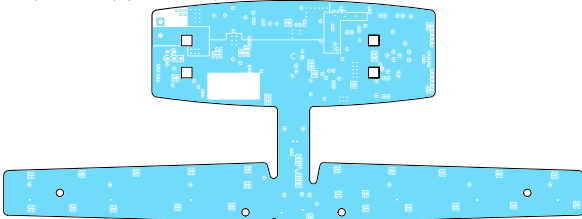
L1 (Top Layer) (Scale 1:1)



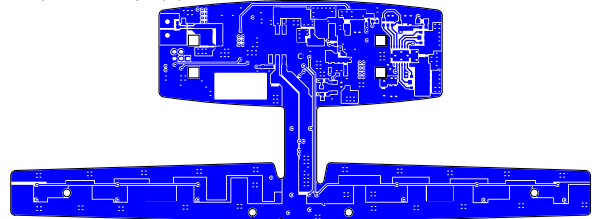
L2 (GND) (Scale 1:1)



L3 (POWER) (Scale 1:1)



L4 (Bottom Layer) (Scale 1:1)

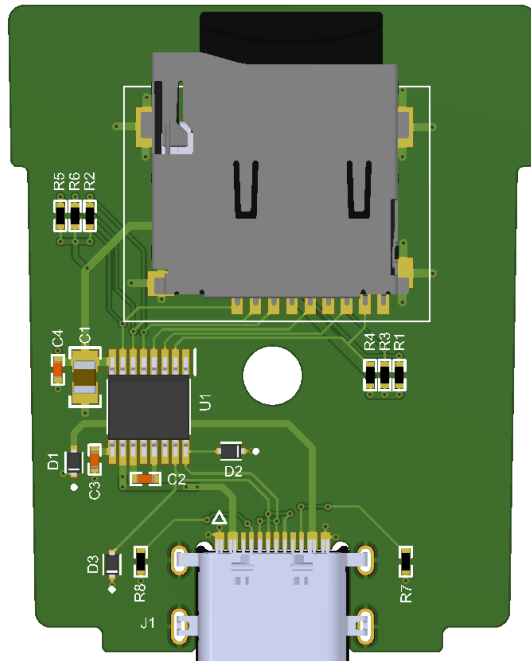


Layer Stack Legend

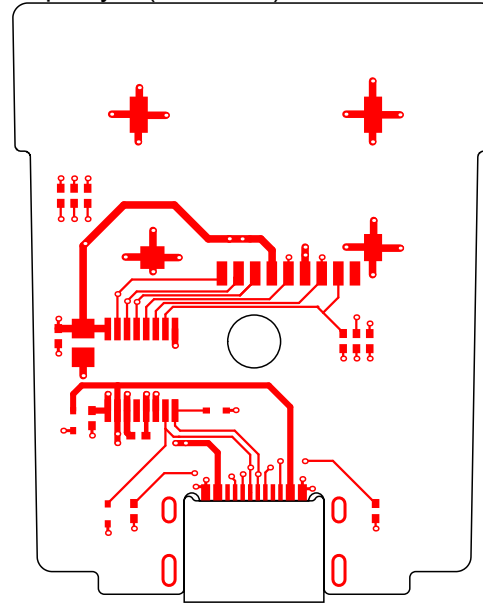
Material	Layer	Thickness	Dielectric Material	Type	Gerber
Surface Material	Top Overlay			Legend	
Copper	Top Coverlay		FC-001	Solder Mask	GCT1
Prepreg	L1 (Top Layer)	0.01mm		Signal	GTL
PP-006	Adhesive 1	0.01mm	PP-006	Dielectric	
PP-006	Adhesive 2	0.02mm		Adhesive	
Prepreg		0.03mm	PP-006	Dielectric	
Core		0.01mm	Core-009	Dielectric	
Copper	L2 (GND)	0.01mm		Signal	G1
PP-006	Adhesive 3	0.03mm	PP-006	Dielectric	
Prepreg		0.03mm	PP-006	Dielectric	
Copper	L3 (POWER)	0.01mm		Signal	G2
Core		0.01mm	Core-009	Dielectric	
Prepreg		0.03mm	PP-006	Dielectric	
PP-006	Adhesive 6			Adhesive	
Core	Adhesive 7	0.02mm		Adhesive	
Copper		0.01mm	Core-009	Dielectric	
Surface Material	L4 (Bottom Layer)	0.01mm		Signal	GBL
Surface Material	Bottom Coverlay		FC-001	Solder Mask	GCB1
Surface Material	Bottom Overlay			Legend	

Total thickness: 0.20mm

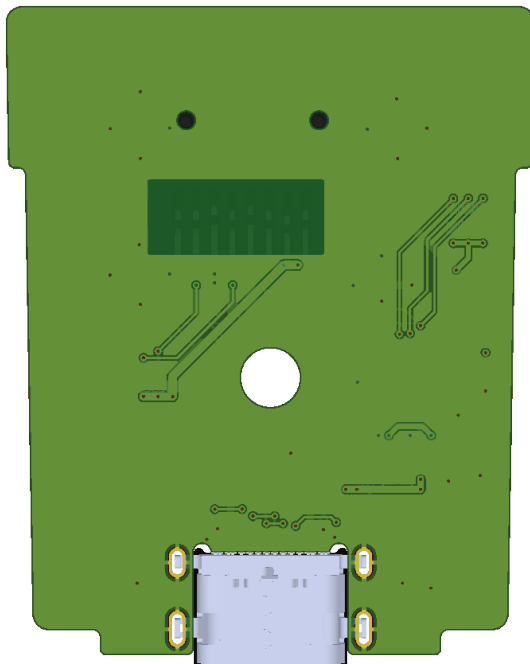
Realistic View



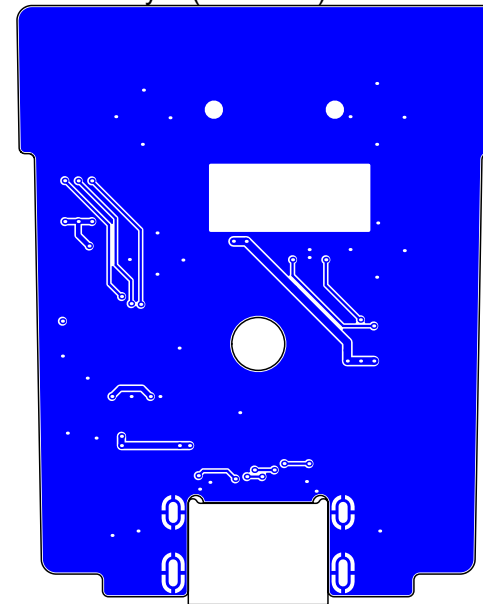
Top Layer (Scale 2:1)

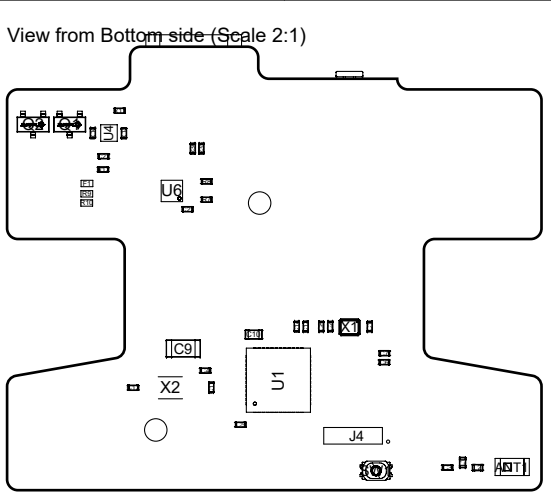
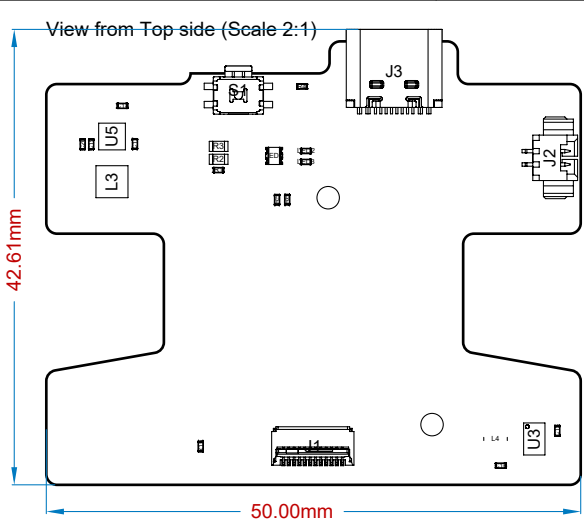


Realistic View



Bottom Layer (Scale 2:1)



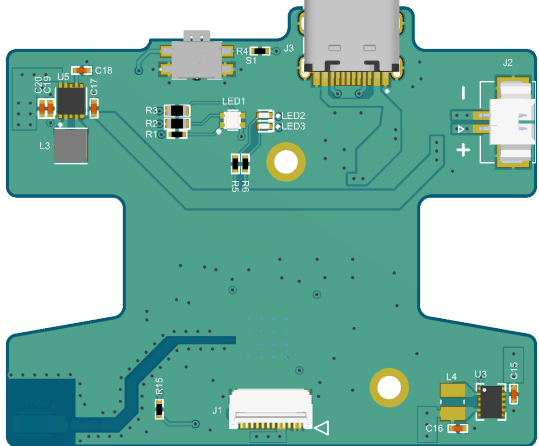


Layer Stack Legend

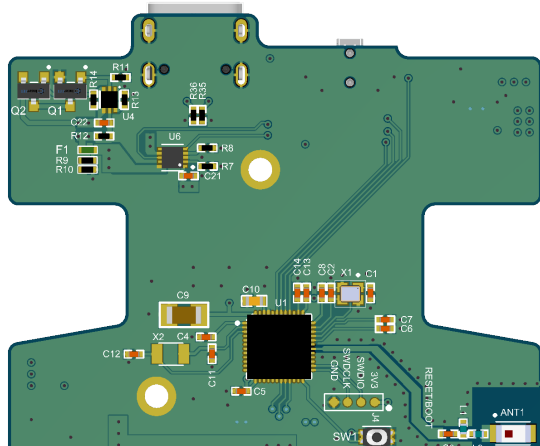
Material	Layer	Thickness	Dielectric Material	Type	Gerber
Surface Material	Top Overlay			Legend	GTO
Surface Material	Top Solder	0.01mm	Solder Resist	Solder Mask	GTS
CF-004	L1 - SIGNAL	0.04mm		Signal	GTL
Prepreg		0.07mm	PP-006	Dielectric	
Copper	L2 - POWER	0.04mm		Signal	G1
			0.32mm	FR-4	Dielectric
Copper	L3 - GND	0.04mm		Signal	G2
Prepreg		0.07mm	PP-006	Dielectric	
CF-004	L4 - SIGNAL	0.04mm		Signal	GBL
Surface Material	Bottom Solder	0.01mm	Solder Resist	Solder Mask	GBS
	Bottom Overlay			Legend	GBO

Total thickness: 0.62mm

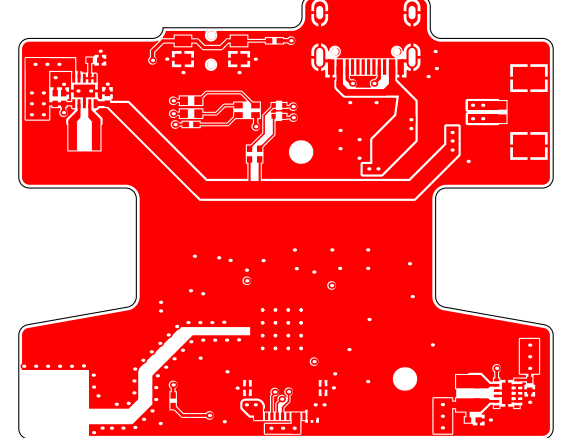
Realistic View



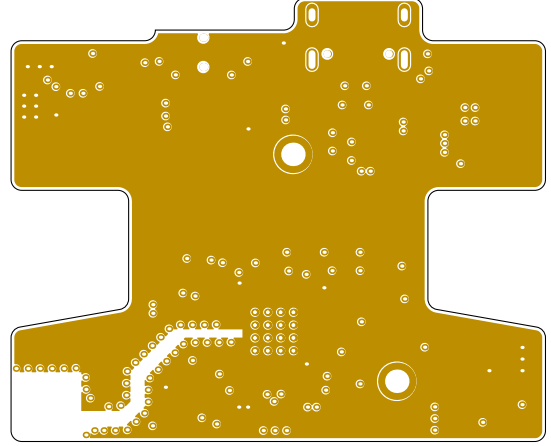
Realistic View



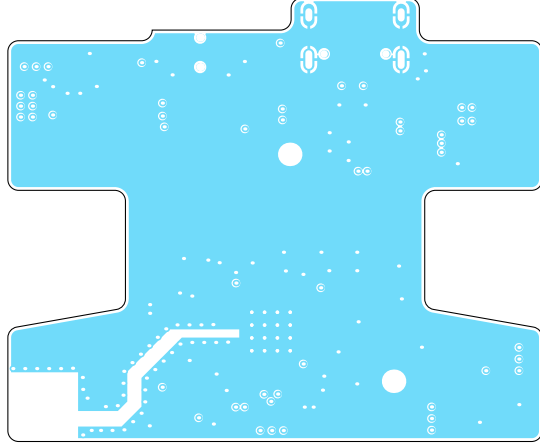
L1 - SIGNAL (Scale 2:1)



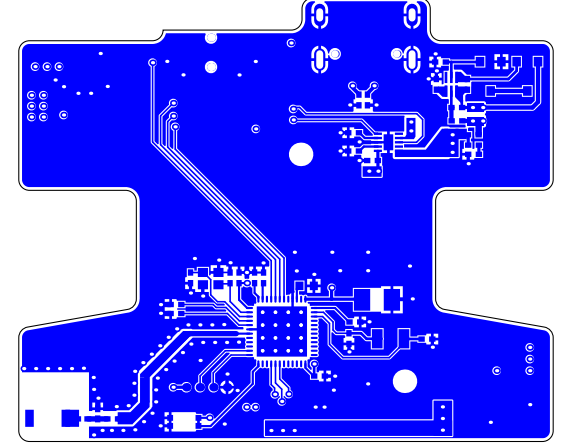
L2 - POWER (Scale 2:1)



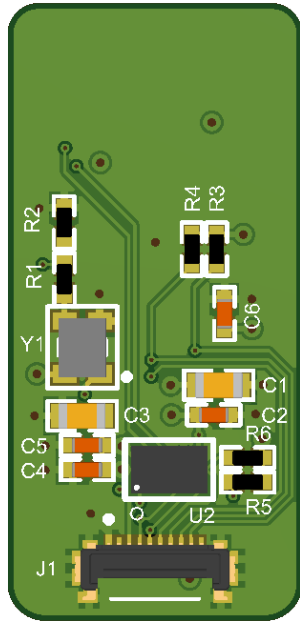
L3 - GND (Scale 2:1)



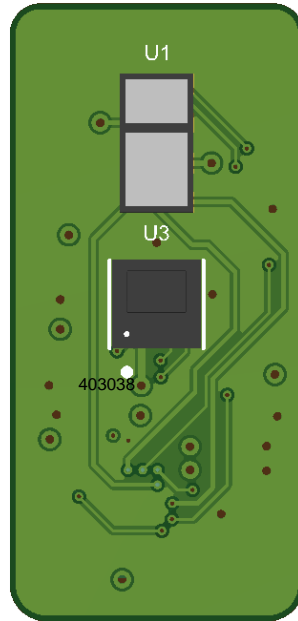
L4 - SIGNAL (Scale 2:1)



Realistic View



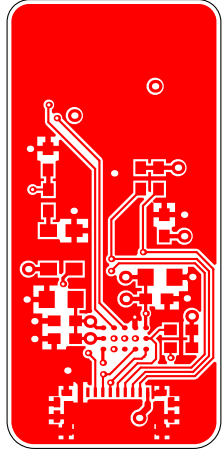
Realistic View



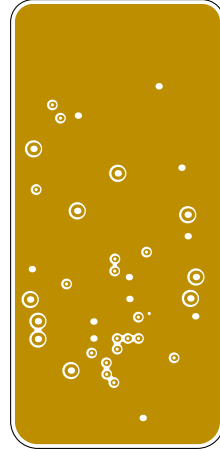
Layer Stack Legend

Material	Layer	Thickness	Dielectric Material	Type	Gerber
Surface Material	Top Overlay	0.01mm		Legend	GTO
Surface Material	Top Solder	0.01mm	Solder Resist	Solder Mask	GTS
Copper	L1 - SIGNAL	0.04mm		Signal	GTL
Prepreg		0.07mm	PP-006	Dielectric	
CF-004	L2 - POWER	0.04mm		Signal	G1
		0.32mm	FR-4	Dielectric	
CF-004	L3 - GND	0.04mm		Signal	G2
Prepreg		0.07mm	PP-006	Dielectric	
Copper	L4 - SIGNAL	0.04mm		Signal	GBL
Surface Material	Bottom Solder	0.01mm	Solder Resist	Solder Mask	GBS
	Bottom Overlay			Legend	GBO
Total thickness: 0.62mm					

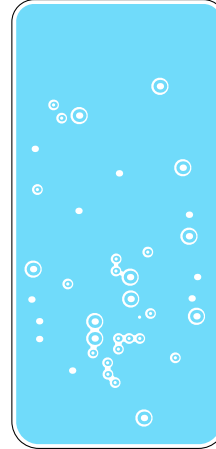
L1 - SIGNAL (Scale 4:1)



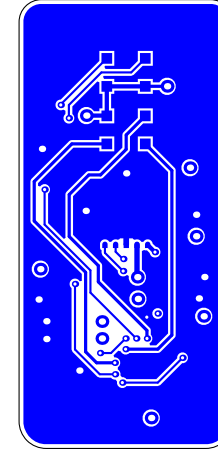
L2 - POWER (Scale 4:1)



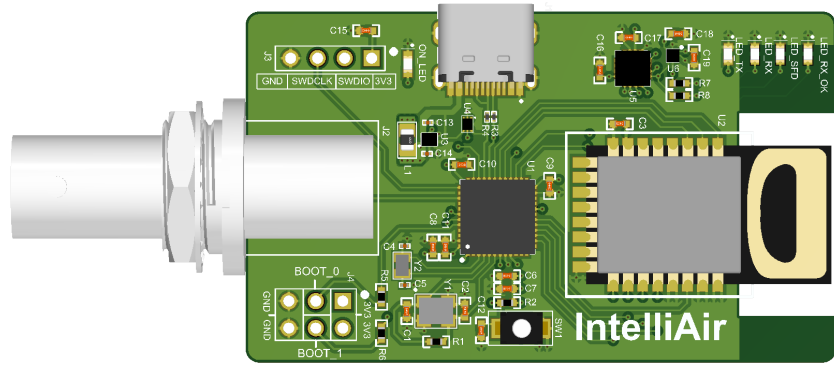
L3 - GND (Scale 4:1)



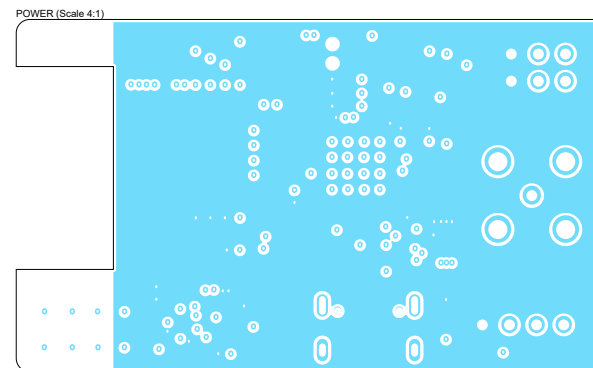
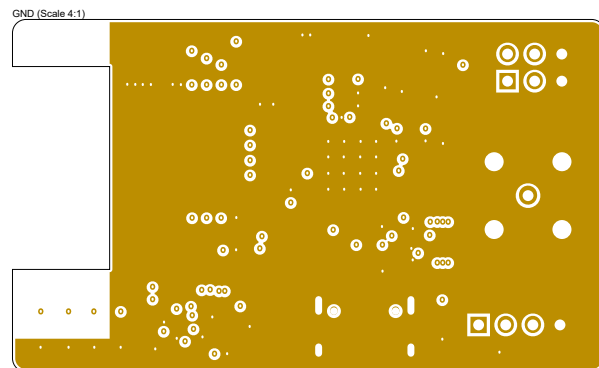
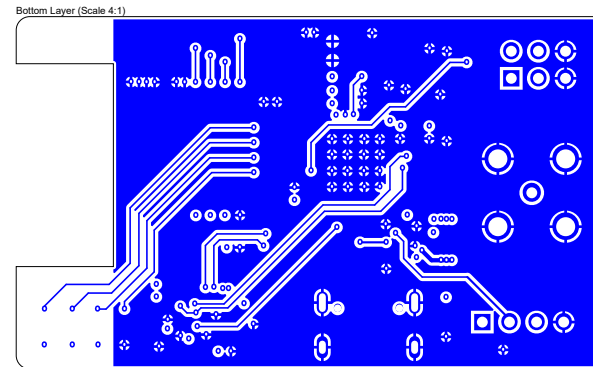
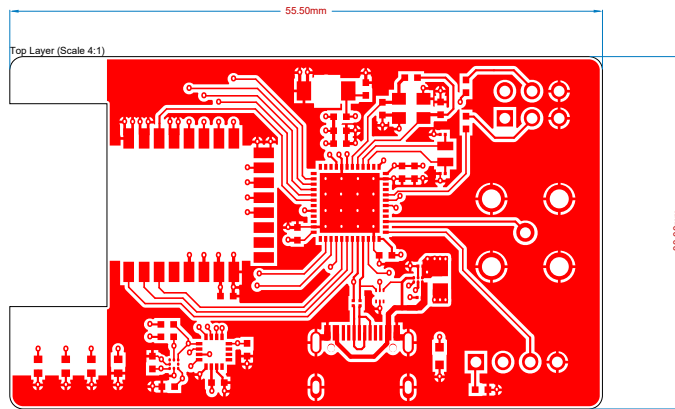
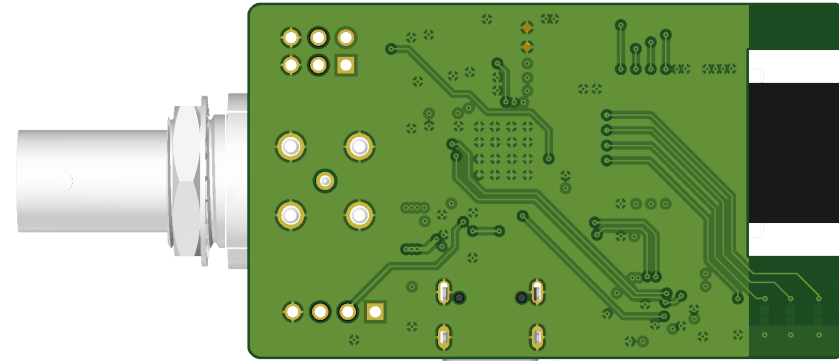
L4 - SIGNAL (Scale 4:1)



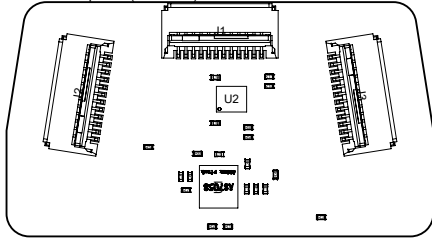
Realistic View



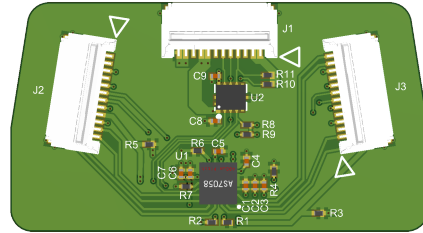
Realistic View



View from Top side (Scale 4:1)



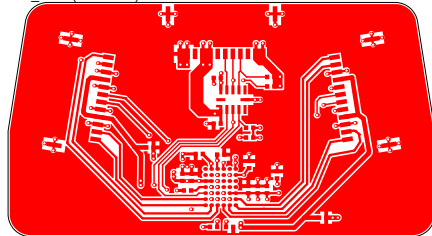
Realistic View



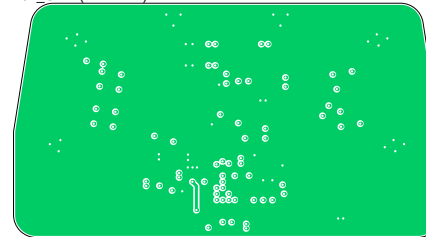
Layer Stack Legend

Material	Layer	Thickness	Dielectric Material	Type	Gerber
Surface Material	Top Overlay			Legend	GTO
Top Solder	Top Solder	0.01mm	Solder Resist	Solder Mask	GTS
CF-004	L01_TOP	0.04mm		Signal	GTL
Prepreg		0.07mm	PP-006	Dielectric	
CF-004	L02_GND	0.04mm		Signal	G1
		0.32mm	FR-4	Dielectric	
CF-004	L03_POWER	0.04mm		Signal	G2
Prepreg		0.07mm	PP-006	Dielectric	
CF-004	L04_BOTTOM	0.04mm		Signal	GBL
Surface Material	Bottom Solder	0.01mm	Solder Resist	Solder Mask	GBS
	Bottom Overlay			Legend	GBO
Total thickness: 0.62mm					

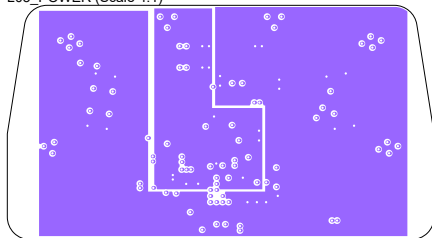
L01_TOP (Scale 4:1)



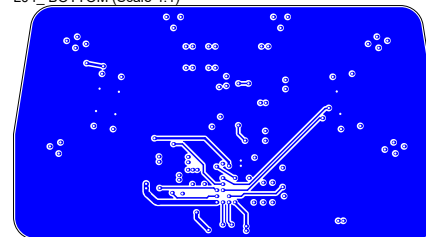
L02_GND (Scale 4:1)



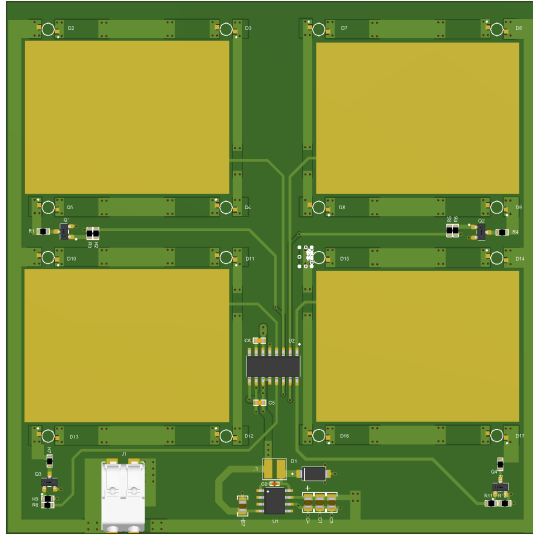
L03_POWER (Scale 4:1)



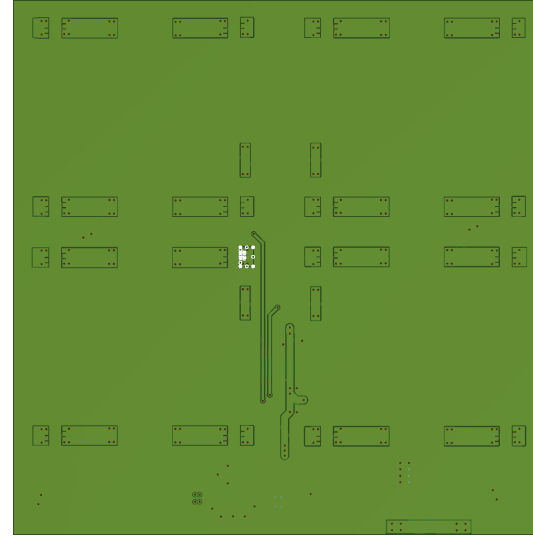
L04_BOTTOM (Scale 4:1)



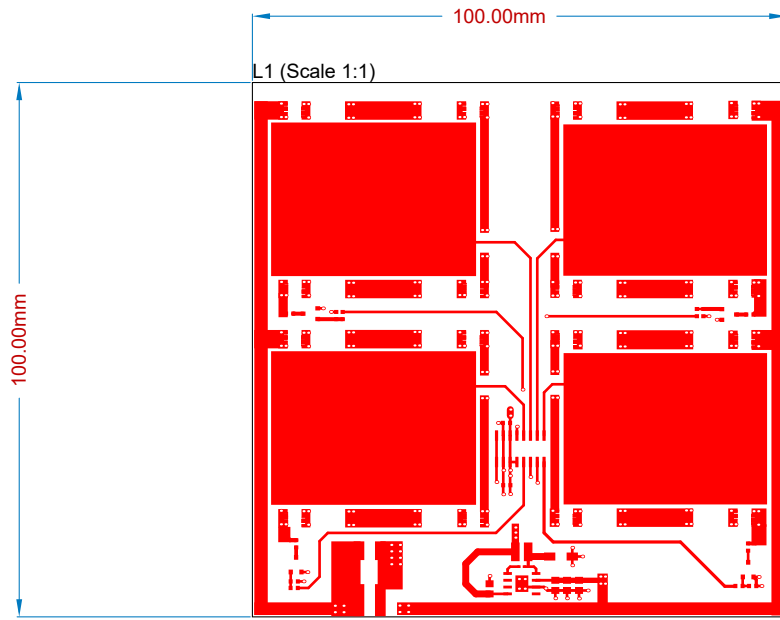
Realistic View



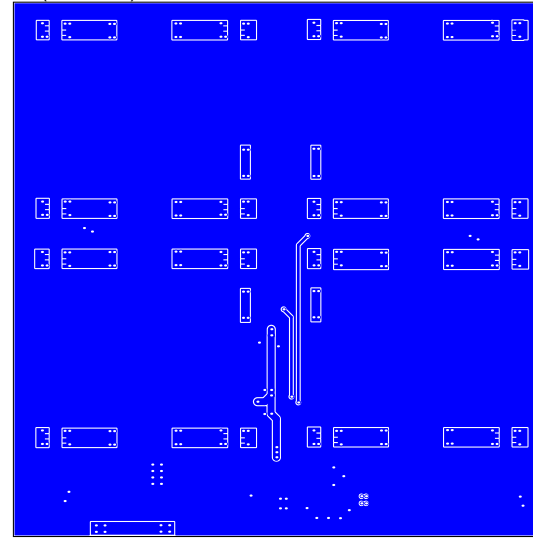
Realistic View



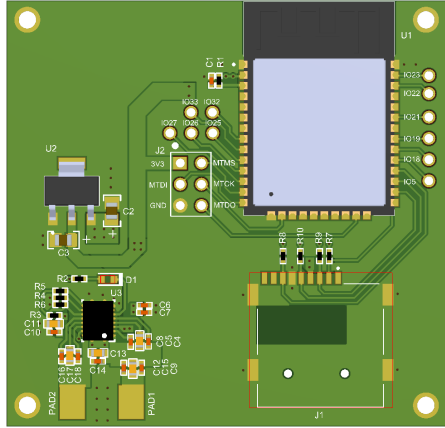
L1 (Scale 1:1)



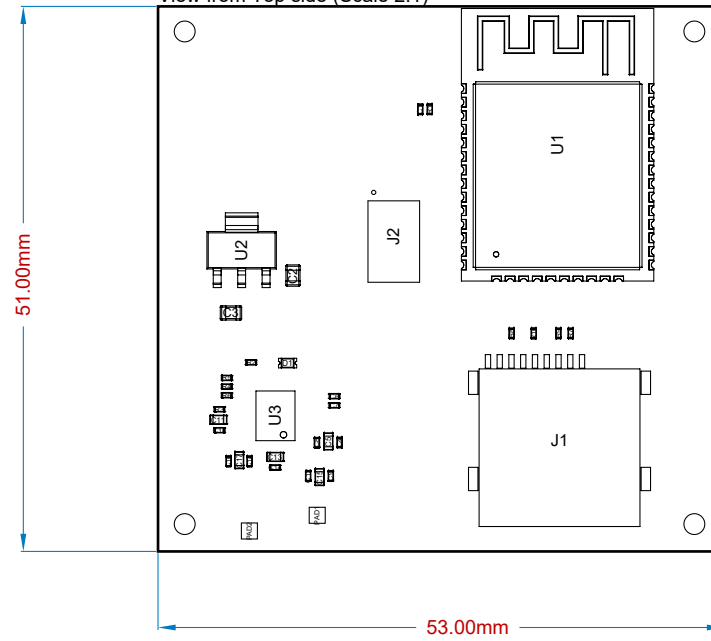
L2 (Scale 1:1)



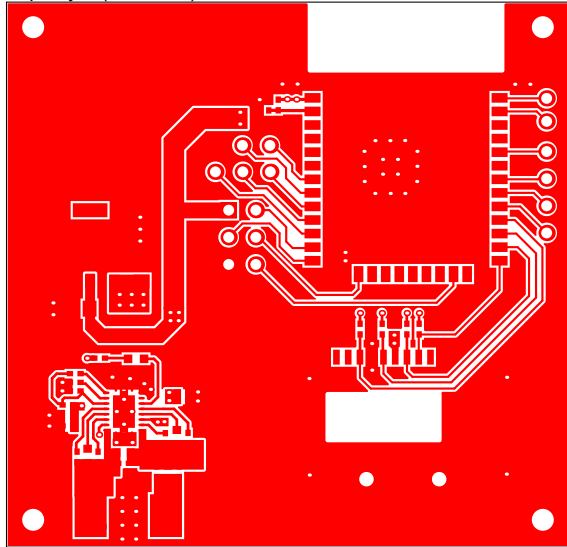
Realistic View



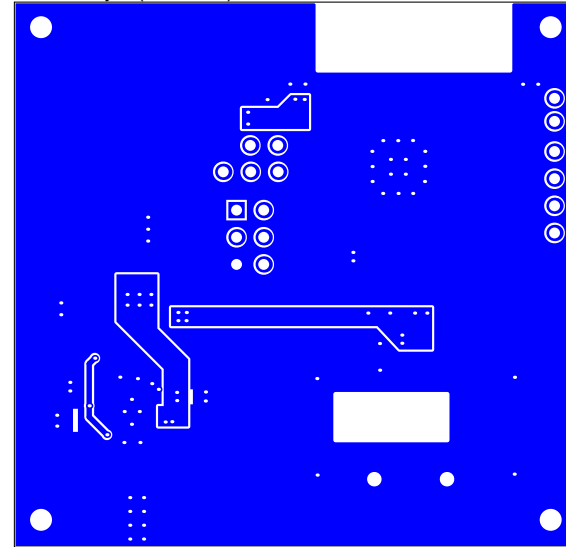
View from Top side (Scale 2:1)



Top Layer (Scale 2:1)



Bottom Layer (Scale 2:1)

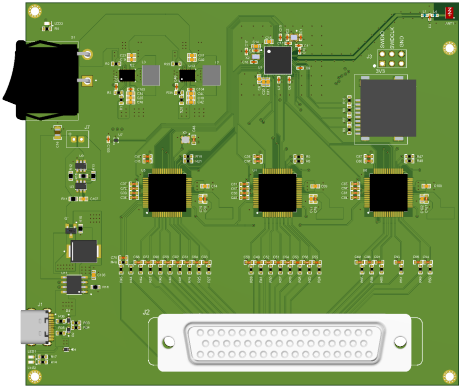


Layer Stack Legend

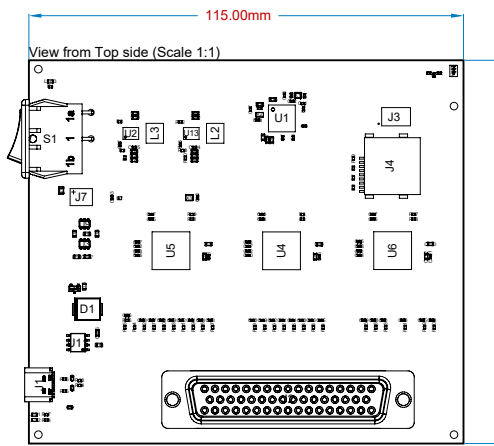
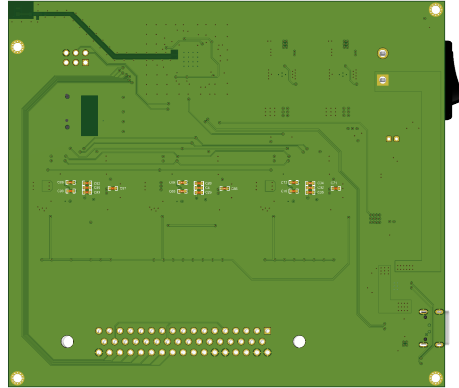
Material	Layer	Thickness	Dielectric Material	Type	Gerber
Surface Material	Top Overlay			Legend	GTO
Top Solder		0.01mm	Solder Resist	Solder Mask	GTS
Copper	L1 - Signal	0.04mm		Signal	GTL
		0.32mm	FR-4	Dielectric	
Copper	L2 - POWER	0.04mm		Signal	G1
		0.32mm	FR-4	Dielectric	
Copper	L3 - GROUND	0.04mm		Signal	G2
		0.32mm	FR-4	Dielectric	
Copper	L4 - SIGNAL	0.04mm		Signal	GBL
Surface Material	Bottom Solder	0.01mm	Solder Resist	Solder Mask	GBS
	Bottom Overlay			Legend	GBO

Total thickness: 1.12mm

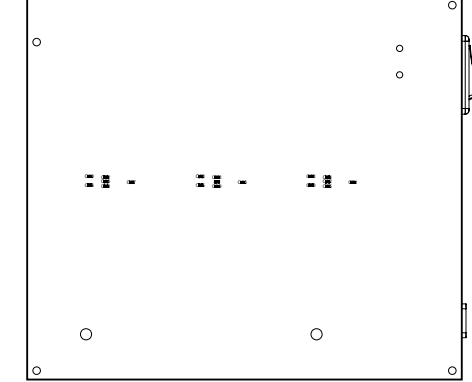
Realistic View



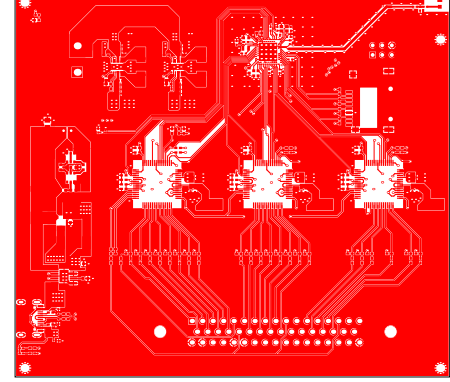
Realistic View



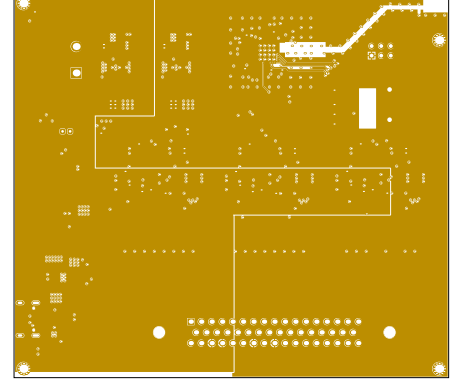
View from Bottom side (Scale 1:1)



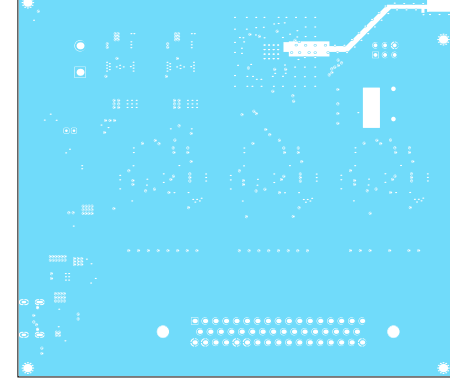
L1 - Signal (Scale 1:1)



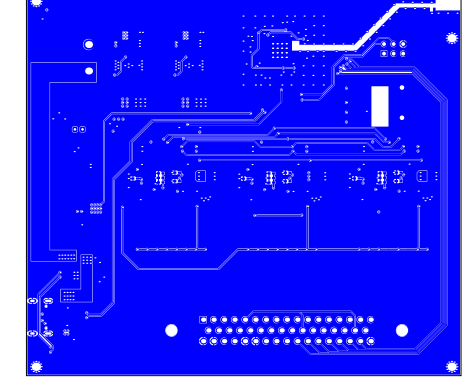
L2 - POWER (Scale 1:1)

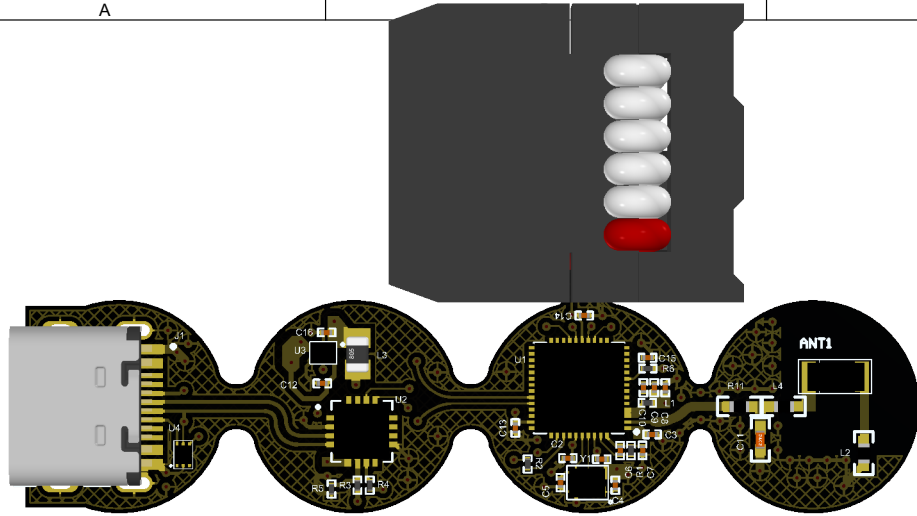


L3 - GROUND (Scale 1:1)

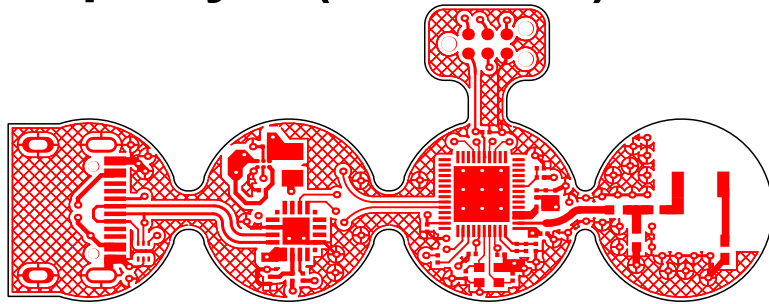


L4 - SIGNAL (Scale 1:1)

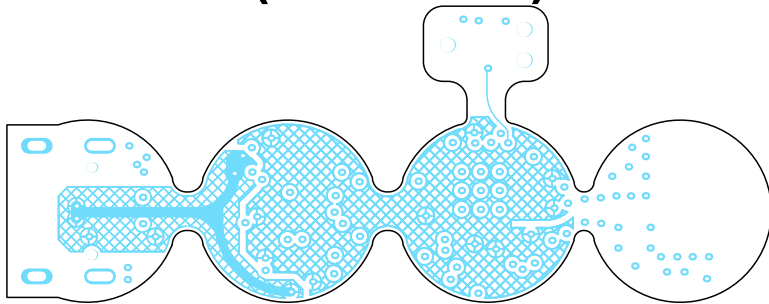




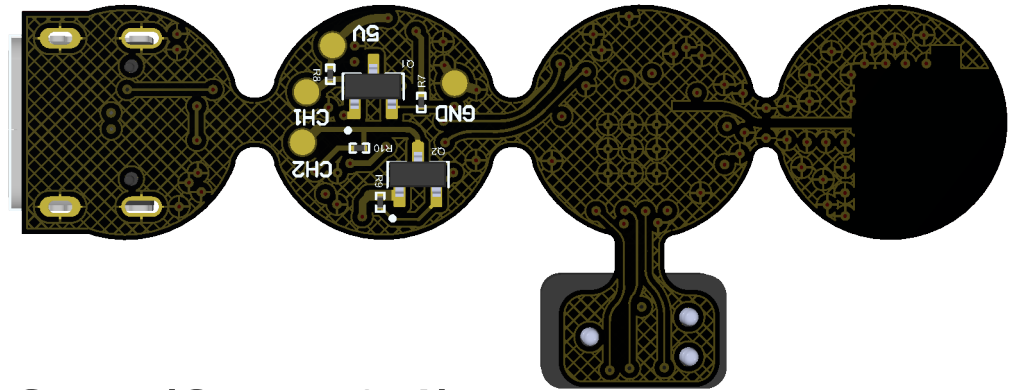
Top Layer (Scale 2:1)



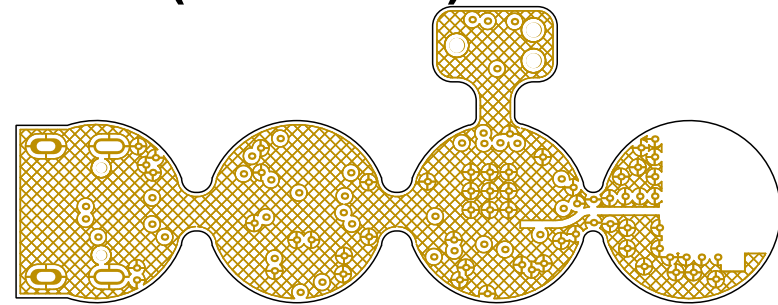
POWER (Scale 2:1)



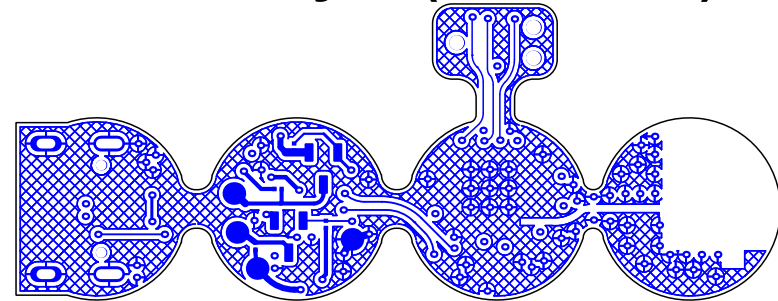
Realistic View



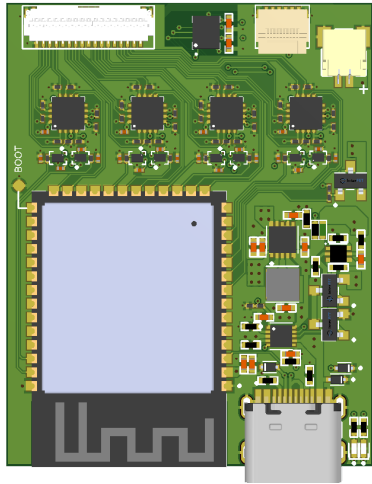
GND (Scale 2:1)



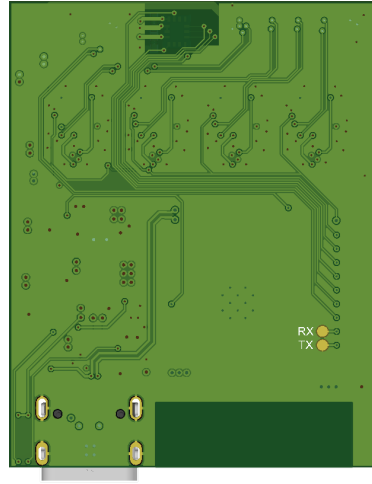
Bottom Layer (Scale 2:1)



Realistic View



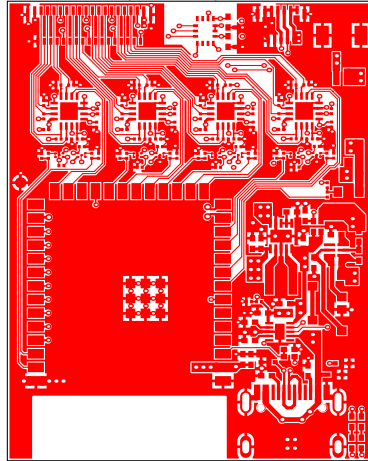
Realistic View



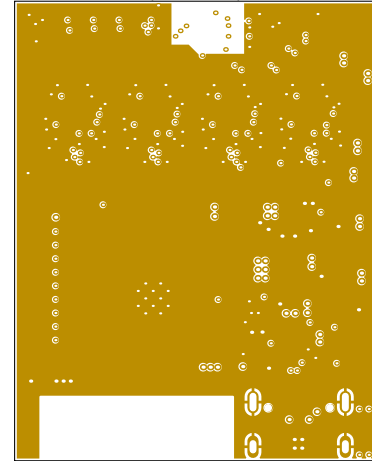
Layer Stack Legend

Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Top Overlay			Legend	GTO
Surface Material	Top Solder	0.01mm	Solder Resist	Solder Mask	GTS
Copper	L1 - SIGNAL	0.04mm		Signal	GTL
Prepreg		0.10mm	PP-006	Dielectric	
CF-004	L2 - GROUND	0.04mm		Signal	G1
		0.34mm	FR-4	Dielectric	
CF-004	L3 - POWER	0.04mm		Signal	G2
Prepreg		0.10mm	PP-006	Dielectric	
Copper	L4 - SIGNAL	0.04mm		Signal	GBL
Surface Material	Bottom Solder	0.01mm	Solder Resist	Solder Mask	GBS
	Bottom Overlay			Legend	GBO
Total thickness: 0.70mm					

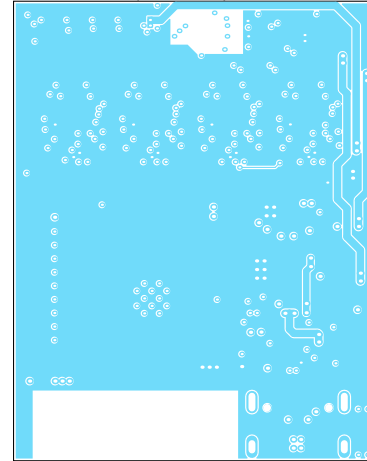
L1 - SIGNAL (Scale 2:1)



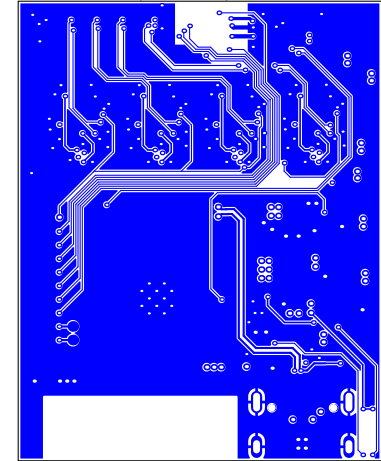
L2 - GROUND (Scale 2:1)



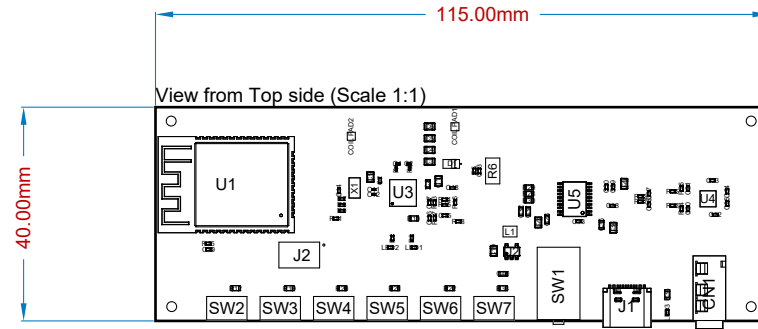
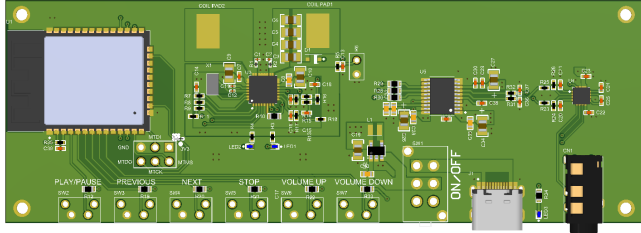
L3 - POWER (Scale 2:1)



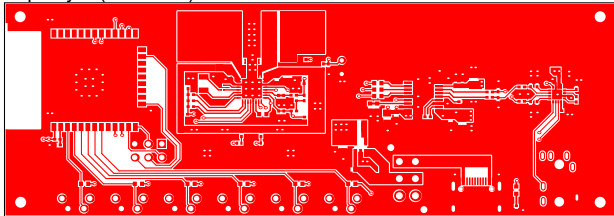
L4 - SIGNAL (Scale 2:1)



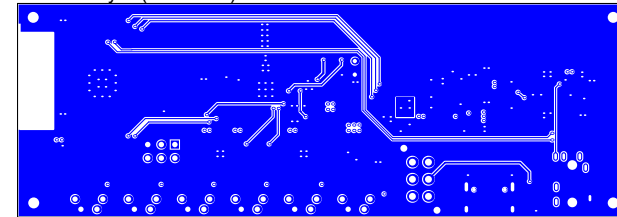
Realistic View



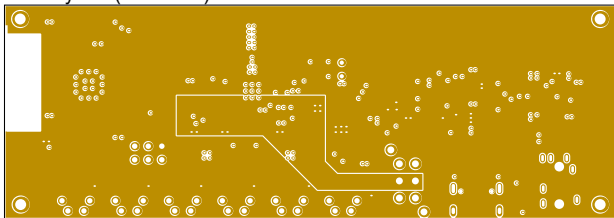
Top Layer (Scale 1:1)



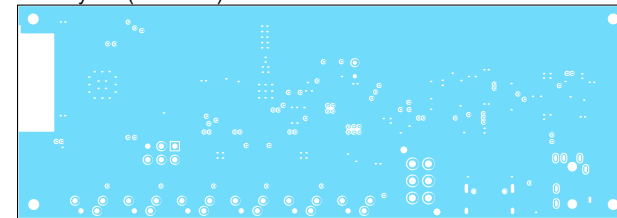
Bottom Layer (Scale 1:1)

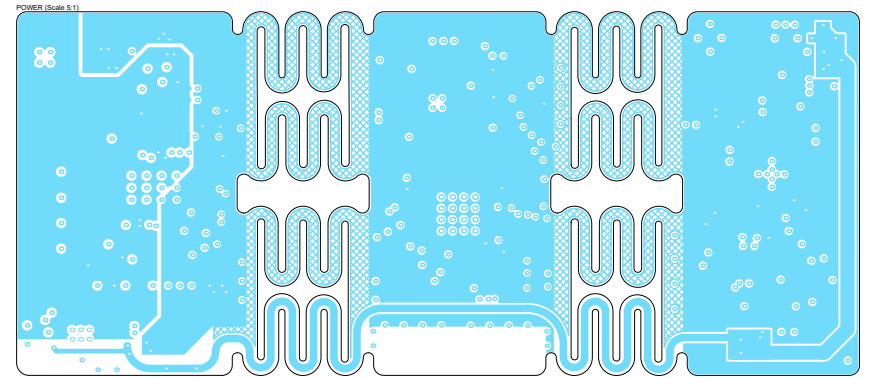
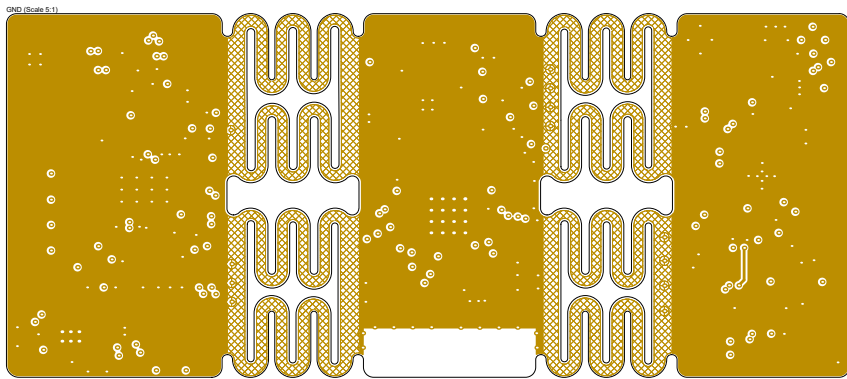
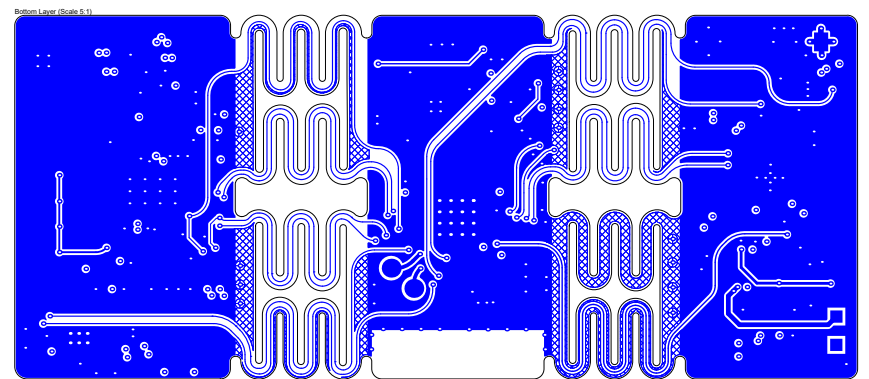
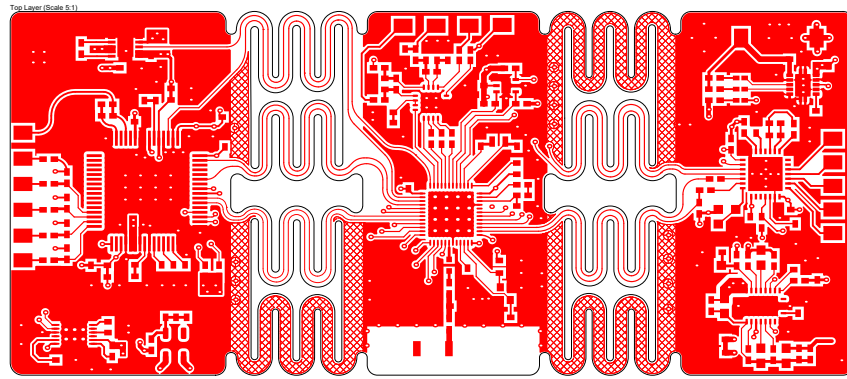
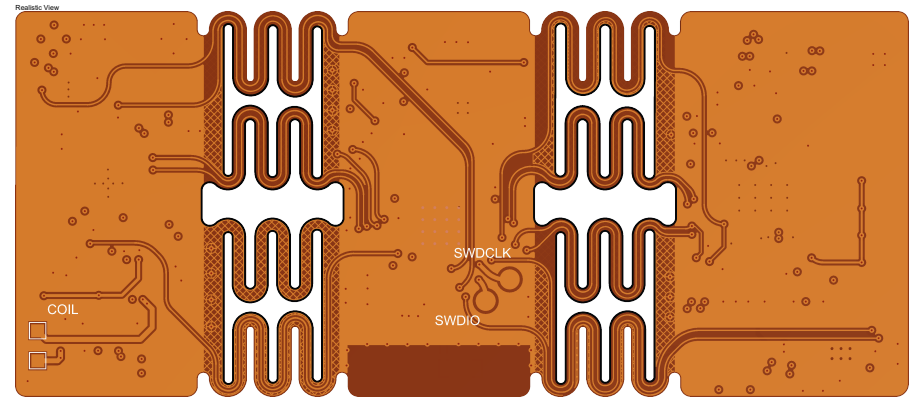
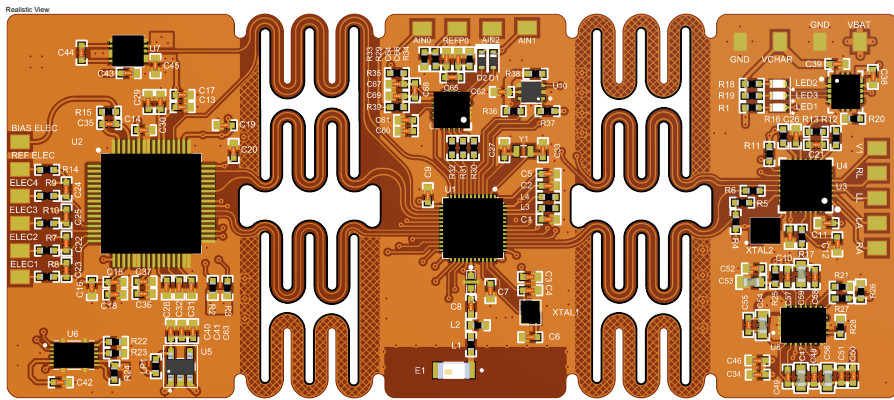


Mid-Layer 1 (Scale 1:1)



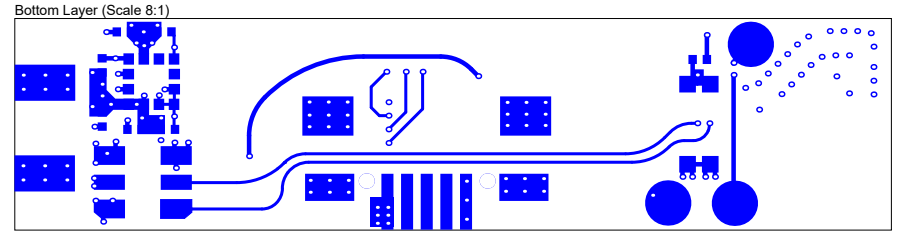
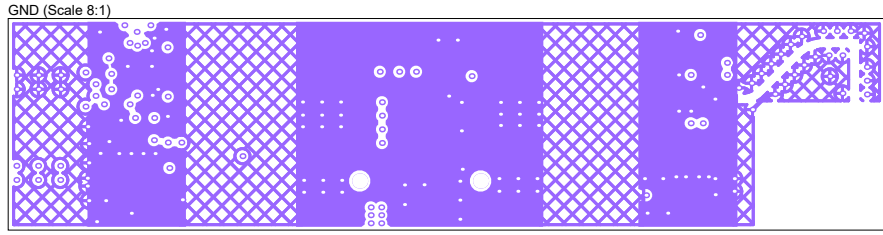
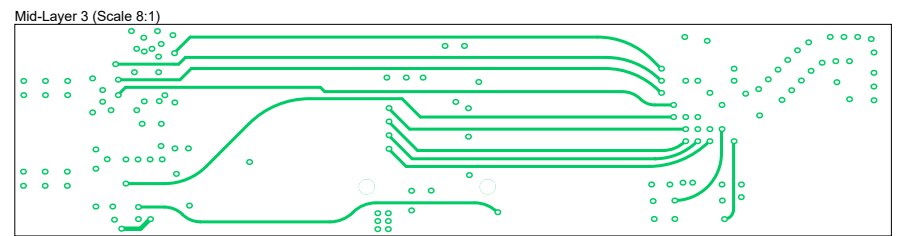
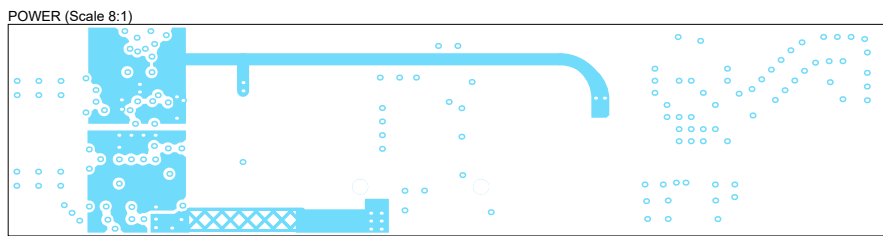
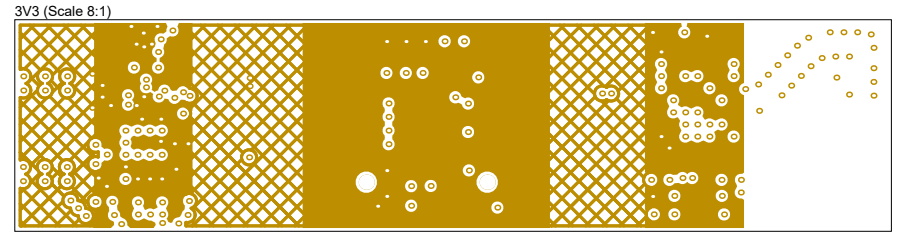
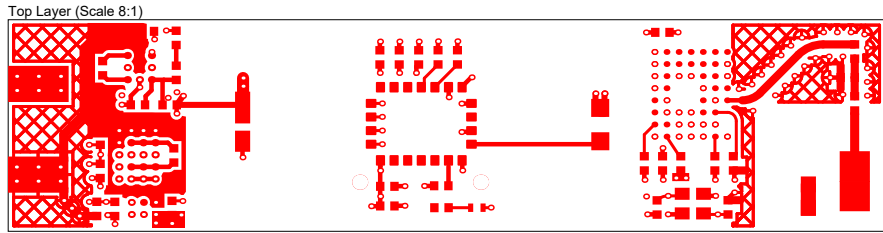
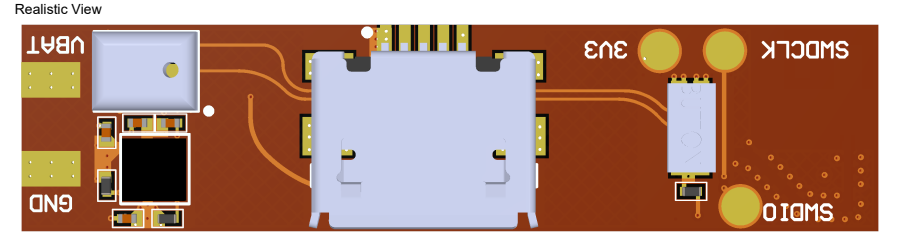
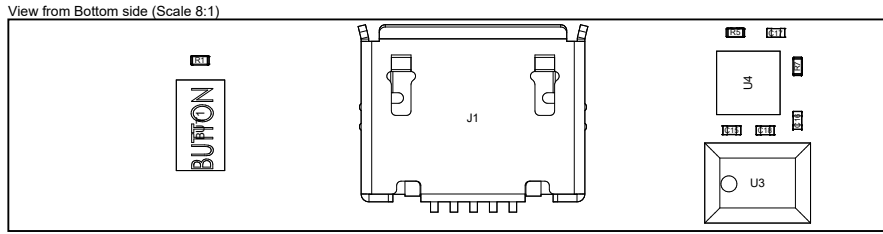
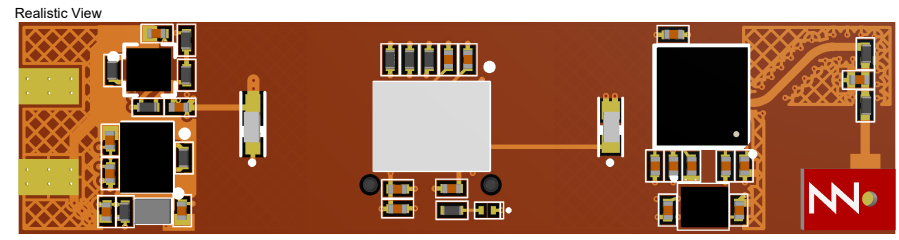
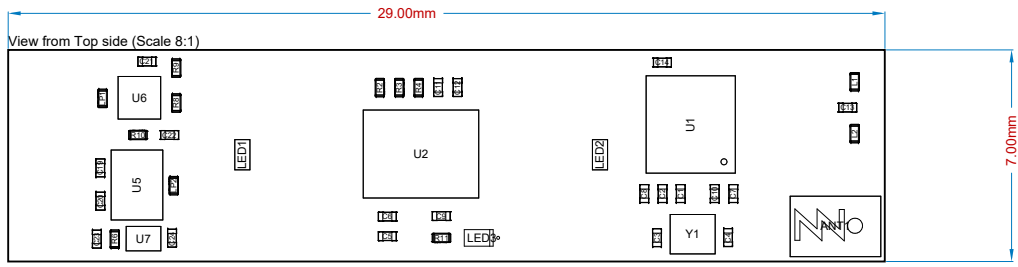
Mid-Layer 2 (Scale 1:1)





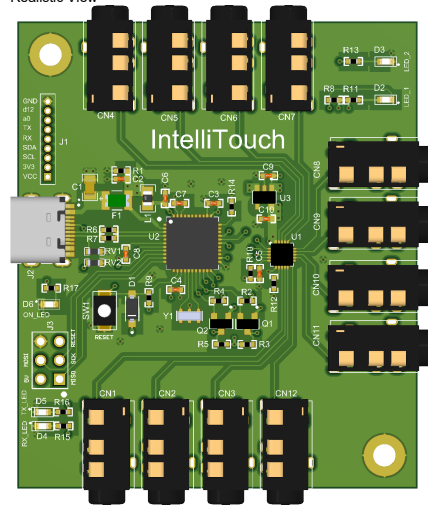
Designed by EL HANI Faiçal
Email: elhani.faiçal@gmail.com
Whatsapp : +212695199120

//

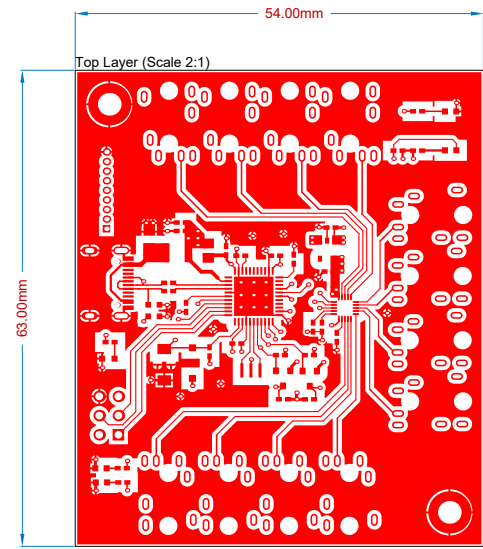


6 LAYERS

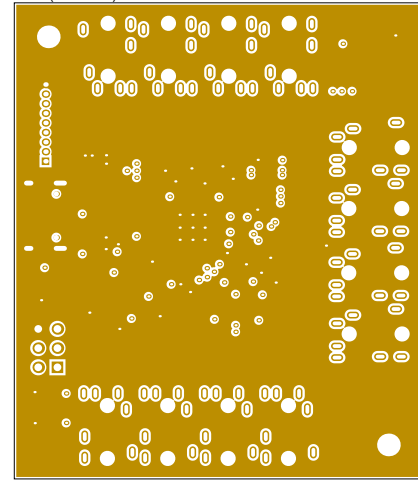
Realistic View



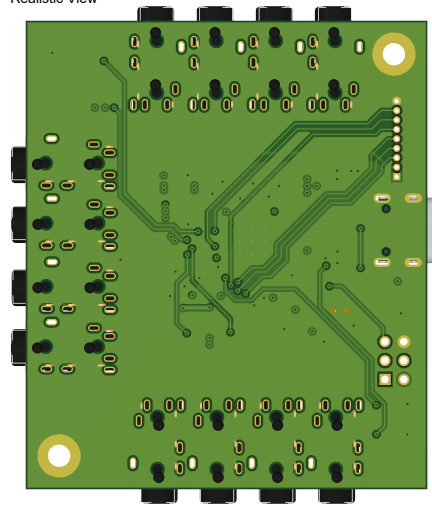
Top Layer (Scale 2:1)



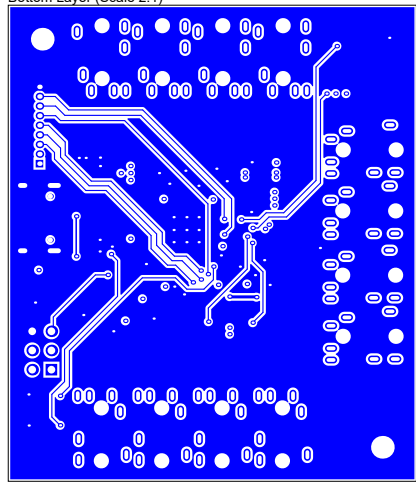
GND (Scale 2:1)



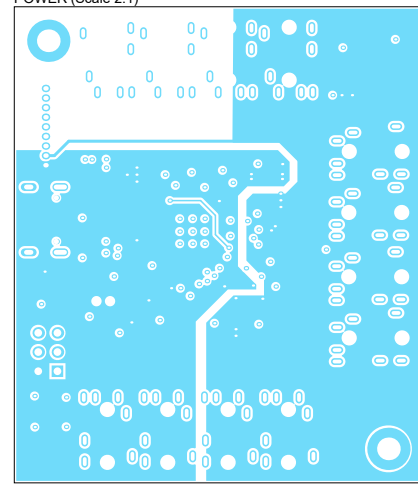
Realistic View



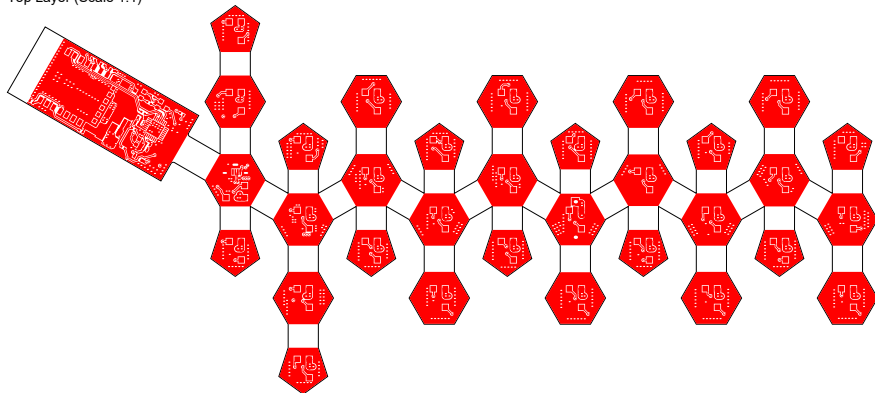
Bottom Layer (Scale 2:1)



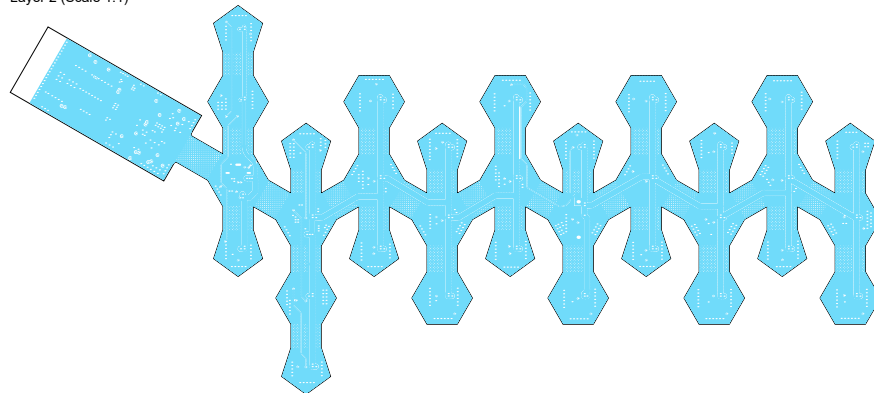
POWER (Scale 2:1)



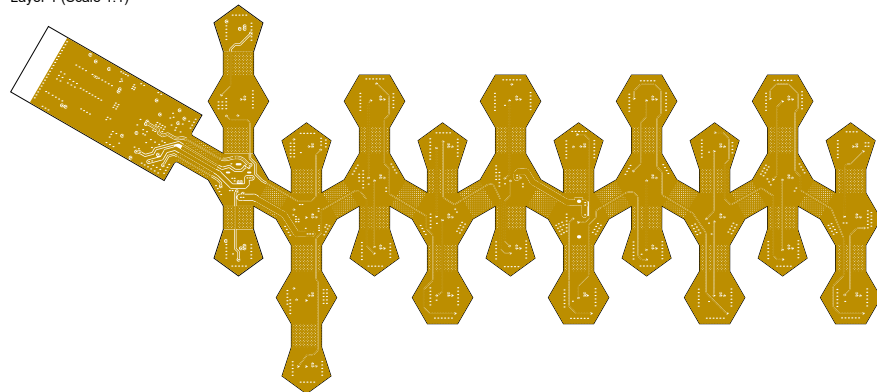
Top Layer (Scale 1:1)



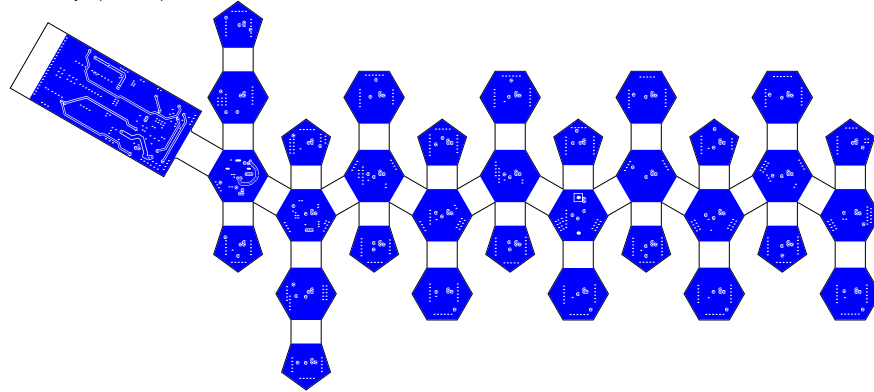
Layer 2 (Scale 1:1)



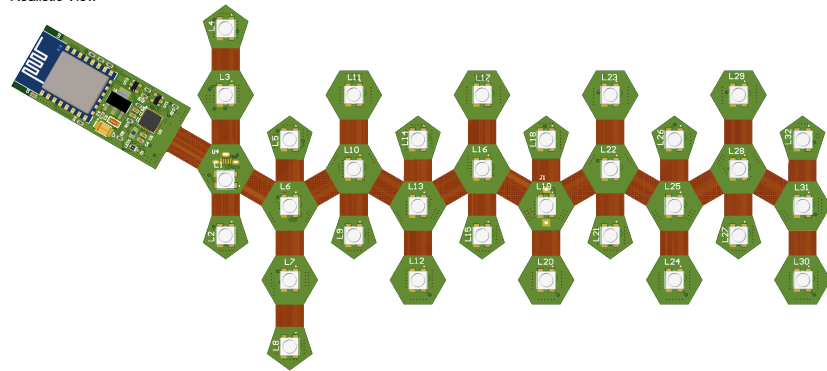
Layer 1 (Scale 1:1)



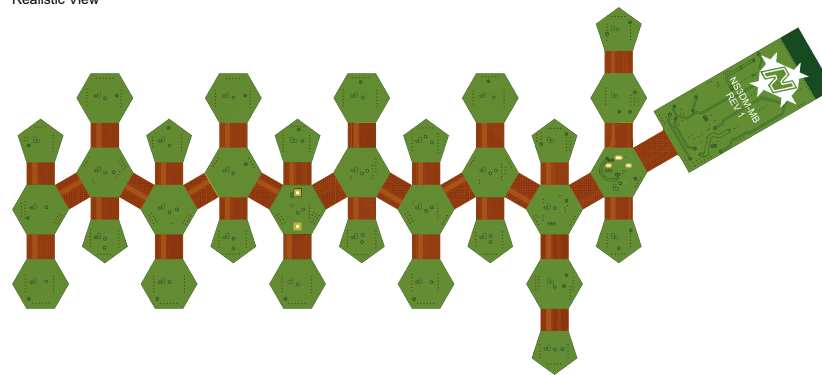
Bottom Layer (Scale 1:1)



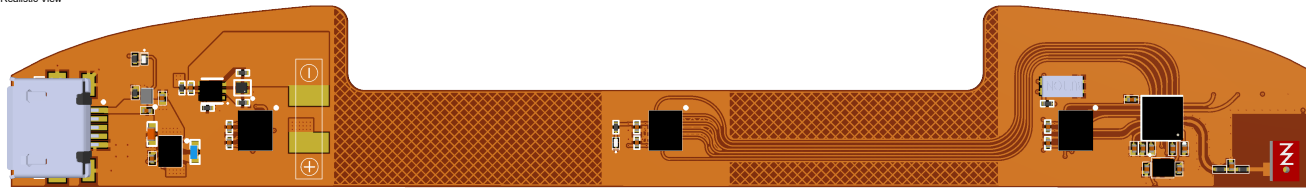
Realistic View



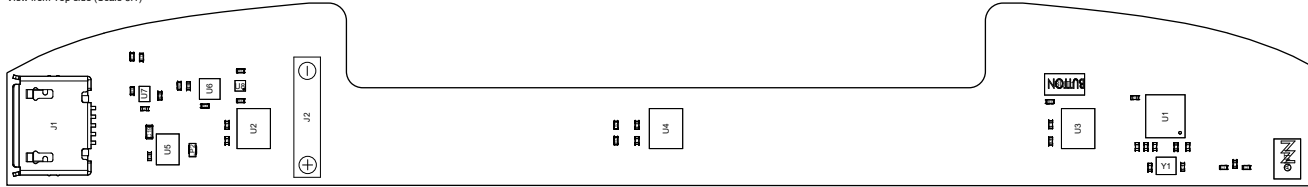
Realistic View



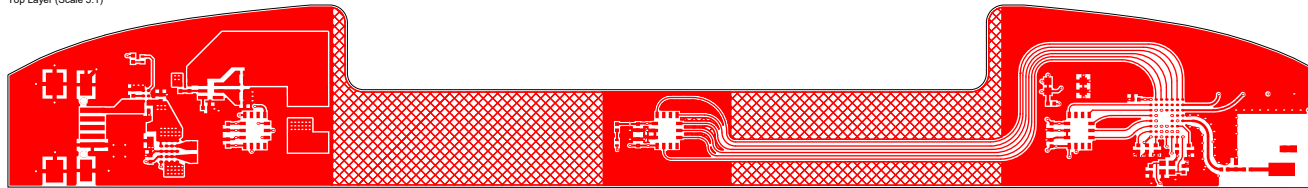
Realistic View



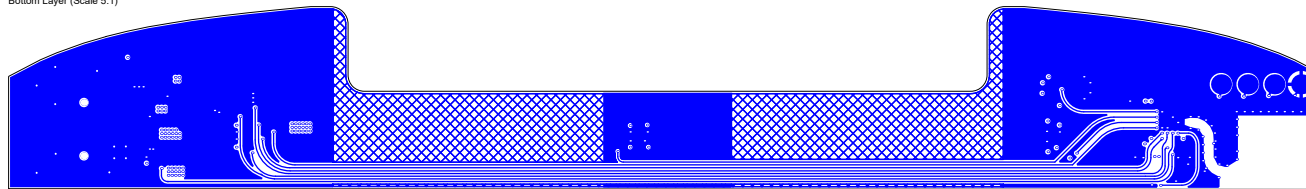
View from Top side (Scale 5:1)



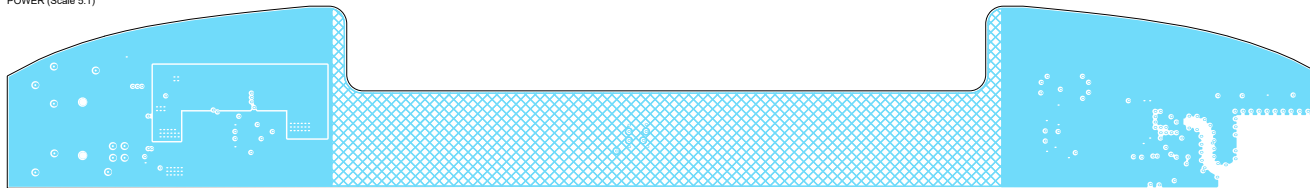
Top Layer (Scale 5:1)



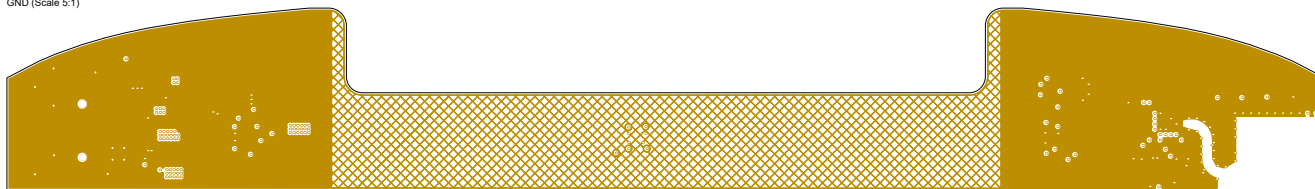
Bottom Layer (Scale 5:1)



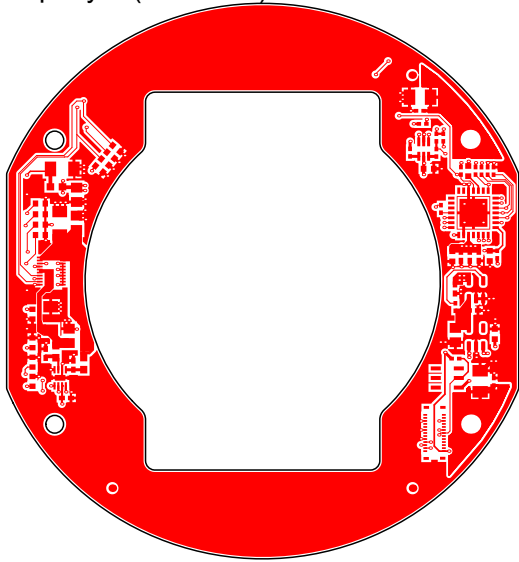
POWER (Scale 5:1)



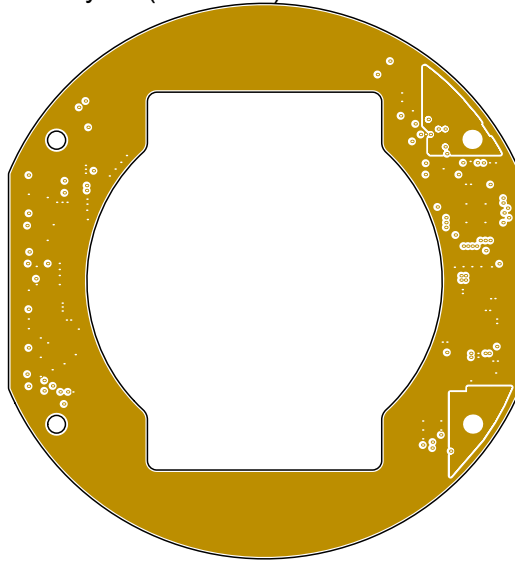
GND (Scale 5:1)



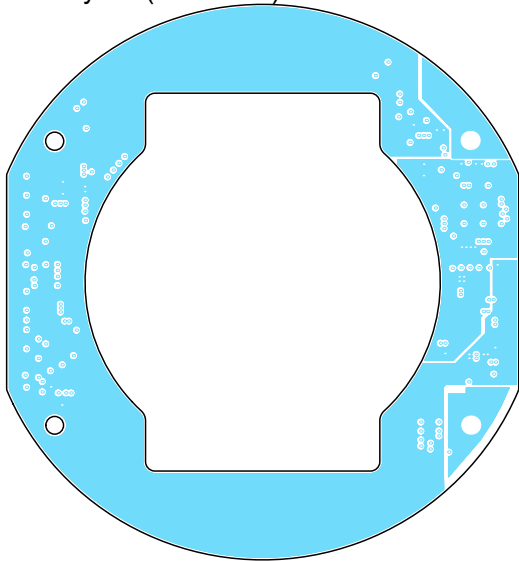
TopLayer (Scale 1:1)



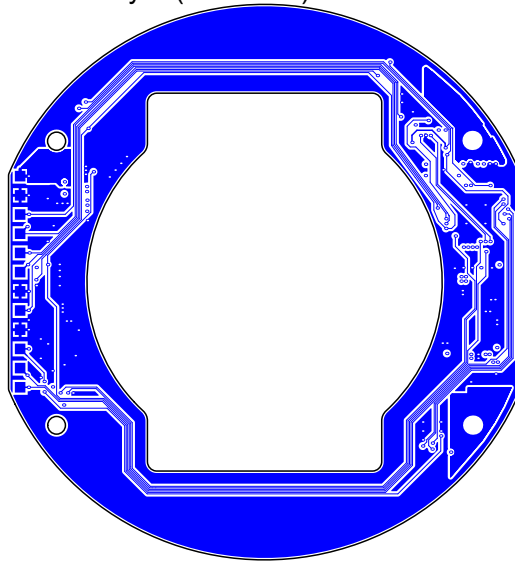
MidLayer1 (Scale 1:1)



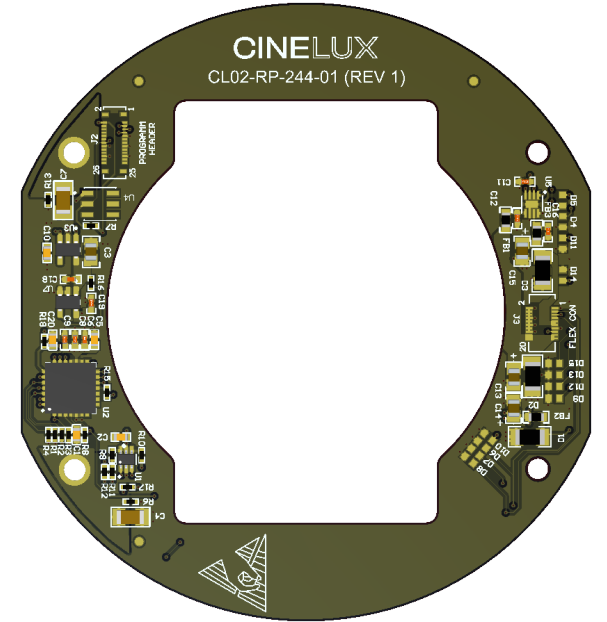
MidLayer2 (Scale 1:1)



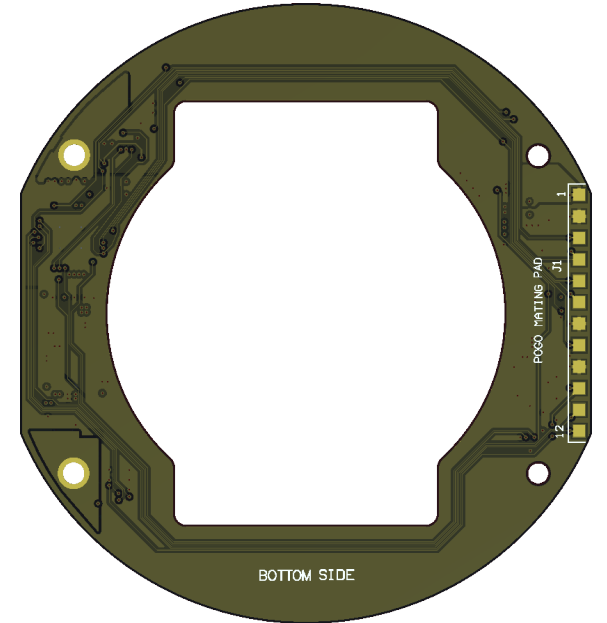
BottomLayer (Scale 1:1)



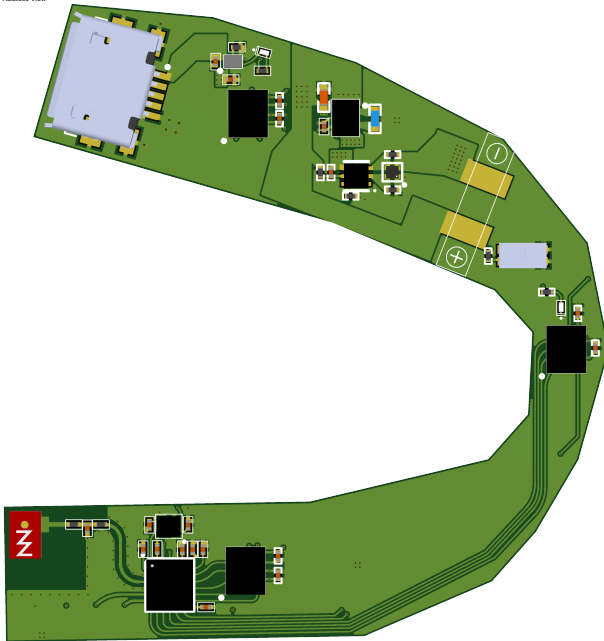
Realistic View



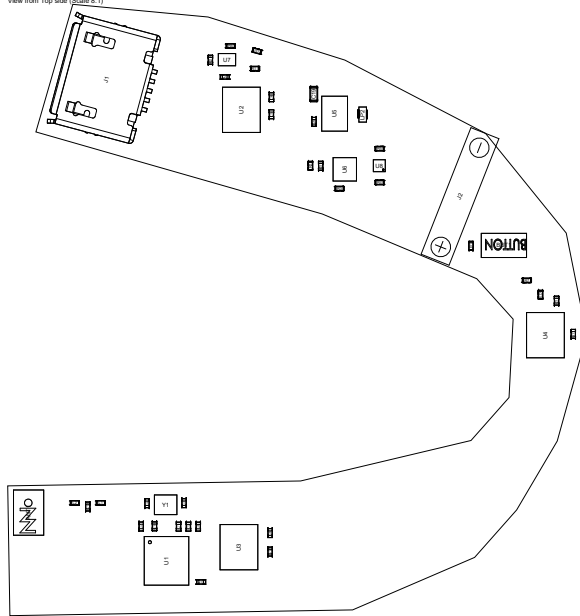
Realistic View



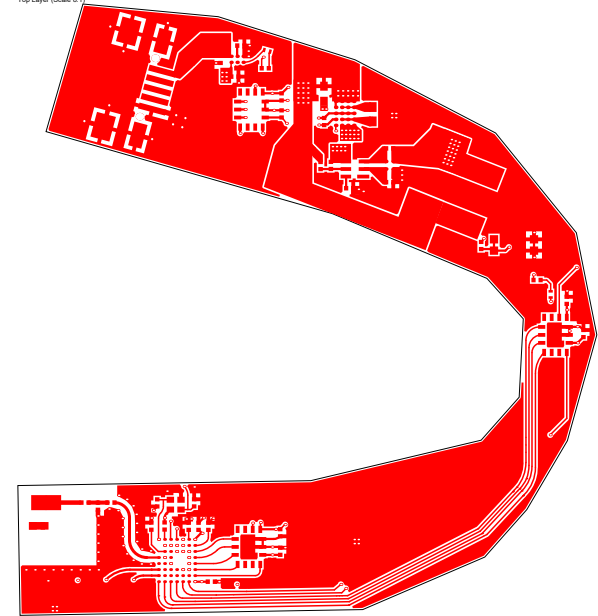
Realistic View



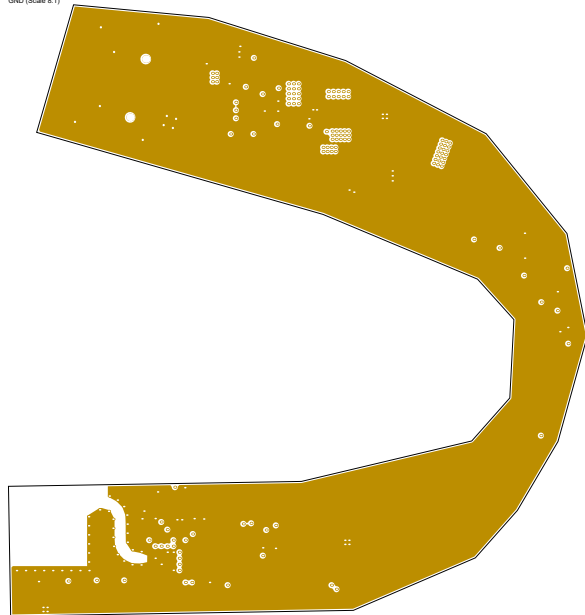
View from Top side (Scale 8:1)



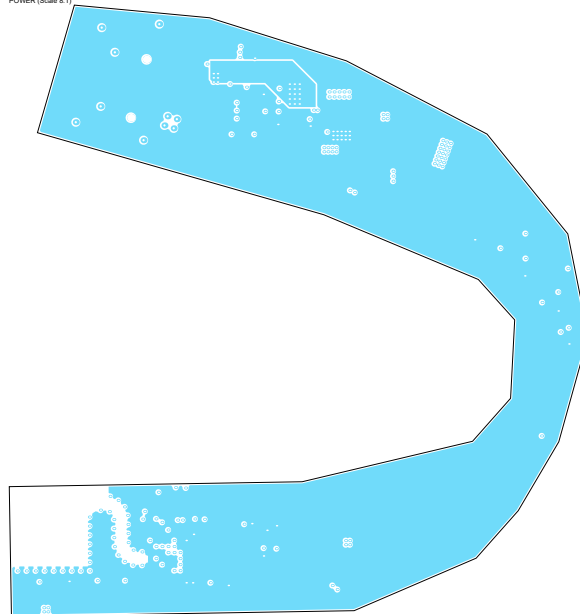
Top Layer (Scale 8:1)



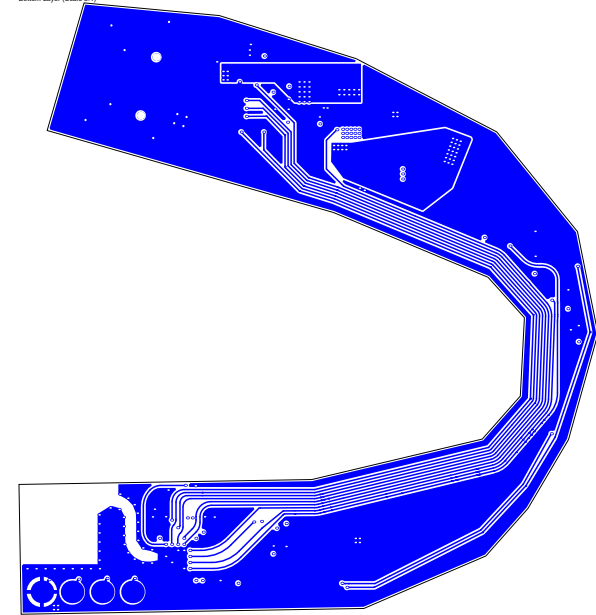
GND (Scale 8:1)



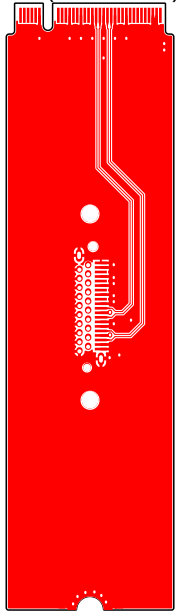
POWER (Scale 8:1)



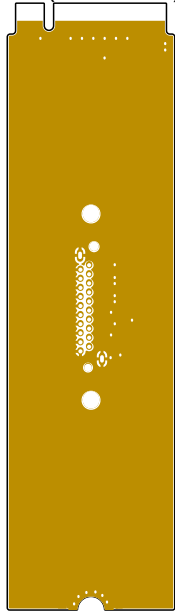
Bottom Layer (Scale 8:1)



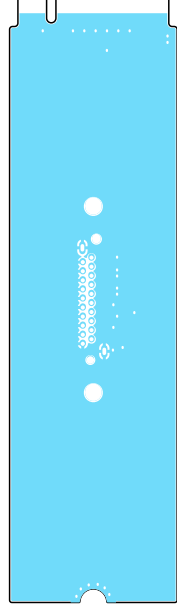
L1 (Scale 1:1)



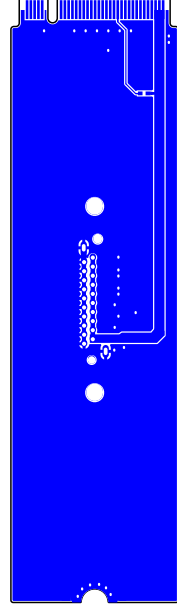
L2 (Scale 1:1)



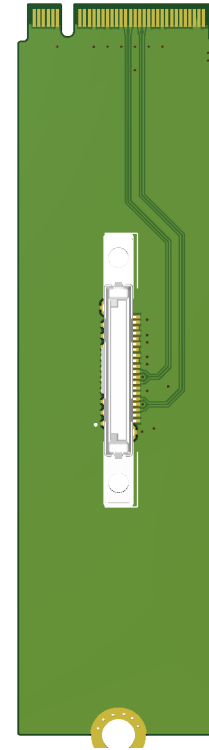
L3 (Scale 1:1)



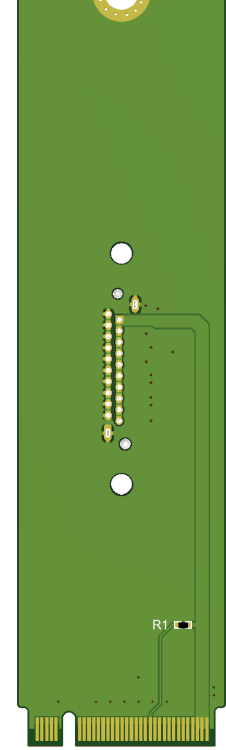
L4 (Scale 1:1)



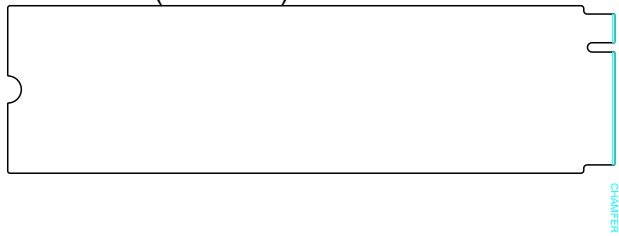
Realistic View



Realistic View



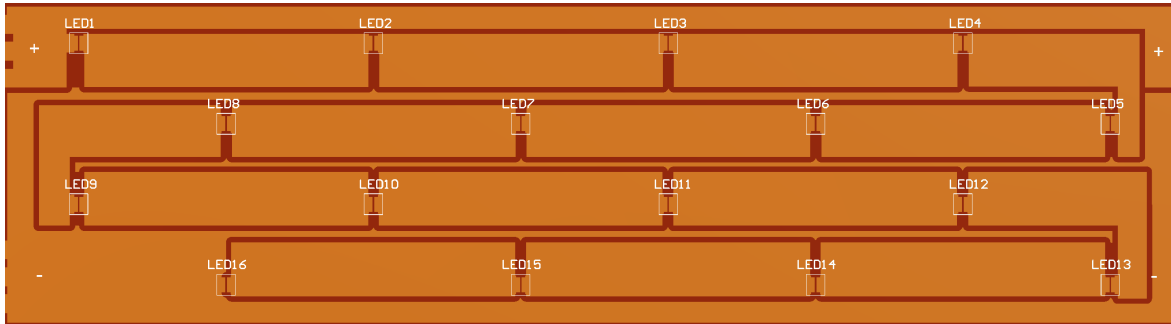
CHAMFER (Scale 1:1)



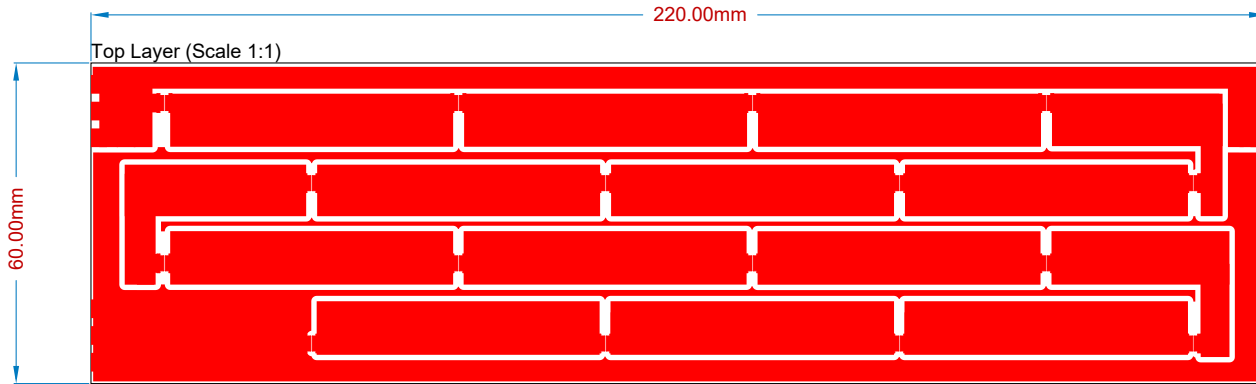
STACKUP

Layer	Material	Thickness (mil)	Thickness (mm)
L1	Outer Copper Weight1oz	1.38	0.0350
Prepreg	3313 RC57% 4.2mil	3.62	0.0920
L2	Inner Copper Weight	1.18	0.0300
Core	0.5mm 1/1OZ without copper	19.68	0.5000
L3	Inner Copper Weight	1.18	0.0300
Prepreg	3313 RC57% 4.2mil	3.62	0.0920
L4	Outer Copper Weight1oz	1.38	0.0350

Realistic View



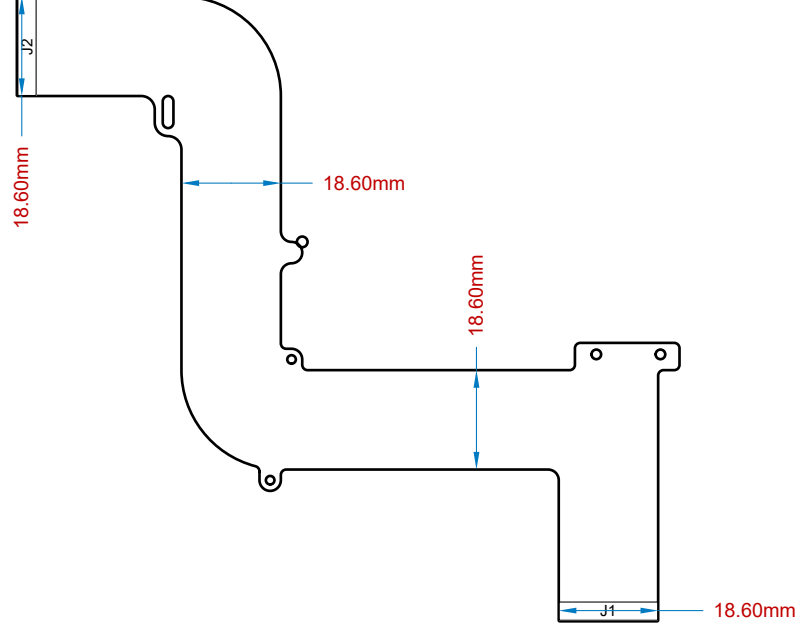
Top Layer (Scale 1:1)



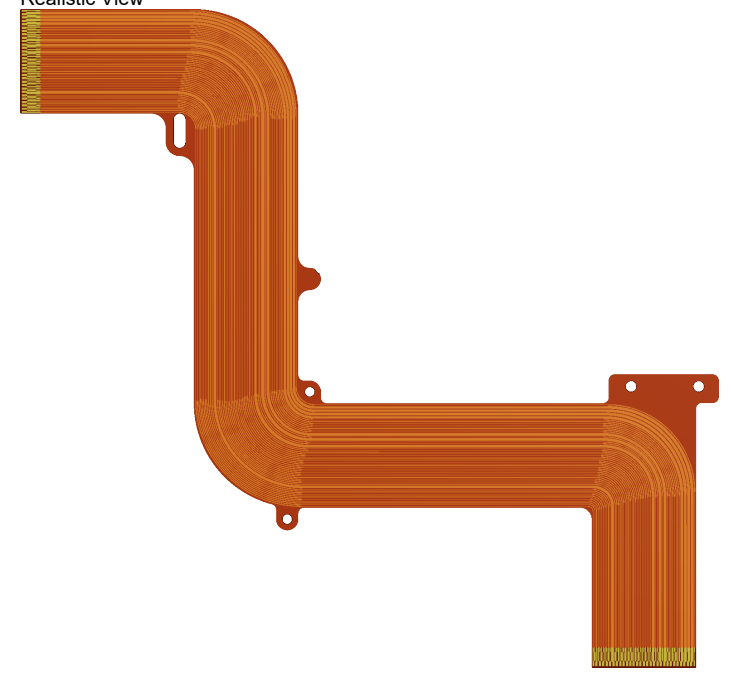
Layer Stack Legend

Material	Layer	Thickness	Dielectric	Material	Type	Gerber
Copper	Top Layer	0.01mm			Signal	GTL
		0.03mm	FR-4		Dielectric	
Total thickness: 0.05mm						

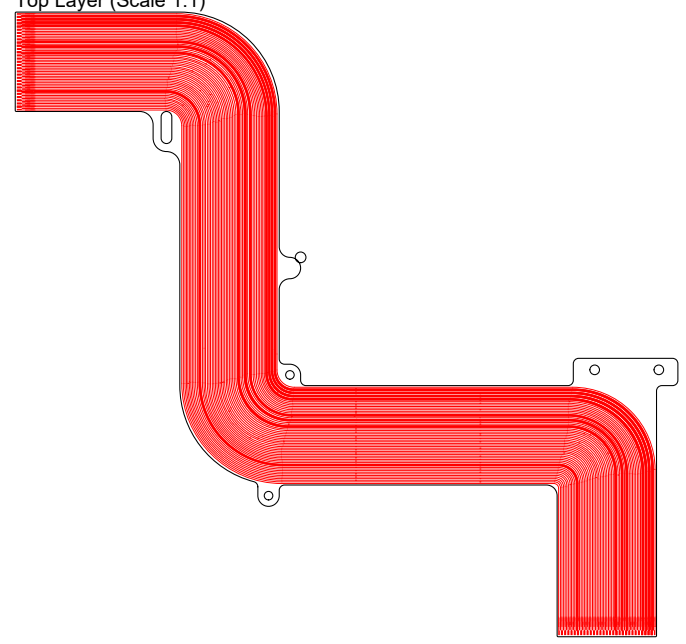
View from Top side (Scale 1:1)



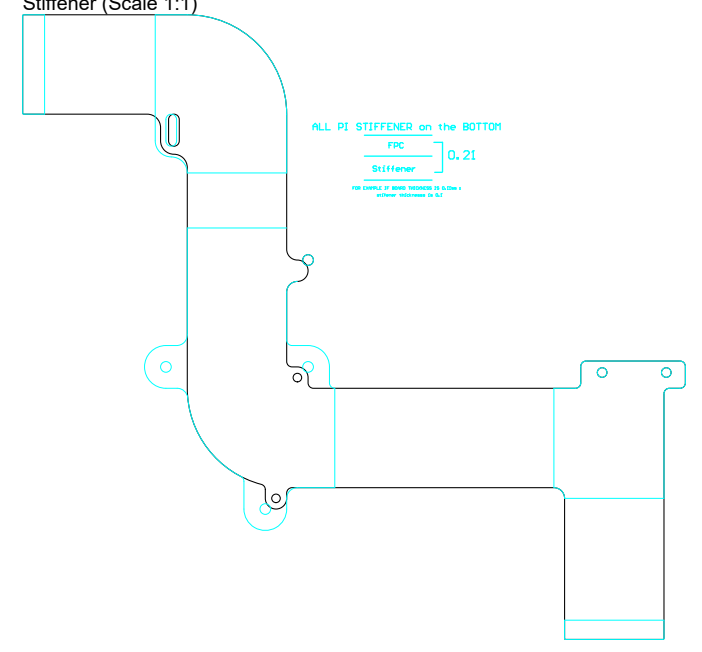
Realistic View



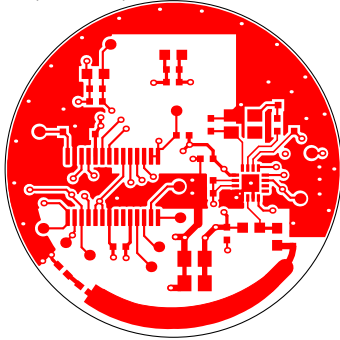
Top Layer (Scale 1:1)



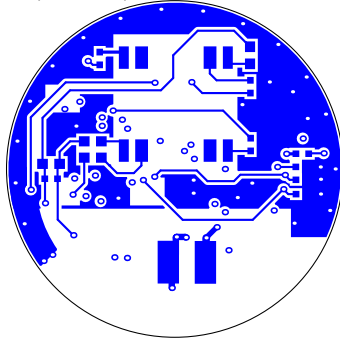
Stiffener (Scale 1:1)



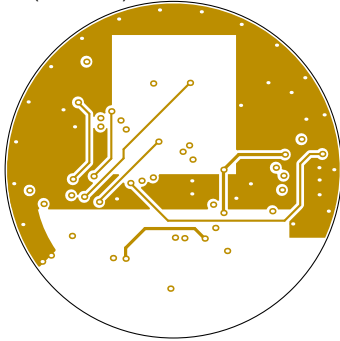
L1 (Scale 2:1)



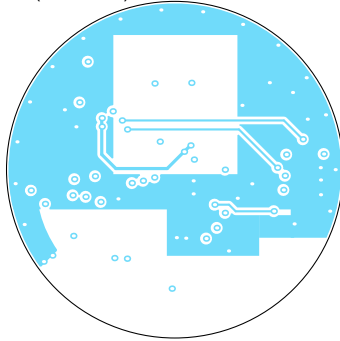
L4 (Scale 2:1)



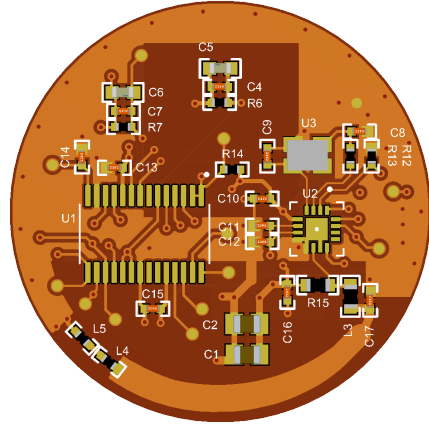
L2 (Scale 2:1)



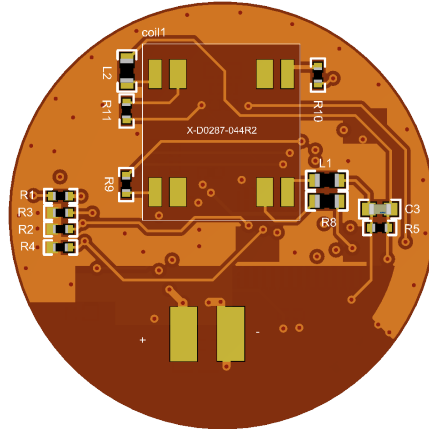
L3 (Scale 2:1)



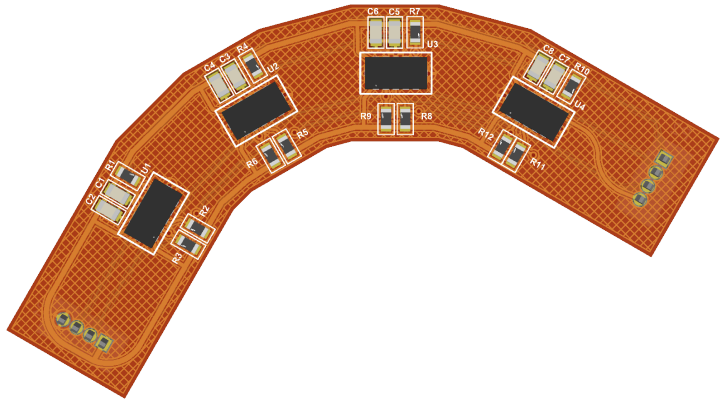
Realistic View



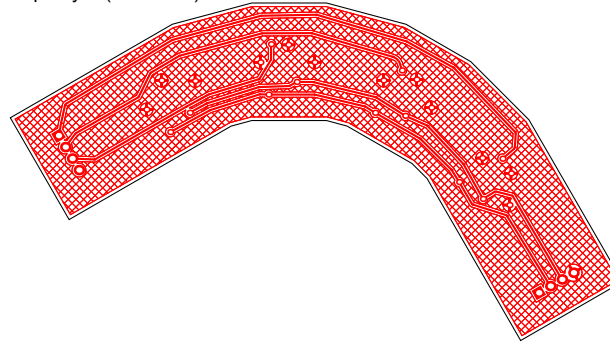
Realistic View



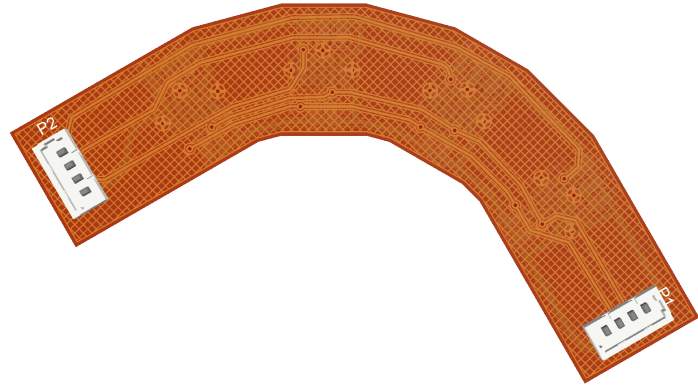
Realistic View



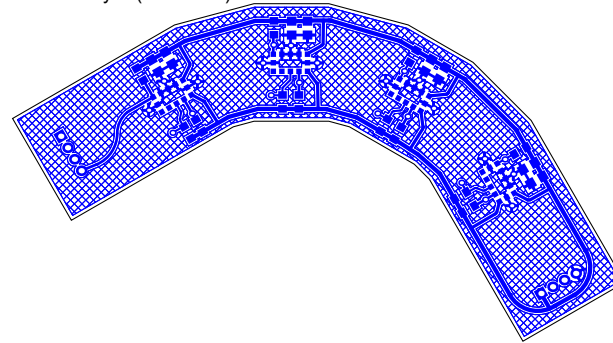
Top Layer (Scale 2:1)



Realistic View



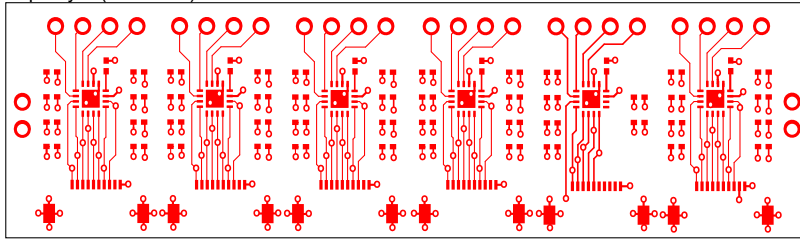
Bottom Layer (Scale 2:1)



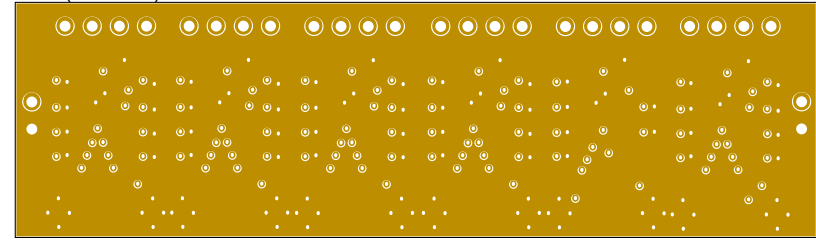
Layer Stack Legend

	Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Surface Material	Top Coverlay	0.01mm	FC-001	Solder Mask	GCT1
	Copper	Top Layer	0.01mm		Signal	GTL
			0.03mm	FR-4	Dielectric	
	Copper	Bottom Layer	0.01mm		Signal	GBL
	Surface Material	Bottom Coverlay	0.01mm	FC-001	Solder Mask	GCB1
Total thickness: 0.08mm						

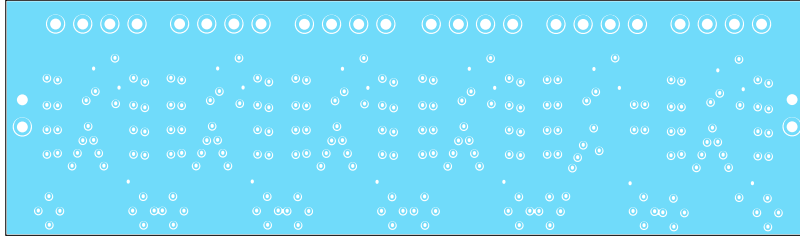
Top Layer (Scale 2:1)



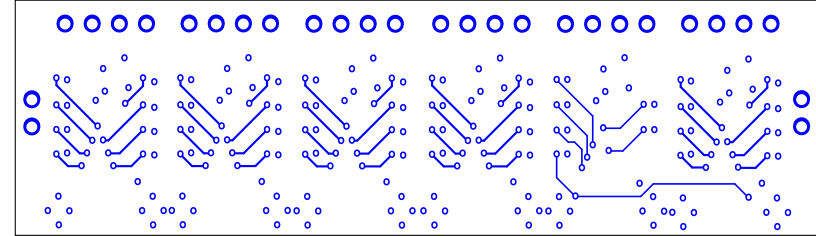
GND (Scale 2:1)



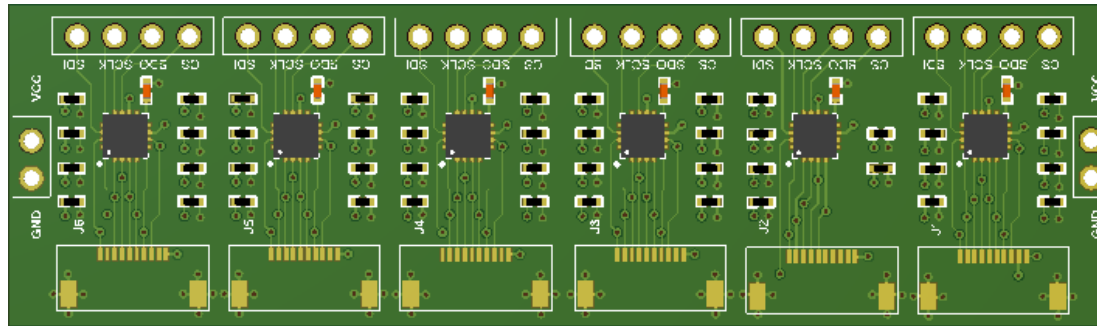
POWER (Scale 2:1)



Bottom Layer (Scale 2:1)



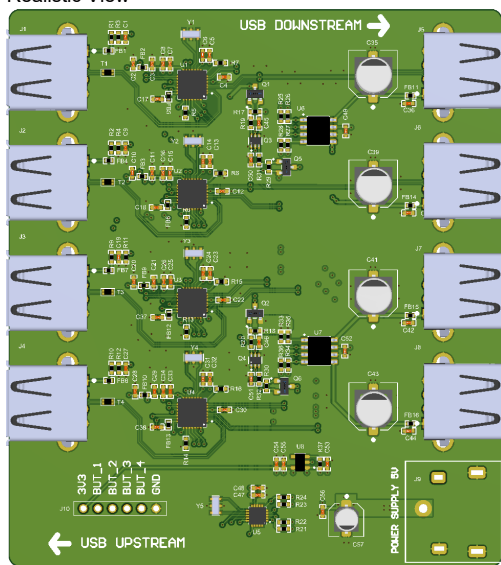
Realistic View



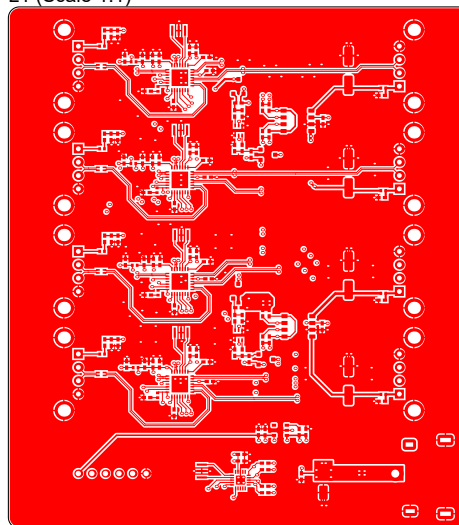
Layer Stack Legend

Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Top Overlay			Legend	GTO
Surface Material	Top Solder	0.01mm	Solder Resist	Solder Mask	GTS
Copper	Top Layer	0.04mm		Signal	GTL
Prepreg		0.07mm	PP-006	Dielectric	
CF-004	GND	0.04mm		Signal	G1
		0.32mm	FR-4	Dielectric	
CF-004	POWER	0.04mm		Signal	G2
Prepreg		0.07mm	PP-006	Dielectric	
Copper	Bottom Layer	0.04mm		Signal	GBL
Surface Material	Bottom Solder	0.01mm	Solder Resist	Solder Mask	GBS
	Bottom Overlay			Legend	GBO
Total thickness: 0.62mm					

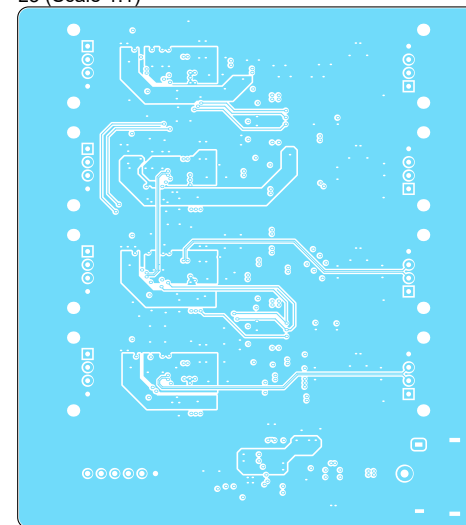
Realistic View



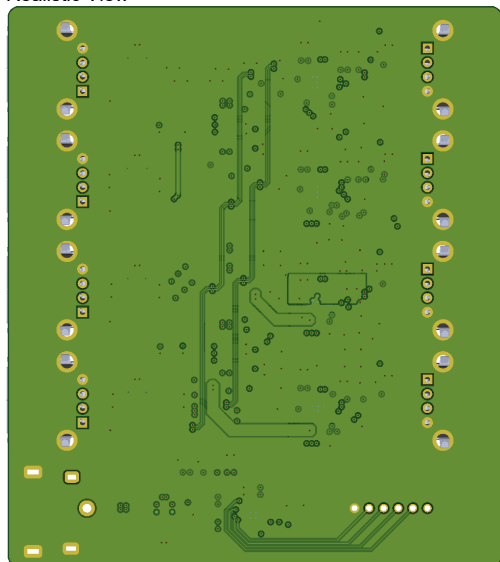
L1 (Scale 1:1)



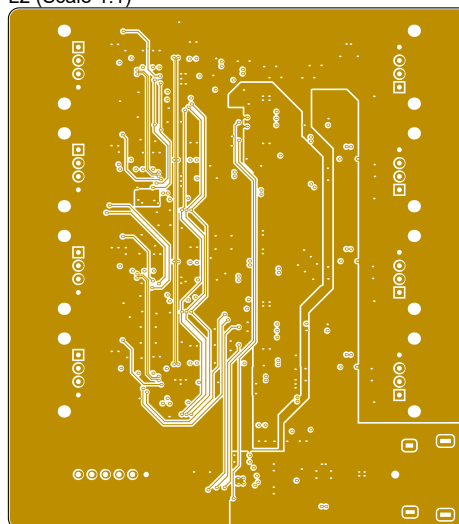
L3 (Scale 1:1)



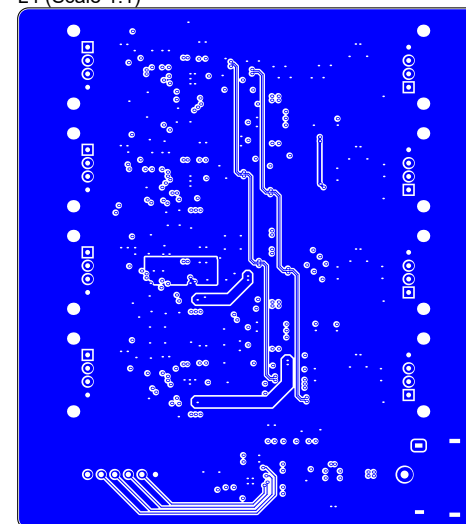
Realistic View



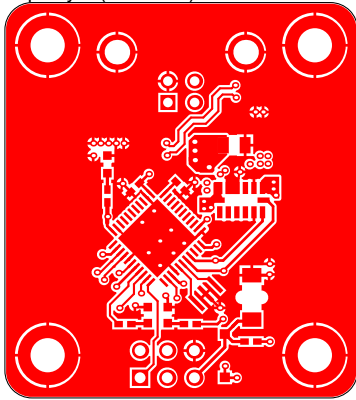
L2 (Scale 1:1)



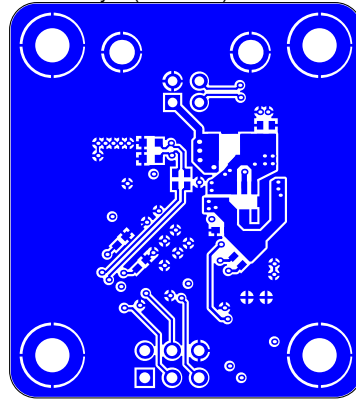
L4 (Scale 1:1)



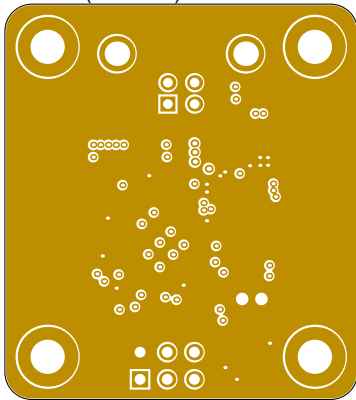
Top Layer (Scale 2:1)



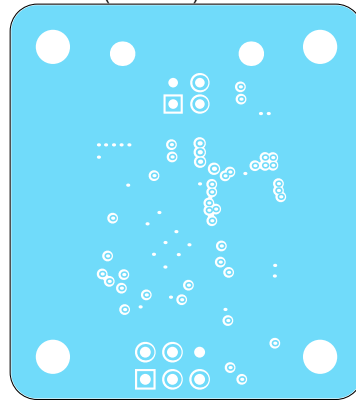
Bottom Layer (Scale 2:1)



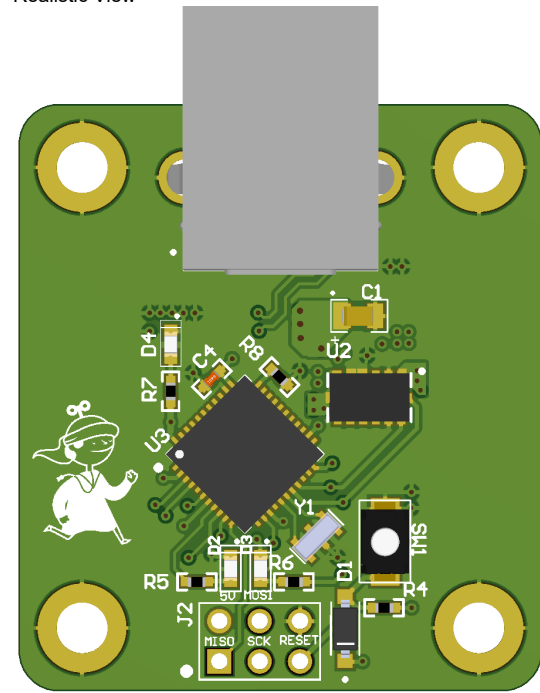
POWER (Scale 2:1)



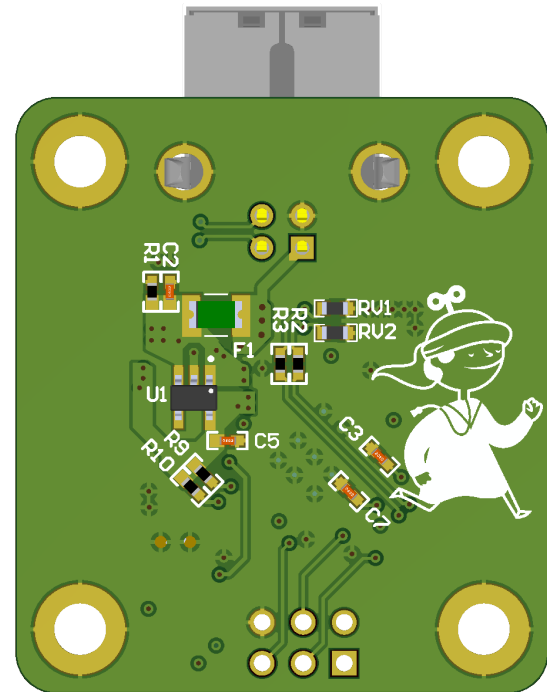
GROUND (Scale 2:1)



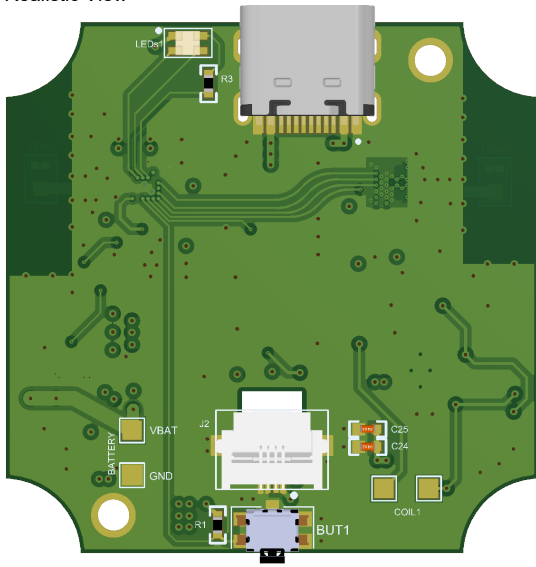
Realistic View



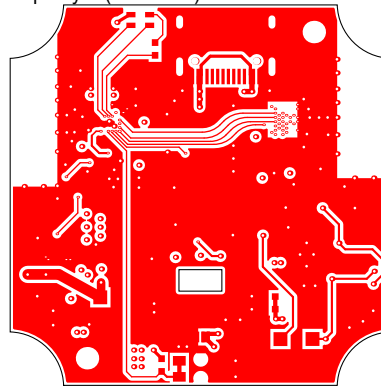
Realistic View



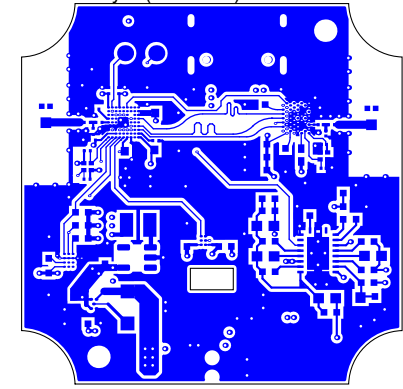
Realistic View



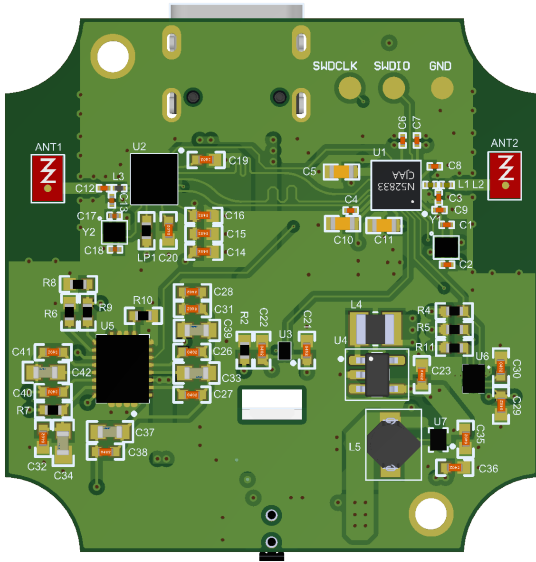
Top Layer (Scale 2:1)



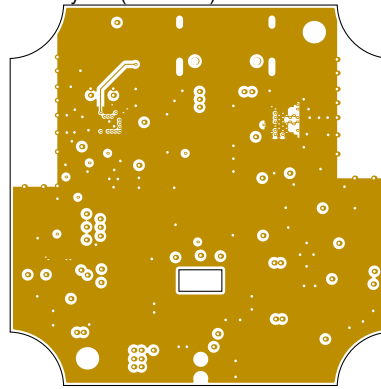
Bottom Layer (Scale 2:1)



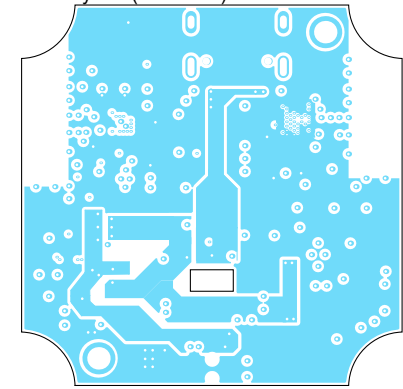
Realistic View



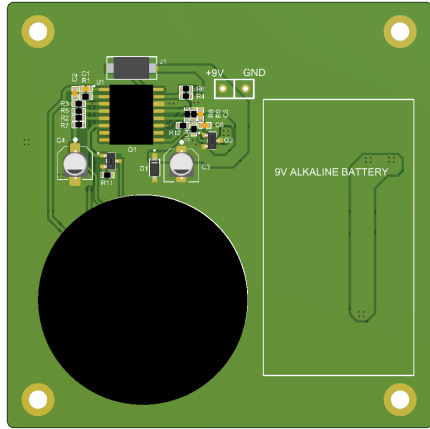
Mid-Layer 1 (Scale 2:1)



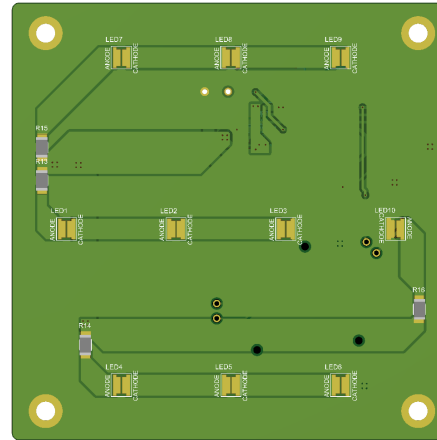
Mid-Layer 2 (Scale 2:1)



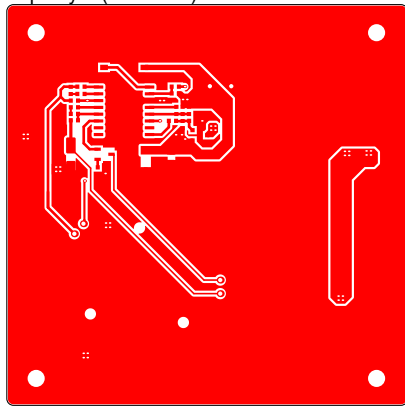
Realistic View



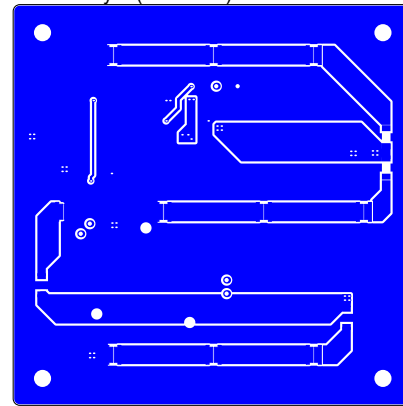
Realistic View



Top Layer (Scale 1:1)



Bottom Layer (Scale 1:1)

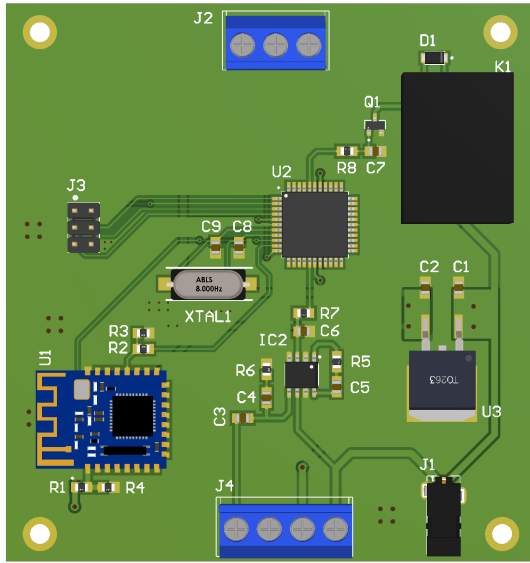


Layer Stack Legend

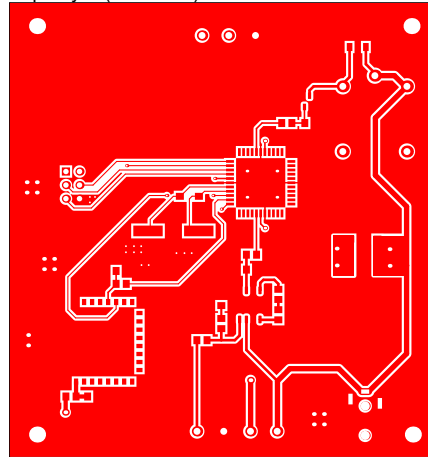
Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Top Overlay			Legend	GTO
Surface Material	Top Solder	0.01mm	Solder Resist	Solder Mask	GTS
Copper	Top Layer	0.04mm		Signal	GTL
		0.32mm	FR-4	Dielectric	
Copper	Bottom Layer	0.04mm		Signal	GBL
Surface Material	Bottom Solder	0.01mm	Solder Resist	Solder Mask	GBS
	Bottom Overlay			Legend	GBO

Total thickness: 0.41mm

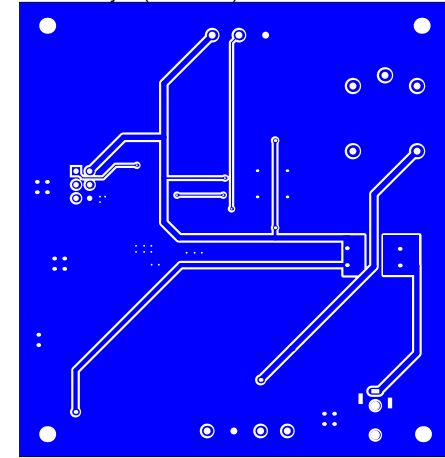
Realistic View



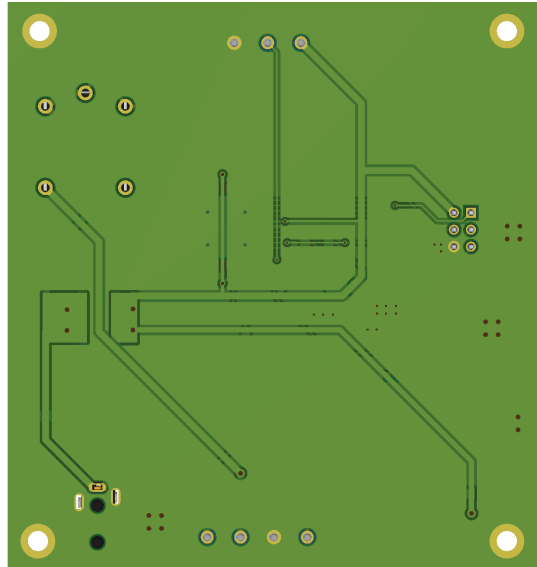
Top Layer (Scale 1:1)



Bottom Layer (Scale 1:1)



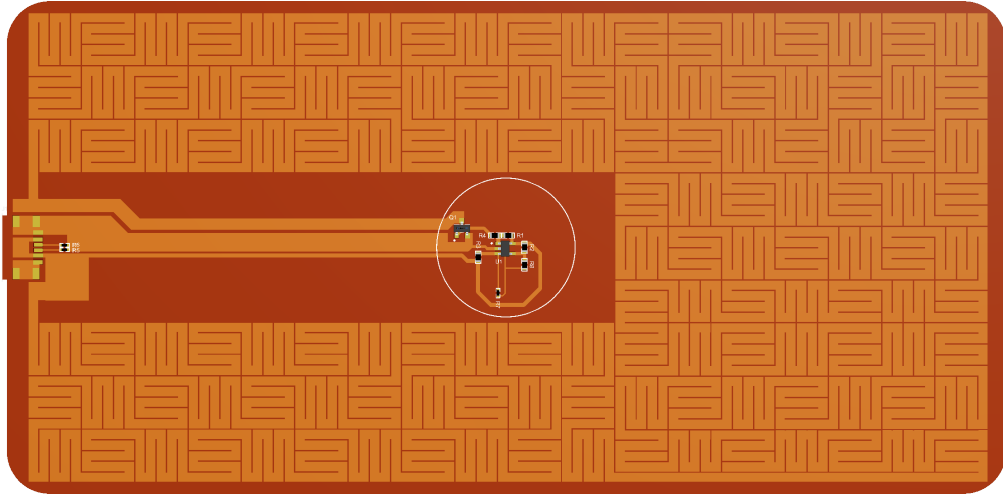
Realistic View



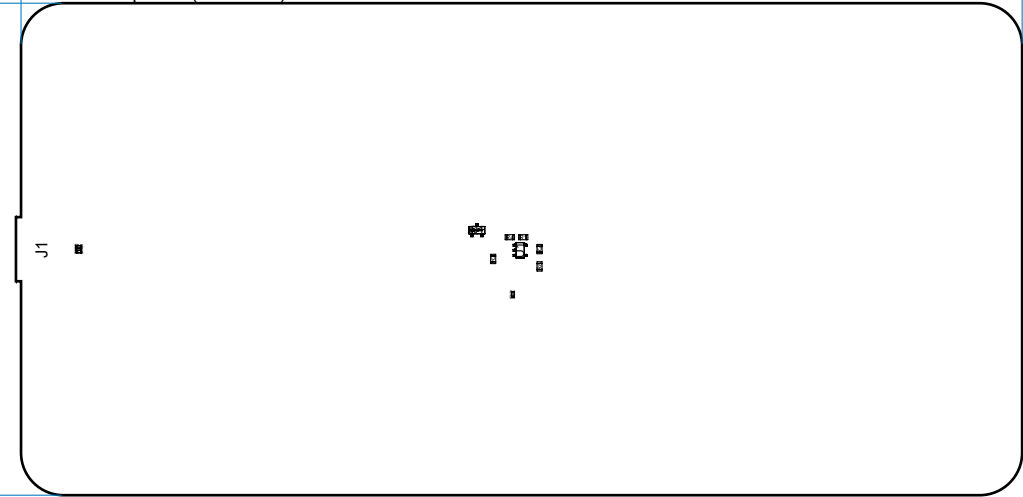
Layer Stack Legend

Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Top Overlay			Legend	GTO
Surface Material	Top Solder	0.01mm	Solder Resist	Solder Mask	GTS
Copper	Top Layer	0.04mm		Signal	GTL
		0.32mm	FR-4	Dielectric	
Copper	Bottom Layer	0.04mm		Signal	GBL
Surface Material	Bottom Solder	0.01mm	Solder Resist	Solder Mask	GBS
	Bottom Overlay			Legend	GBO
Total thickness: 0.41mm					

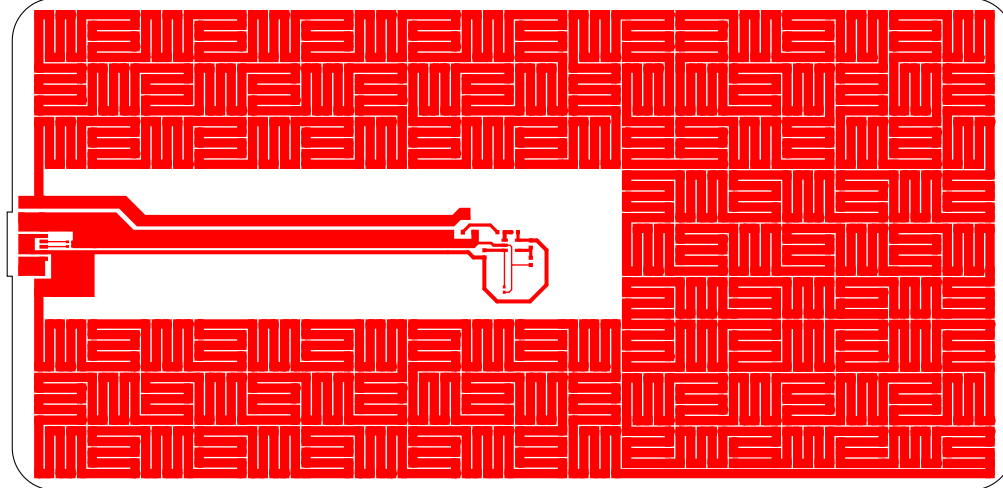
Realistic View

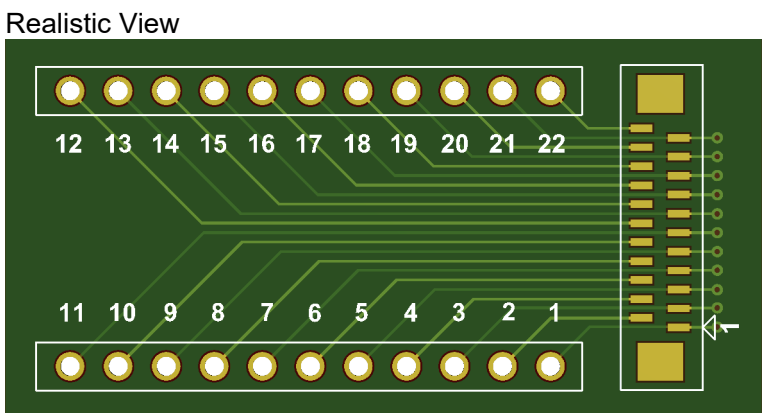
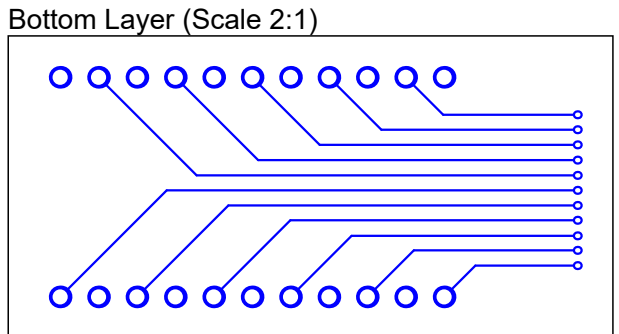
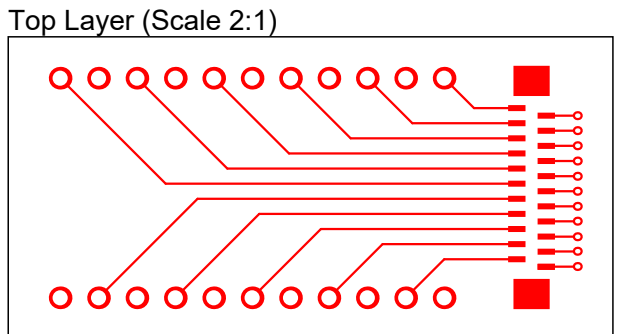
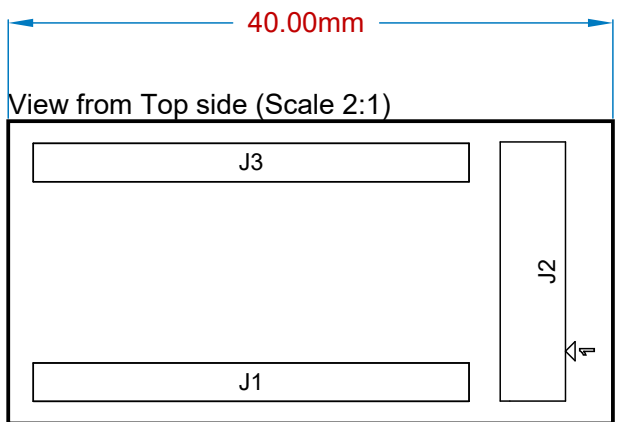


View from Top side (Scale 1:1)

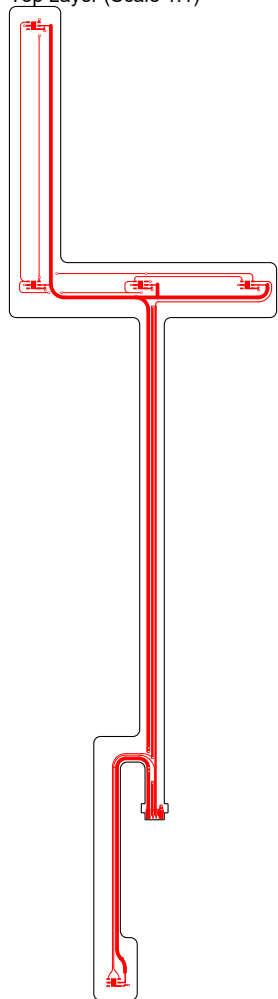


Top Layer (Scale 1:1)

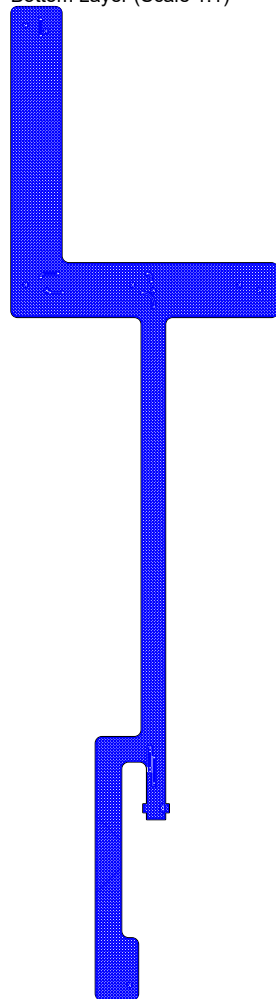




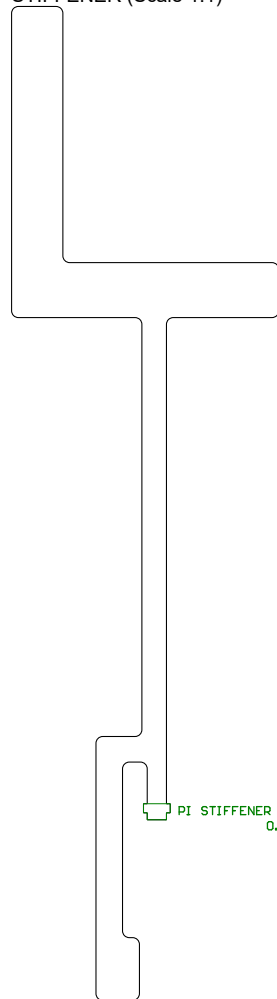
Top Layer (Scale 1:1)



Bottom Layer (Scale 1:1)

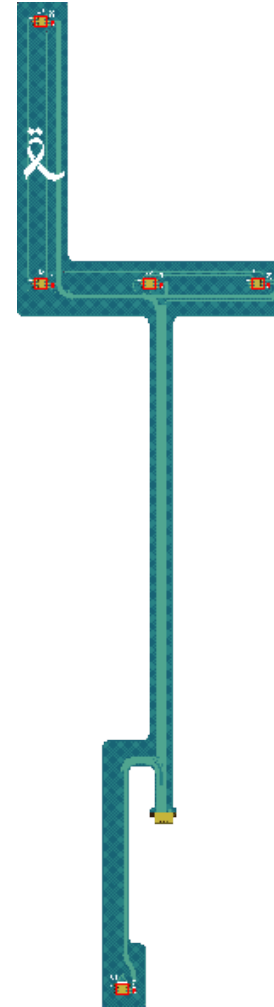


STIFFENER (Scale 1:1)

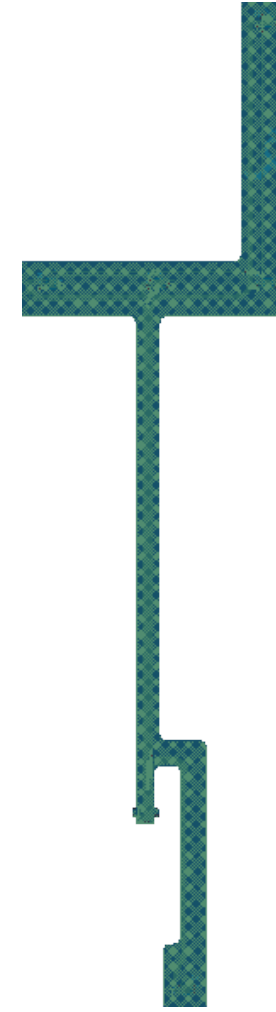


PI STIFFENER on the BOTTOM
0.1 mm

Realistic View



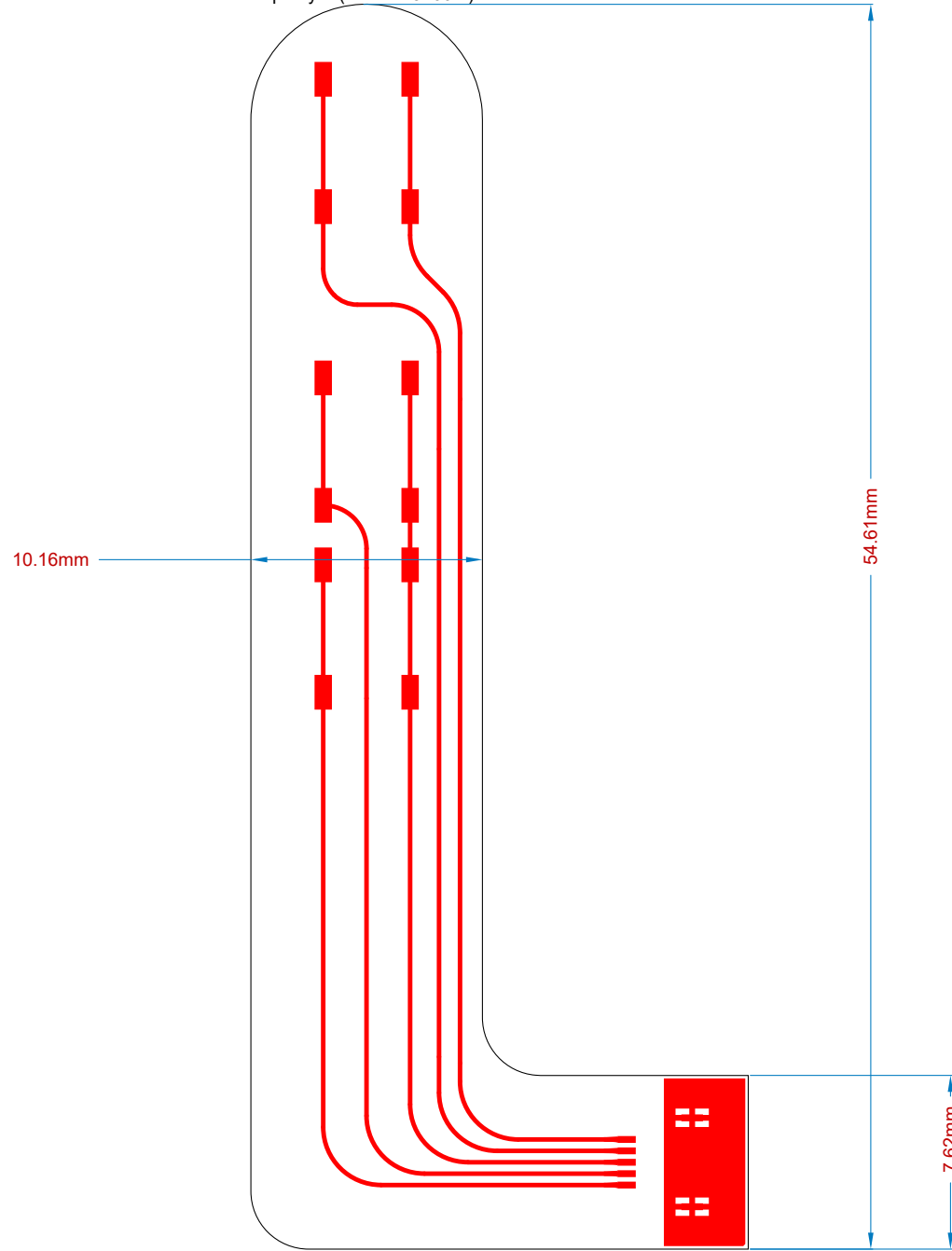
Realistic View



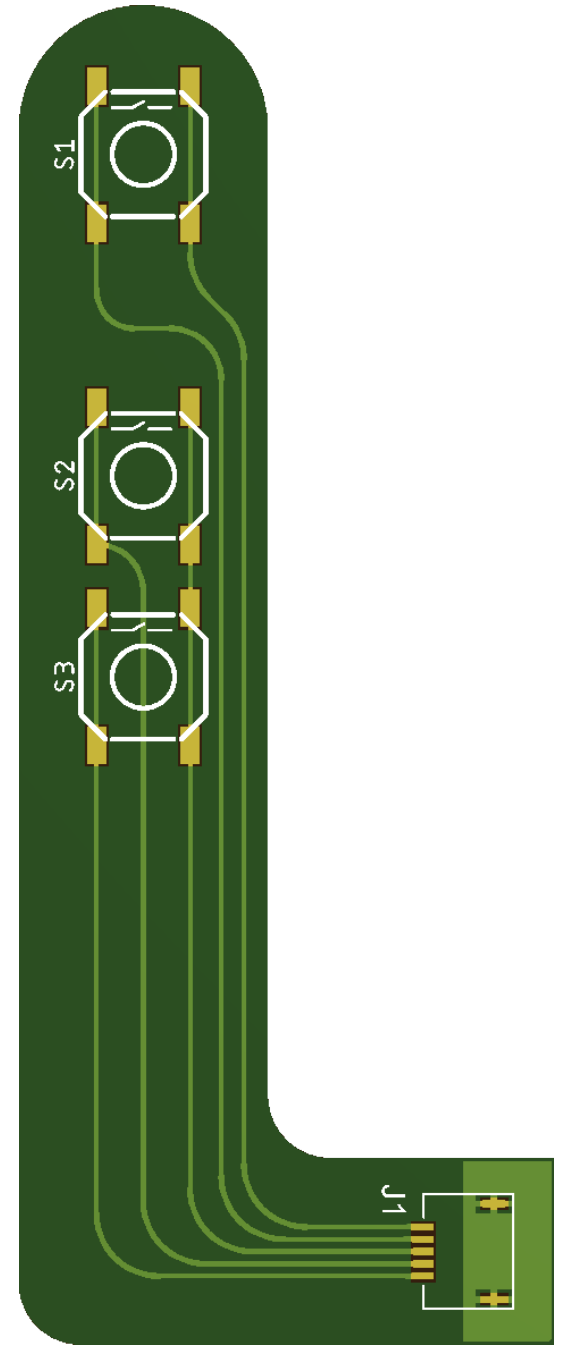
Layer Stack Legend

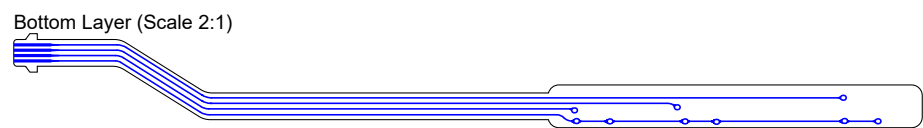
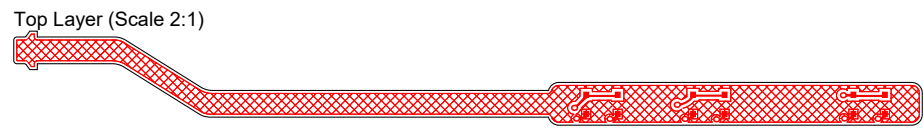
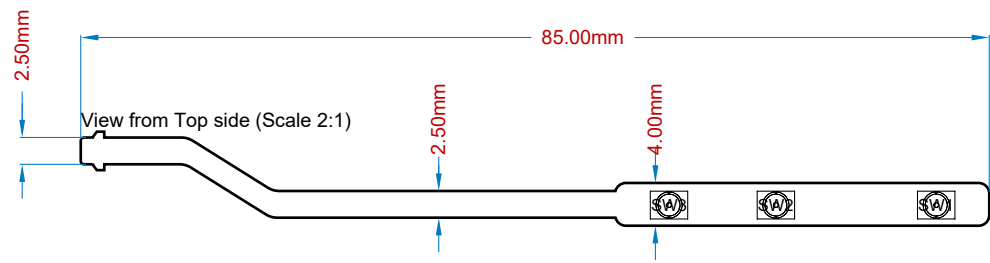
Material	Layer	Thickness	Dielectric Material	Type	Gerber
Surface Material	Top Coverlay	0.01mm	FC-001	Solder Mask	GCT1
Copper	Top Layer	0.01mm		Signal	GTL
		0.03mm	FR-4	Dielectric	
Copper	Bottom Layer	0.01mm		Signal	GBL
Surface Material	Bottom Coverlay	0.01mm	FC-001	Solder Mask	GCB1
Total thickness: 0.08mm					

Top Layer (Scale 4.5766:1)

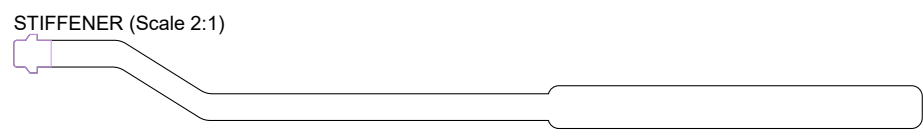
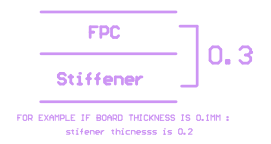


Realistic View

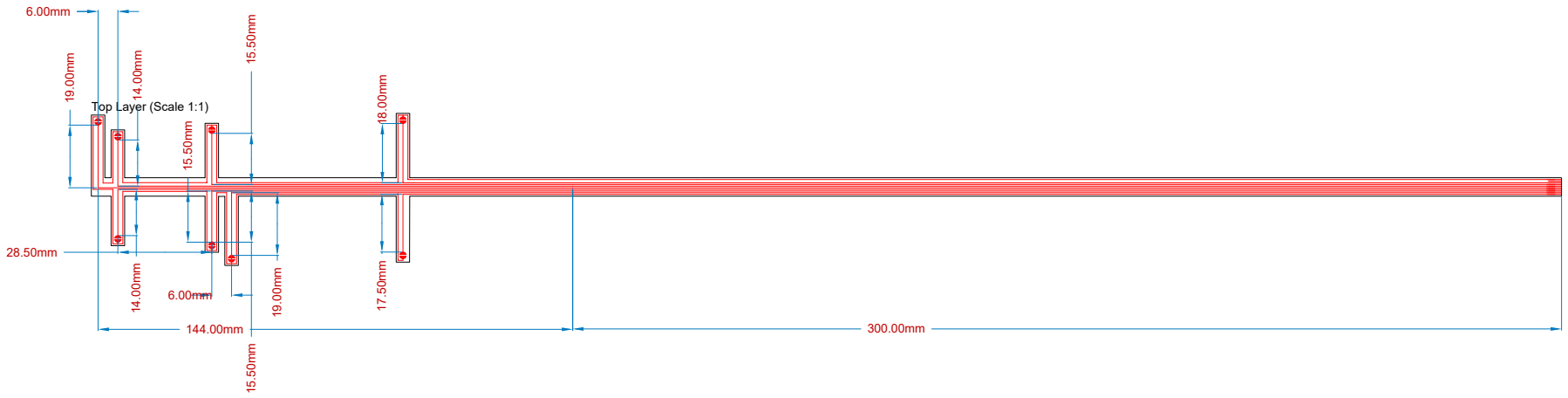




PI STIFFENER on the TOP

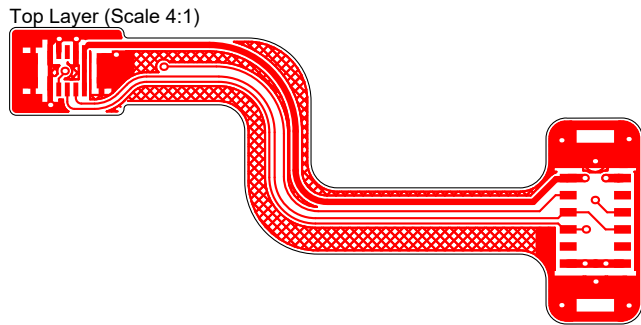
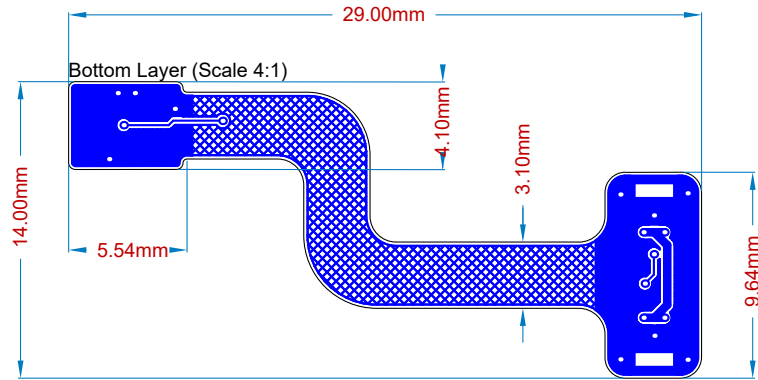


INDEX_RING

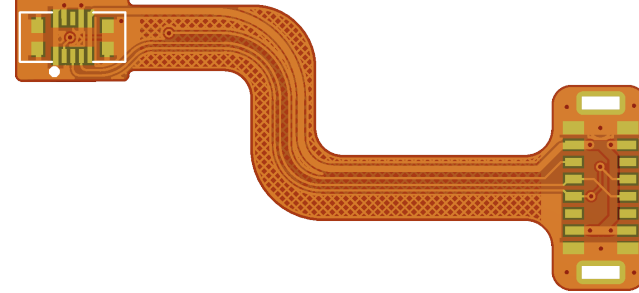


Realistic View



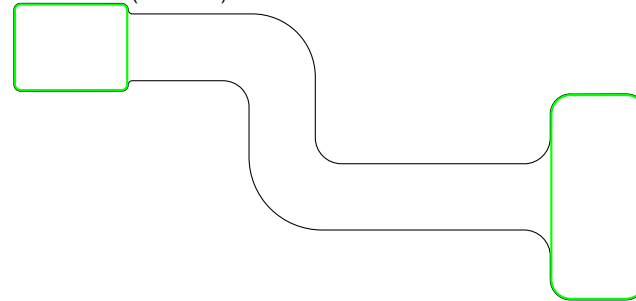


Realistic View

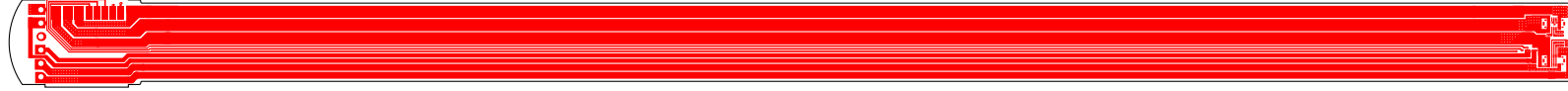


Stainless Steel Stiffener 0.2 mm

STIFENNER (Scale 4:1)



Top Layer (Scale 1:1)

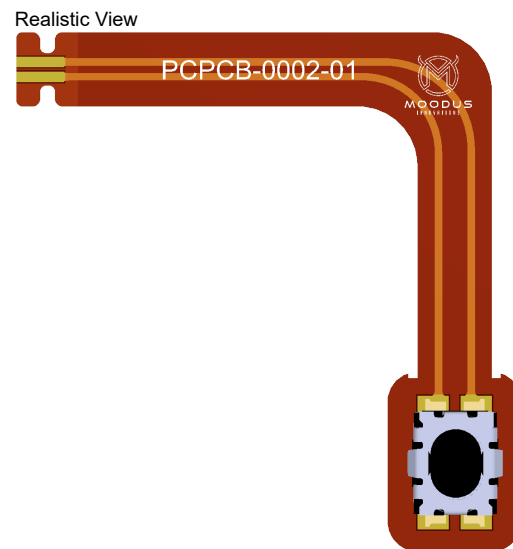
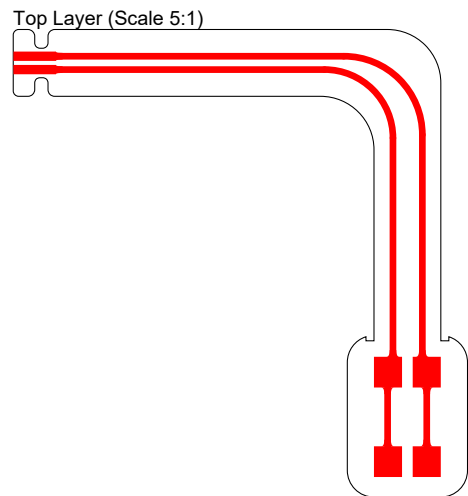
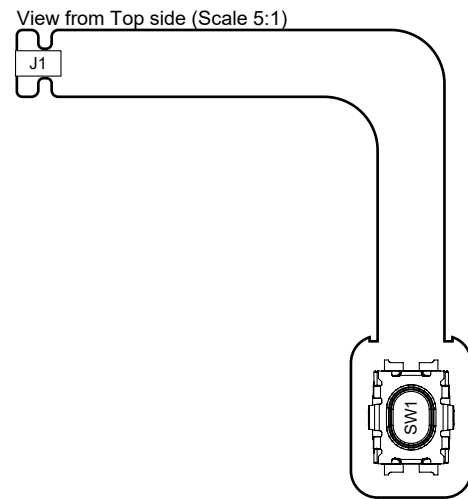
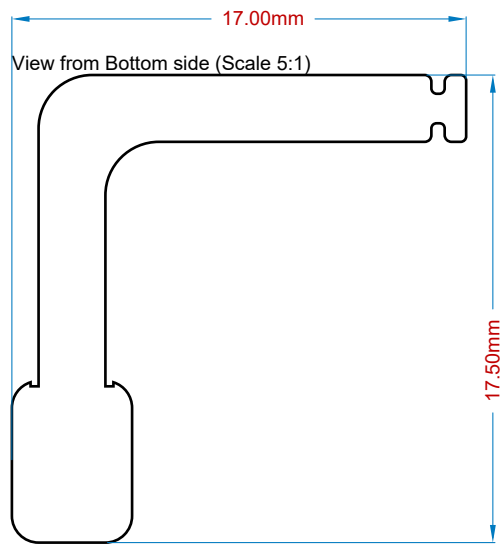


Bottom Layer (Scale 1:1)



Realistic View





A

B

C

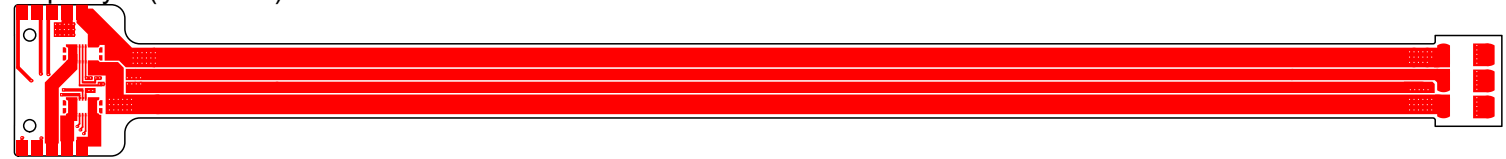
D

E

1

1

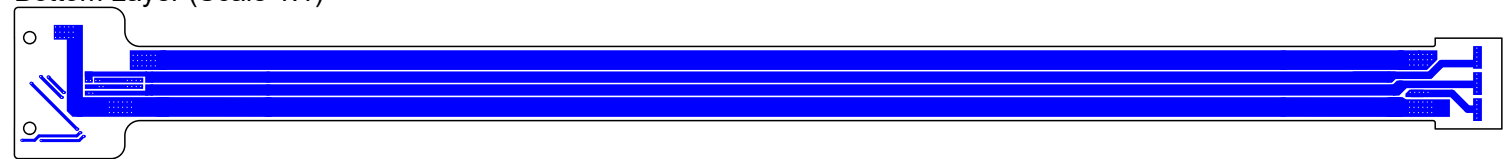
Top Layer (Scale 1:1)



2

2

Bottom Layer (Scale 1:1)



3

3

Realistic View



4

4

A

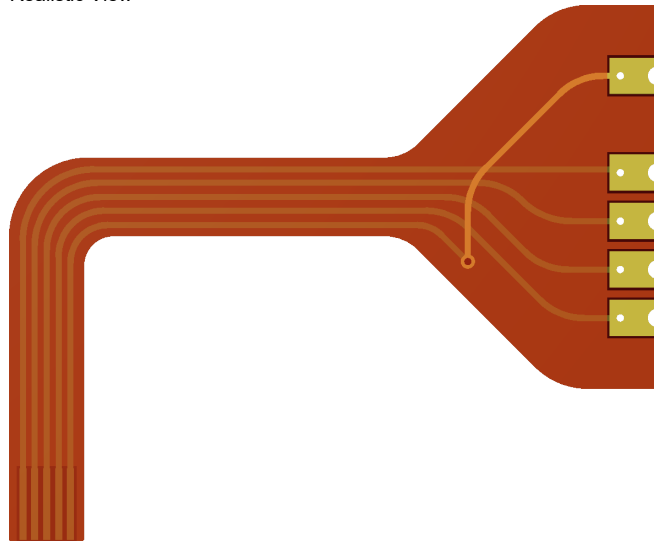
B

C

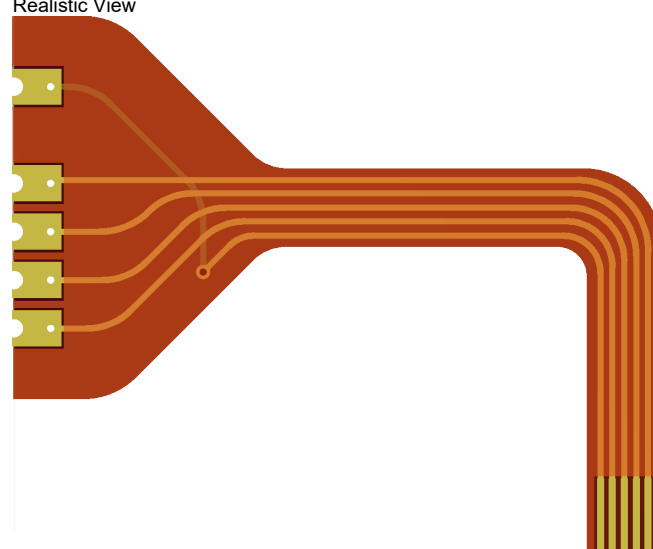
D

E

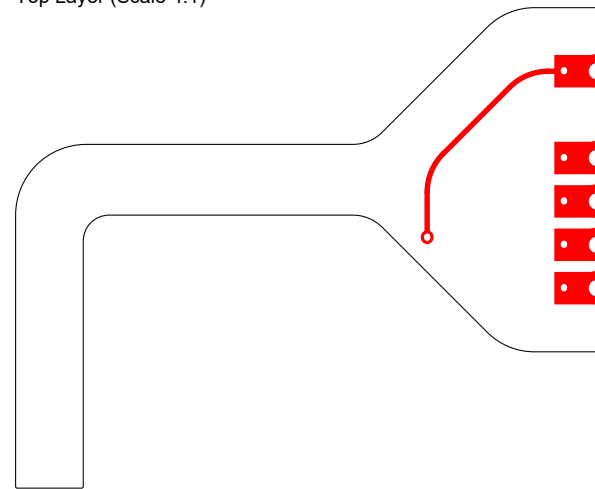
Realistic View



Realistic View

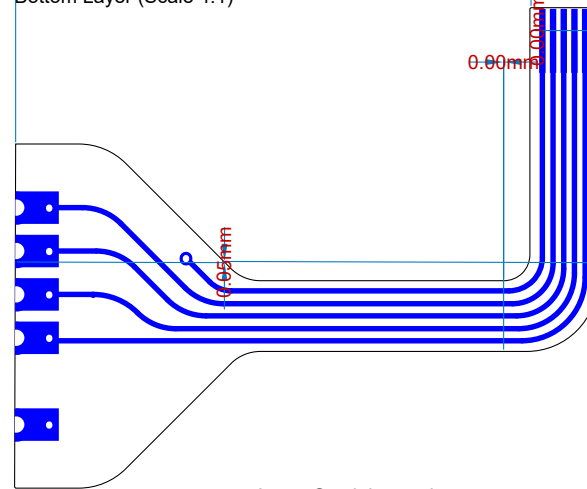


Top Layer (Scale 4:1)



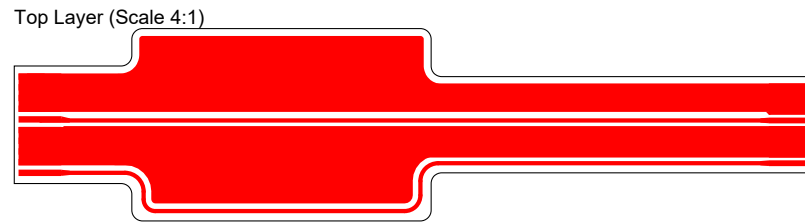
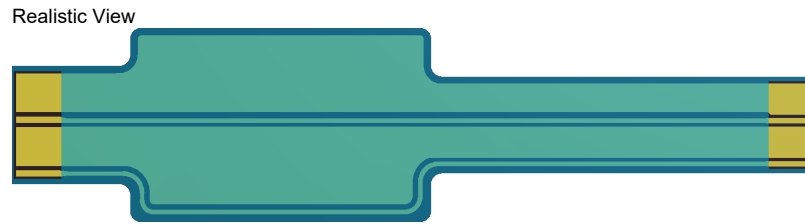
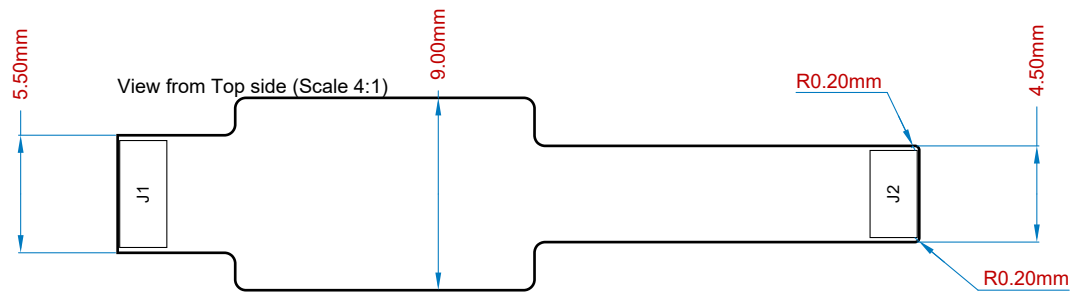
24.11mm

Bottom Layer (Scale 4:1)

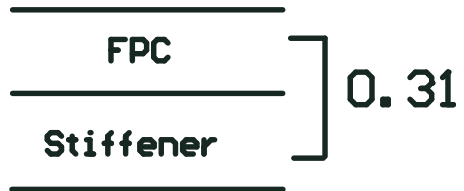


Layer Stack Legend

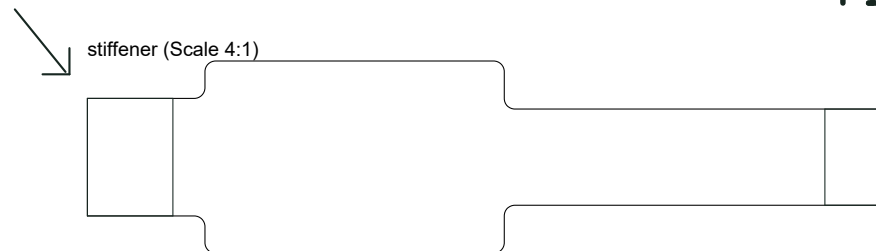
	Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Surface Material	Top Coverlay	0.01mm	FC-001	Solder Mask	GCT1
	Copper	Top Layer	0.01mm		Signal	GTL
			0.03mm	FR-4	Dielectric	
	Copper	Bottom Layer	0.01mm		Signal	GBL
	Surface Material	Bottom Coverlay	0.01mm	FC-001	Solder Mask	GCB1
Total thickness: 0.08mm						



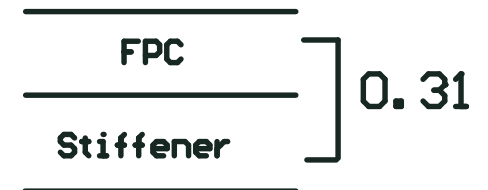
PI STIFFENER on the BOTTOM



FOR EXAMPLE IF BOARD THICKNESS IS 0.11mm :
stifener thicnesss is 0.2

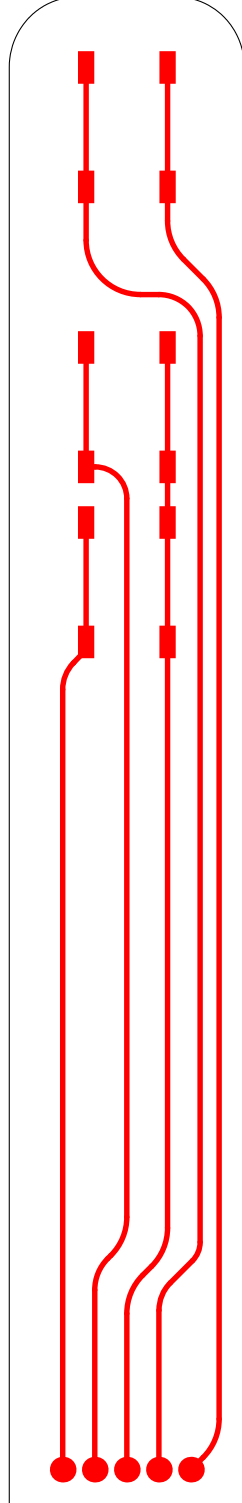


PI STIFFENER on the BOTTOM

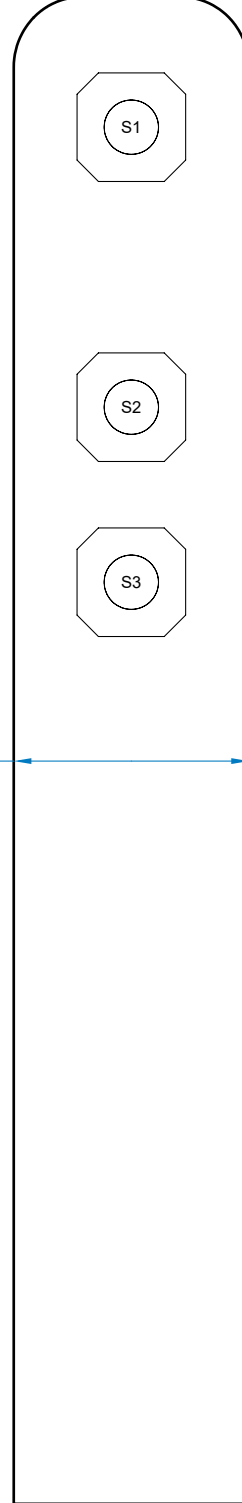


FOR EXAMPLE IF BOARD THICKNESS IS 0.11mm :
stifener thicnesss is 0.2

Top Layer (Scale 4:1)



View from Top side (Scale 4:1)



Realistic View



11.00mm

70.50mm

A

B

C

D

E

1

1

2

2

3

3

4

4

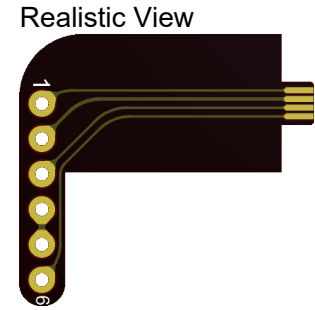
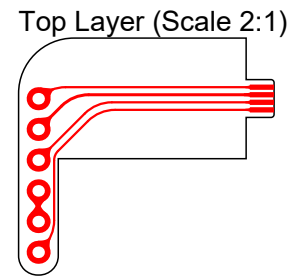
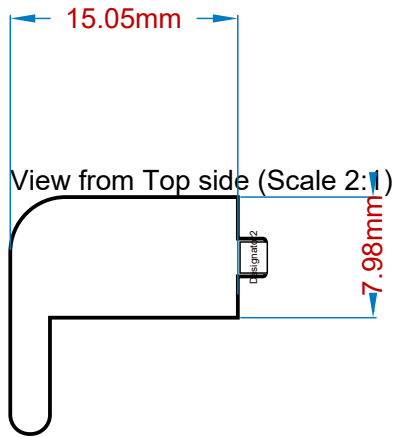
A

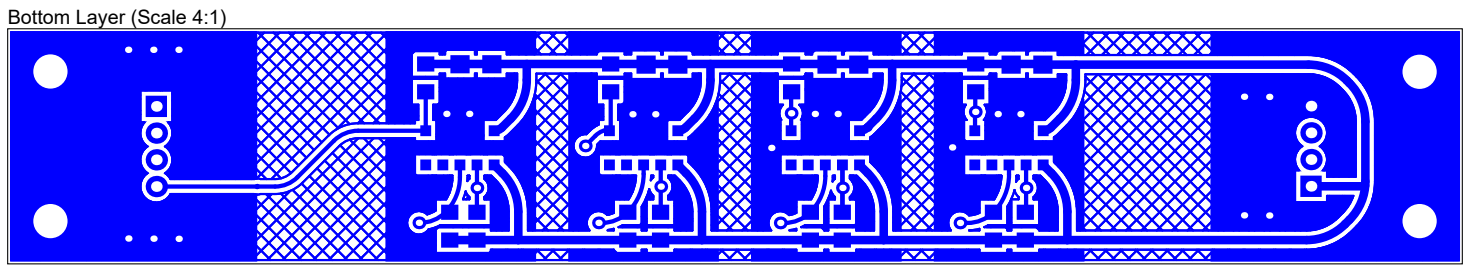
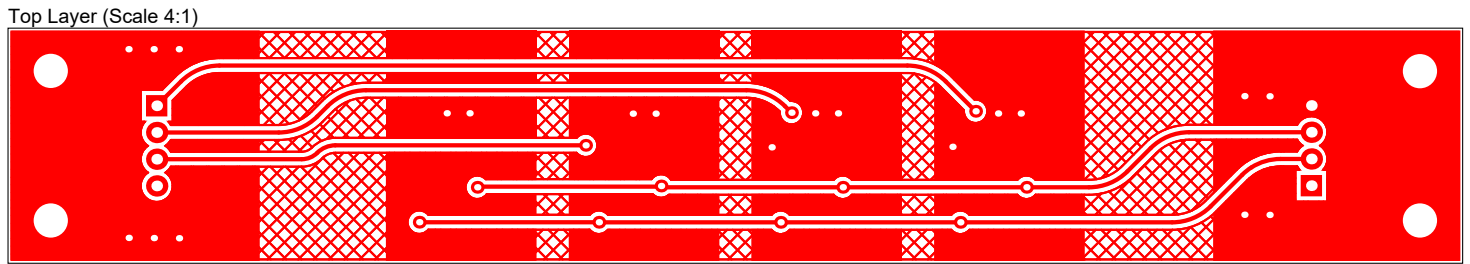
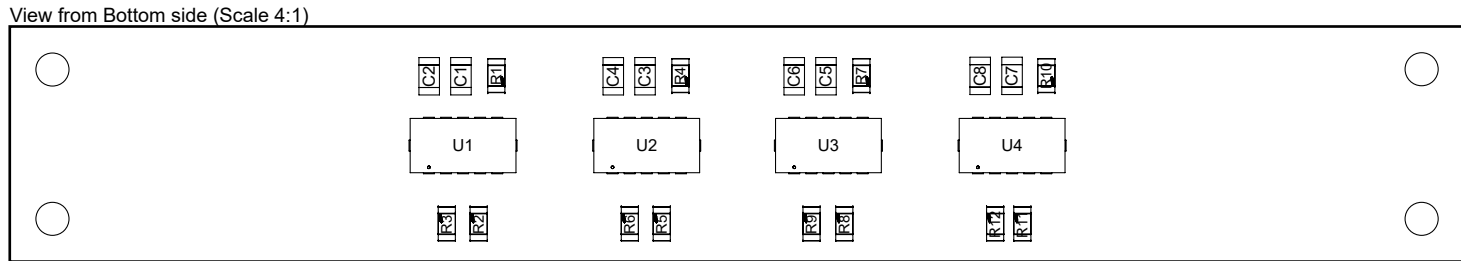
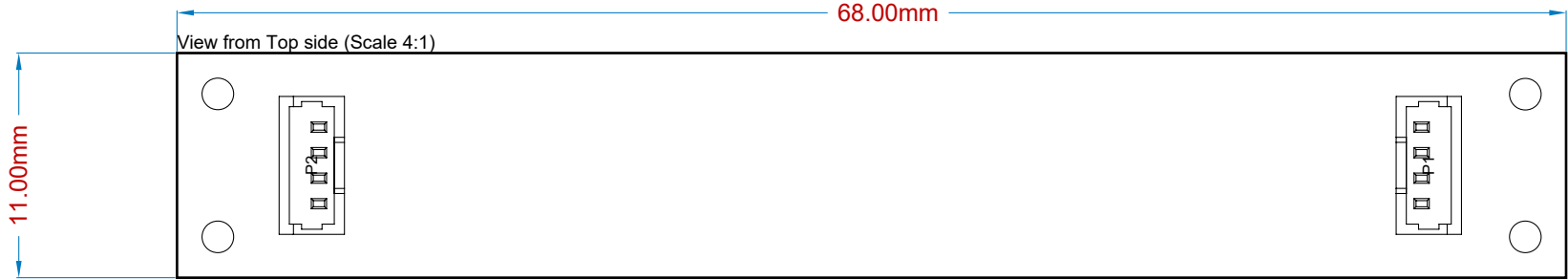
B

C

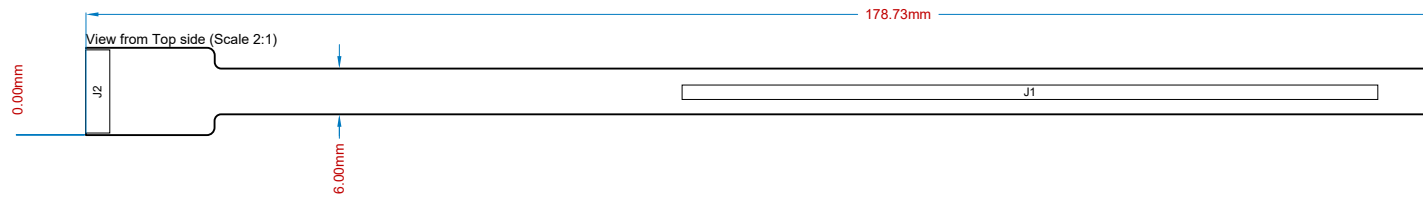
D

E

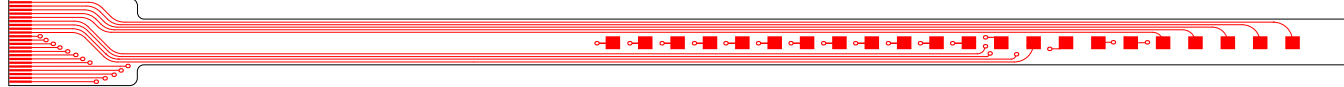




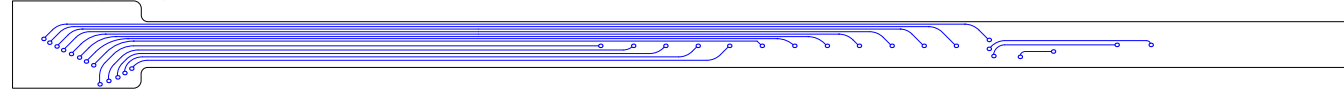
Realistic View



Top Layer (Scale 2:1)



Bottom Layer (Scale 2:1)

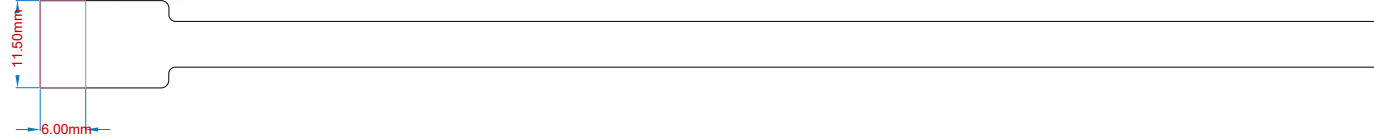


PI STIFFENER on the BOTTOM



FOR EXAMPLE IF BOARD THICKNESS IS 0.191 ±
stiffener thickness is 0.2

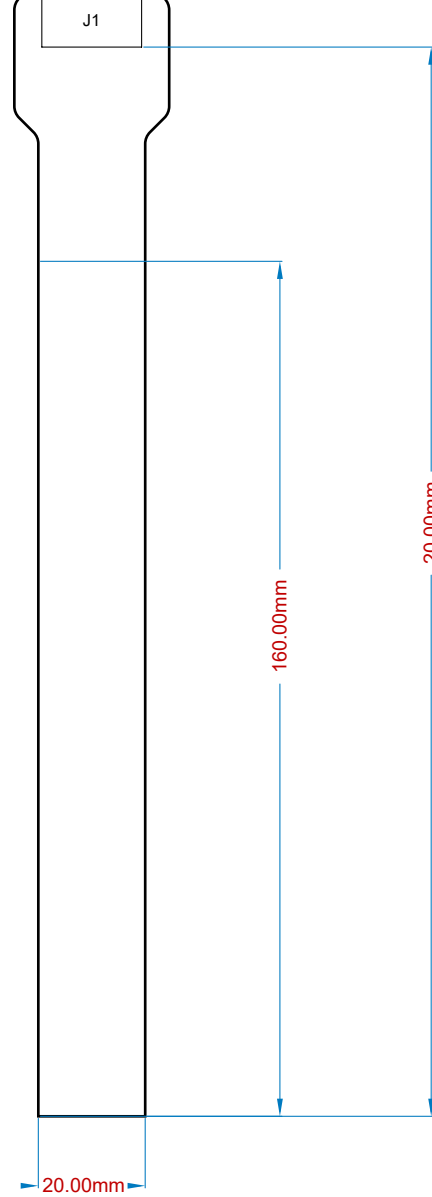
STIFENER (Scale 2:1)



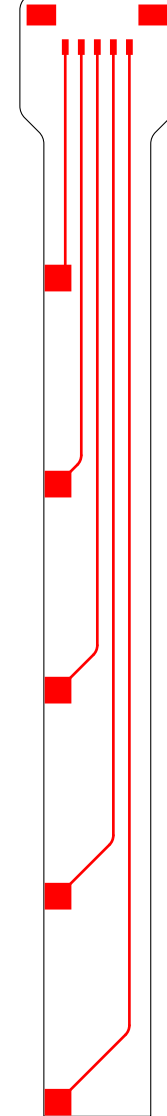
Realistic View



View from Top side (Scale 1:1)



Top Layer (Scale 1:1)



A

B

C

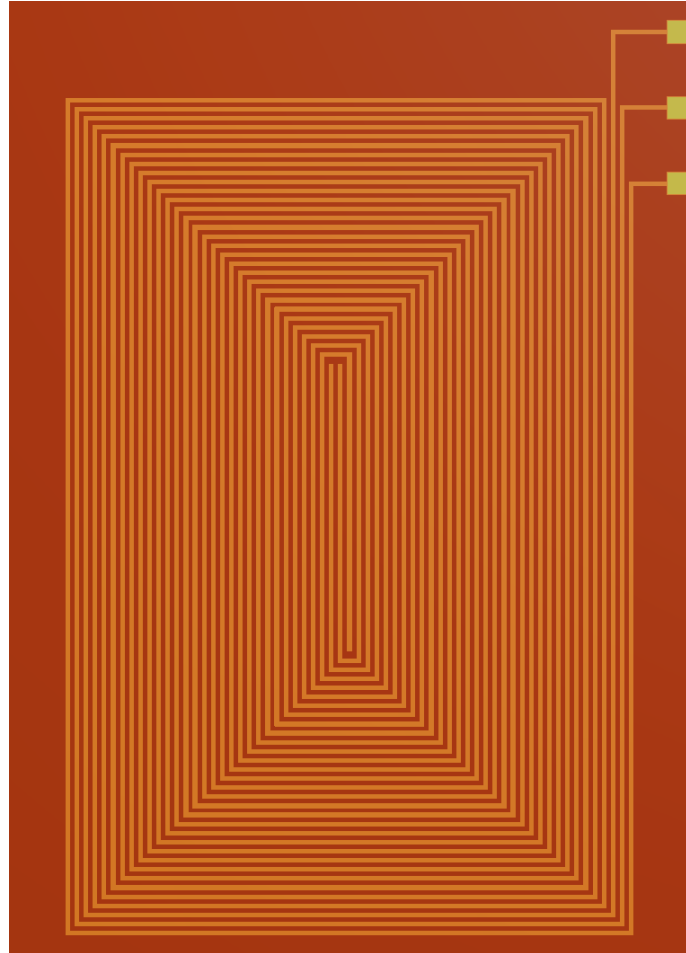
D

E

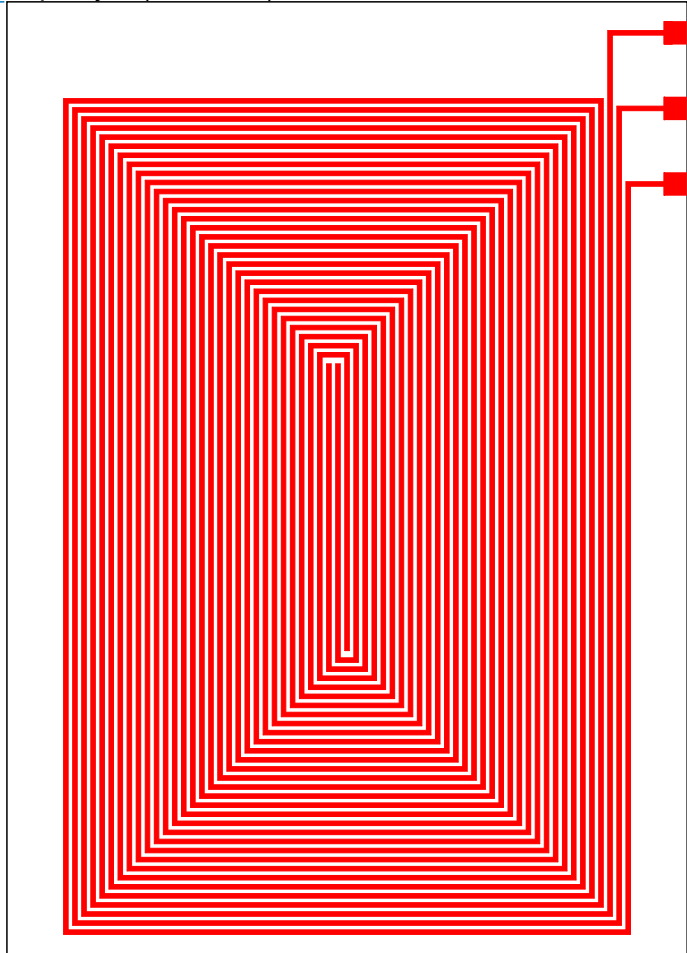
1

1

Realistic View



Top Layer (Scale 1:1)



90.00mm

126.00mm

2

2

3

3

4

4

A

B

C

D

E

A

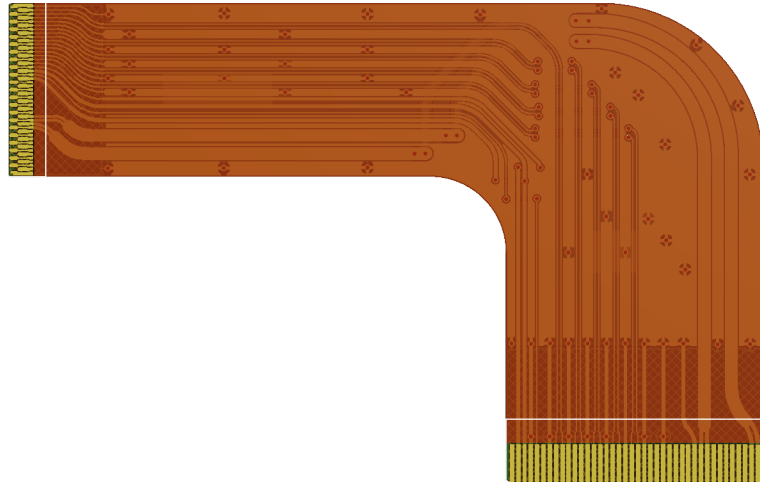
B

C

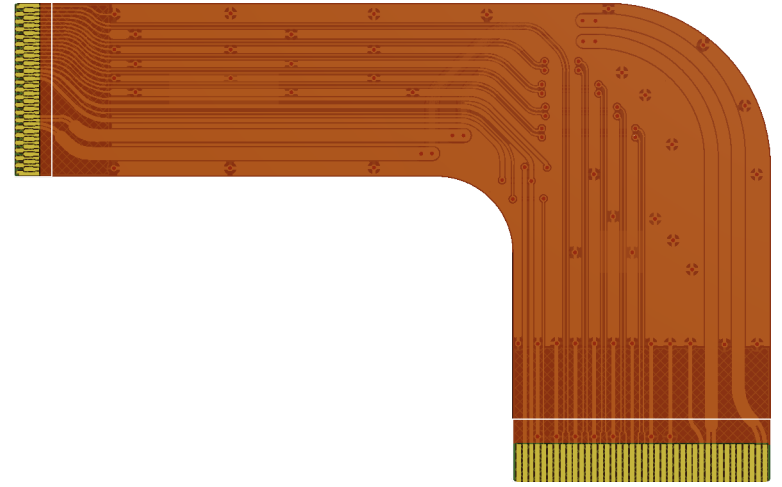
D

E

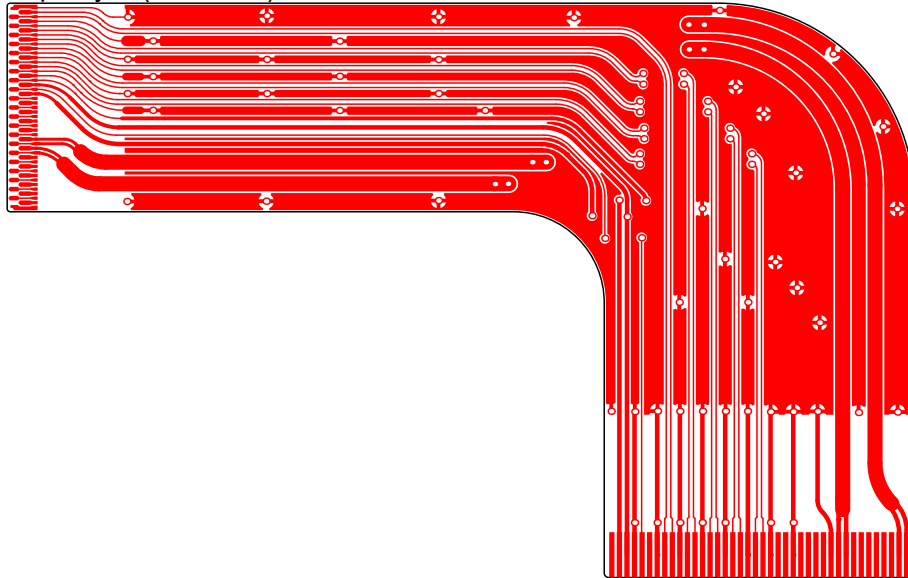
Realistic View



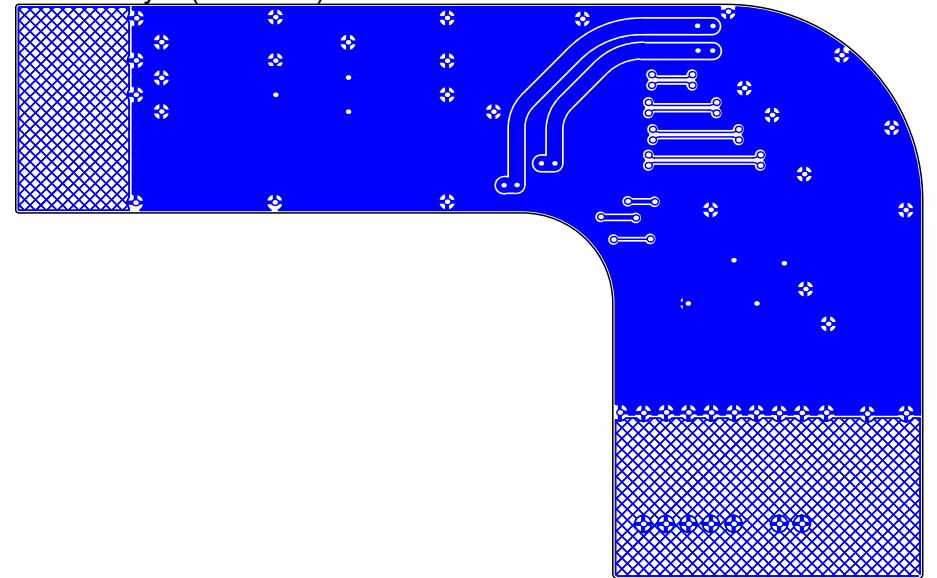
Realistic View



Top Layer (Scale 2:1)



Bottom Layer (Scale 2:1)



A

B

C

D

E

1

1

2

2

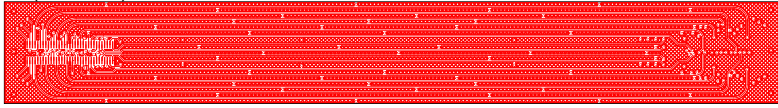
3

3

4

4

L1 (Scale 1:1)



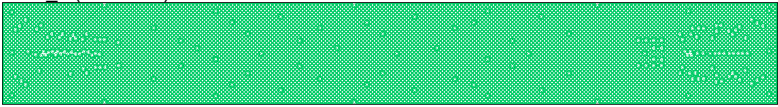
GND_1 (Scale 1:1)



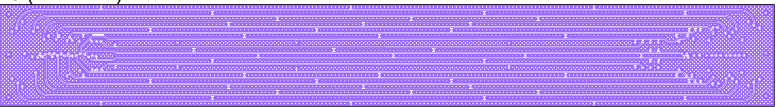
L2 (Scale 1:1)



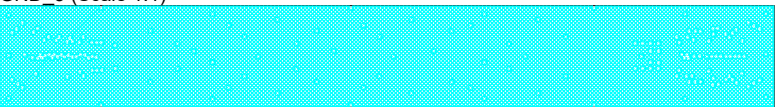
GND_2 (Scale 1:1)



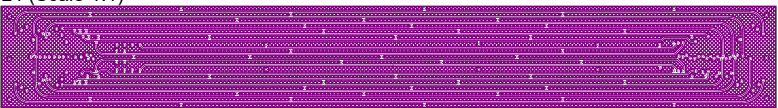
L3 (Scale 1:1)



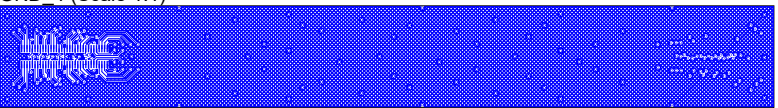
GND_3 (Scale 1:1)



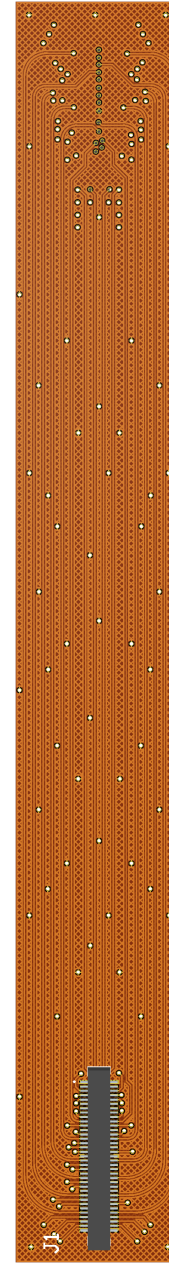
L4 (Scale 1:1)



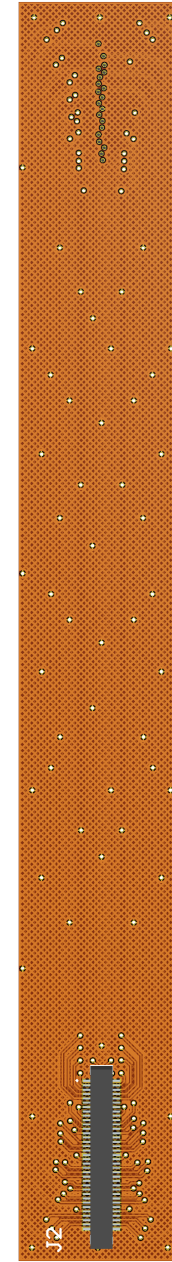
GND_4 (Scale 1:1)



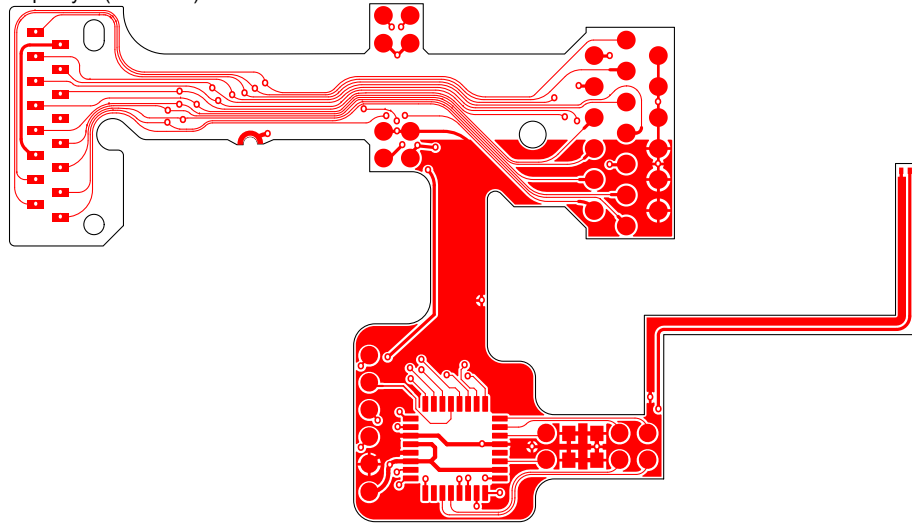
Realistic View



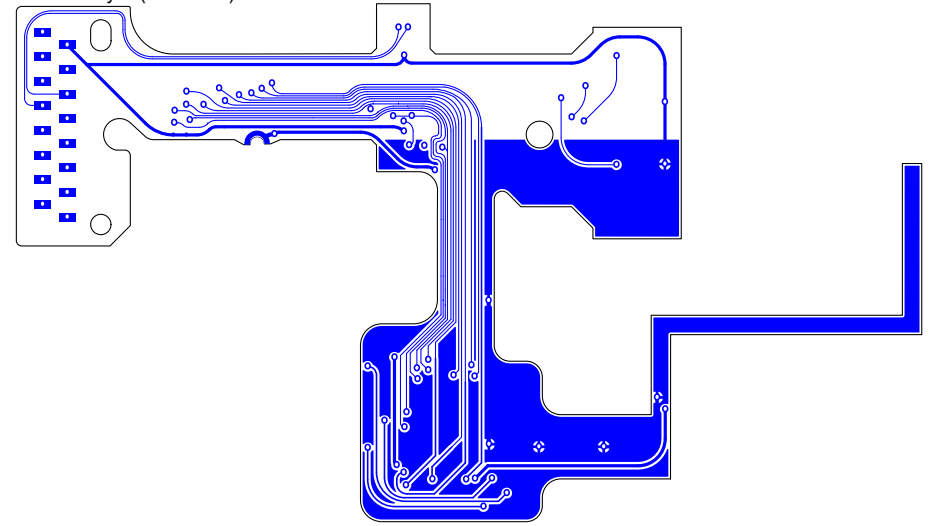
Realistic View



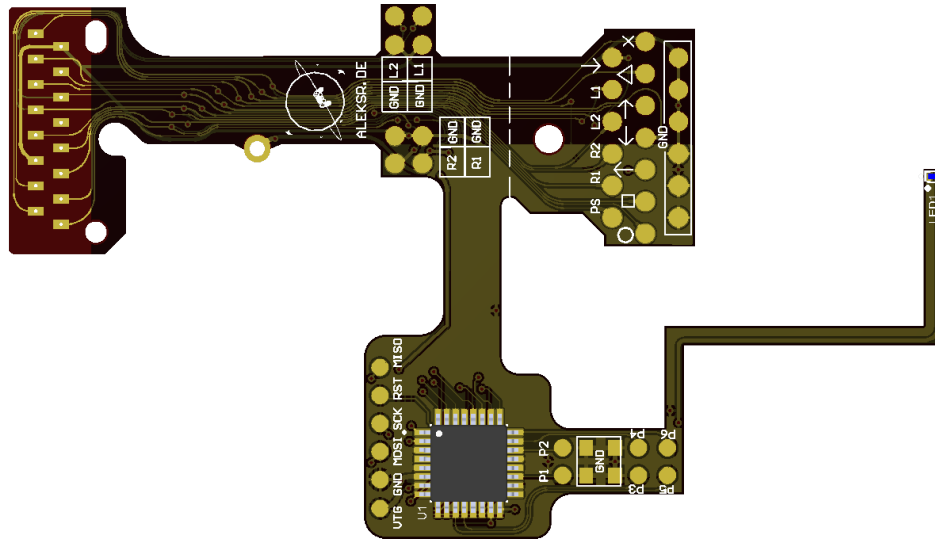
Top Layer (Scale 2:1)



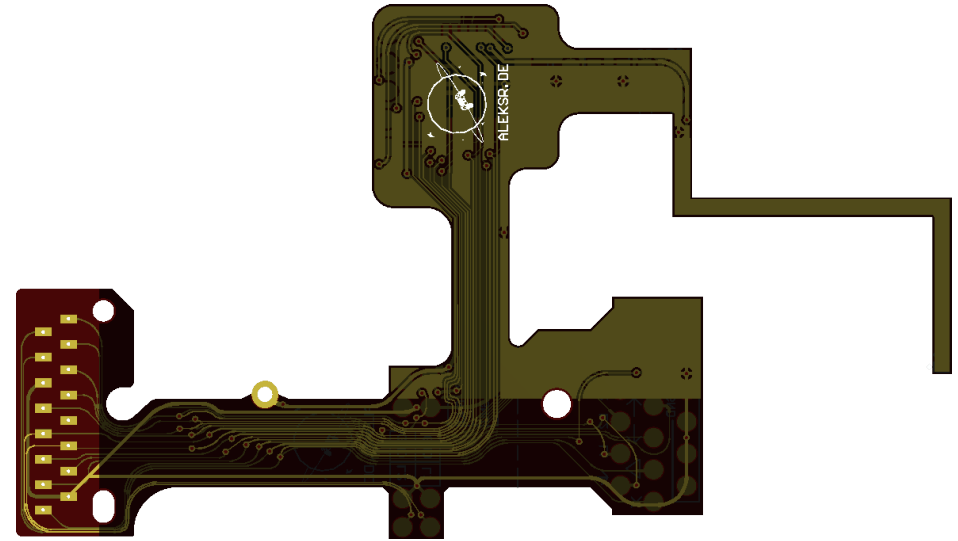
Bottom Layer (Scale 2:1)



Realistic View



Realistic View



Top Layer (Scale 1:1)



Bottom Layer (Scale 1:1)



Realistic View



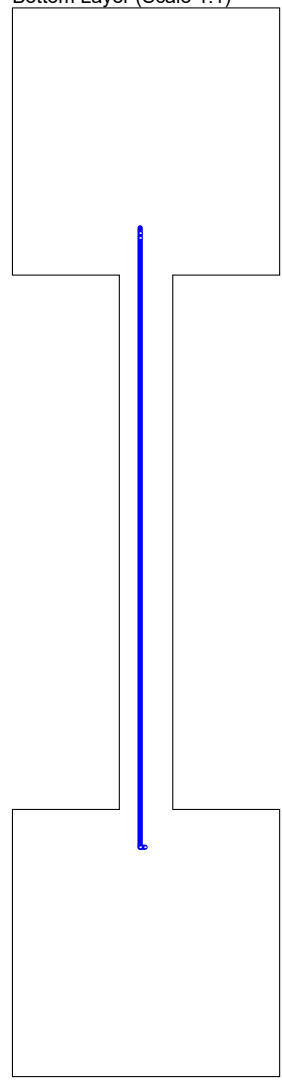
Realistic View



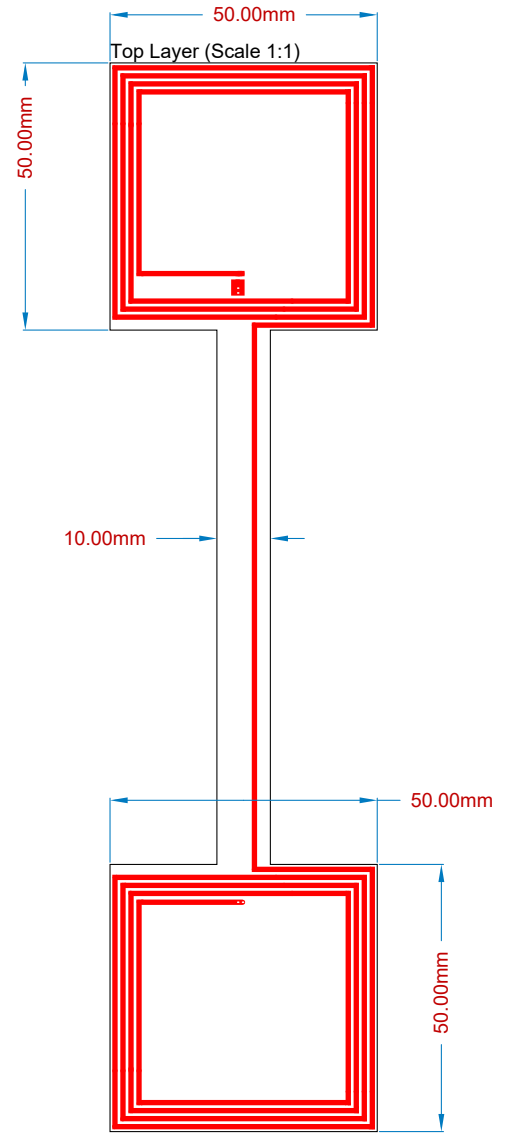
Layer Stack Legend

Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Top Overlay			Legend	
Surface Material	PI1	0.01mm	SM-001	Solder Mask	GCT2
PbSn	Adhesive1	0.02mm		Surface Finish	
CF-004	Top Layer	0.01mm		Signal	GTL
Core		0.03mm	Core-043	Dielectric	
CF-004	Bottom Layer	0.01mm		Signal	GBL
PbSn	Bottom Surface Finish	0.02mm		Surface Finish	
Surface Material	PI3	0.01mm	SM-001	Solder Mask	GCB2
	Bottom Overlay			Legend	
Total thickness: 0.10mm					

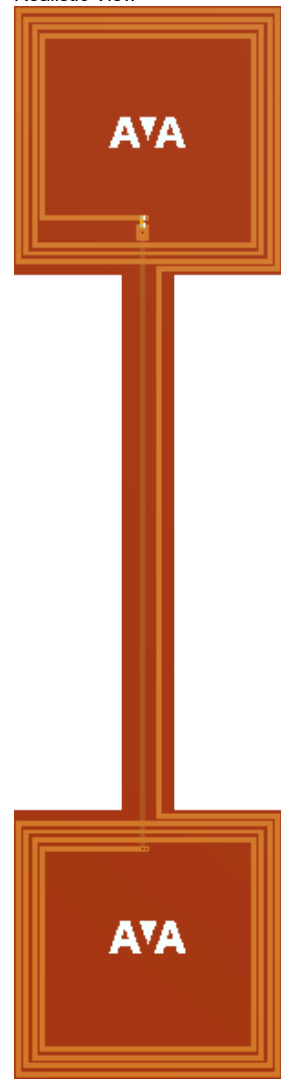
Bottom Layer (Scale 1:1)



Top Layer (Scale 1:1)



Realistic View



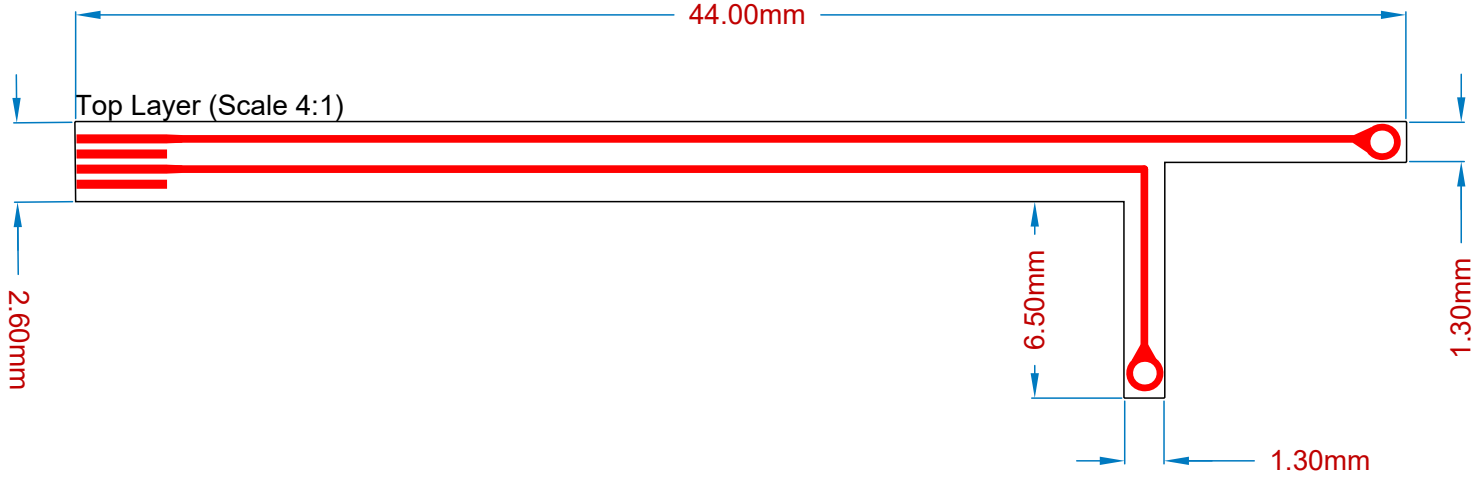
A

B

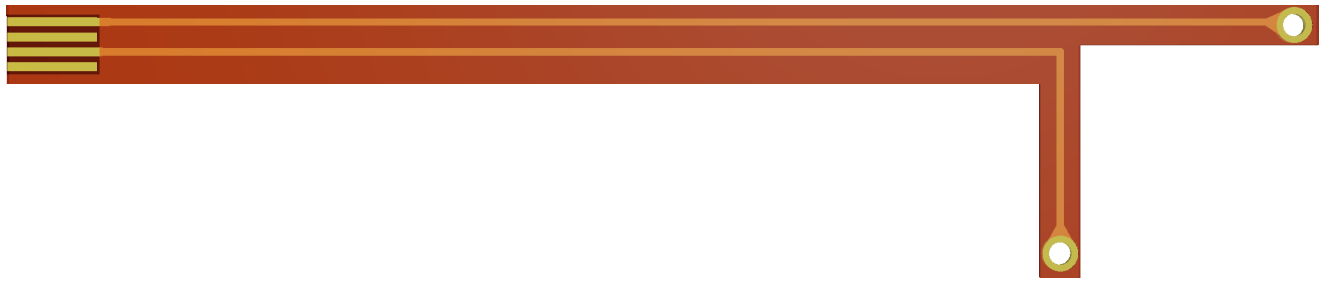
C

D

E



Realistic View



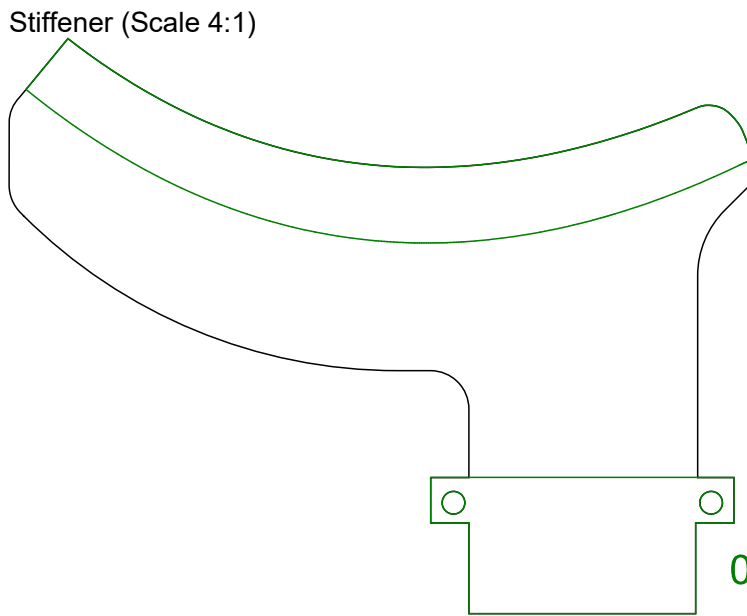
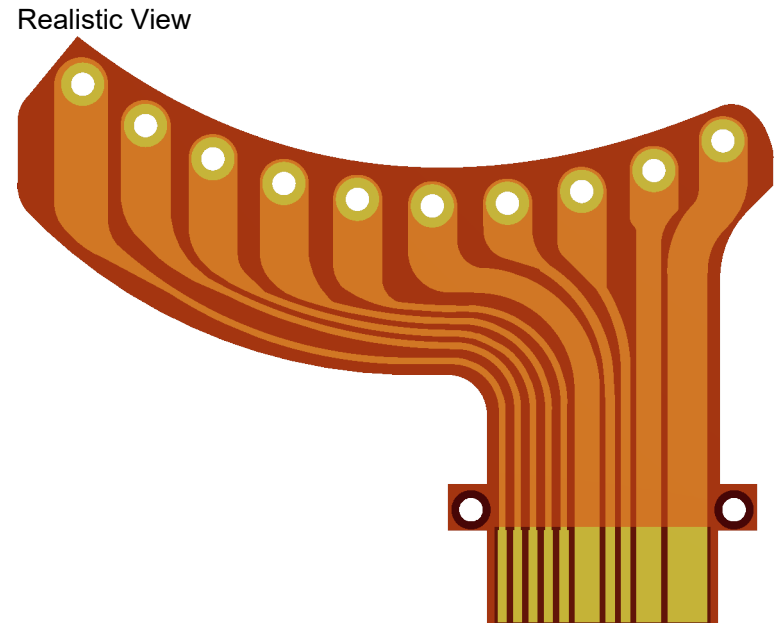
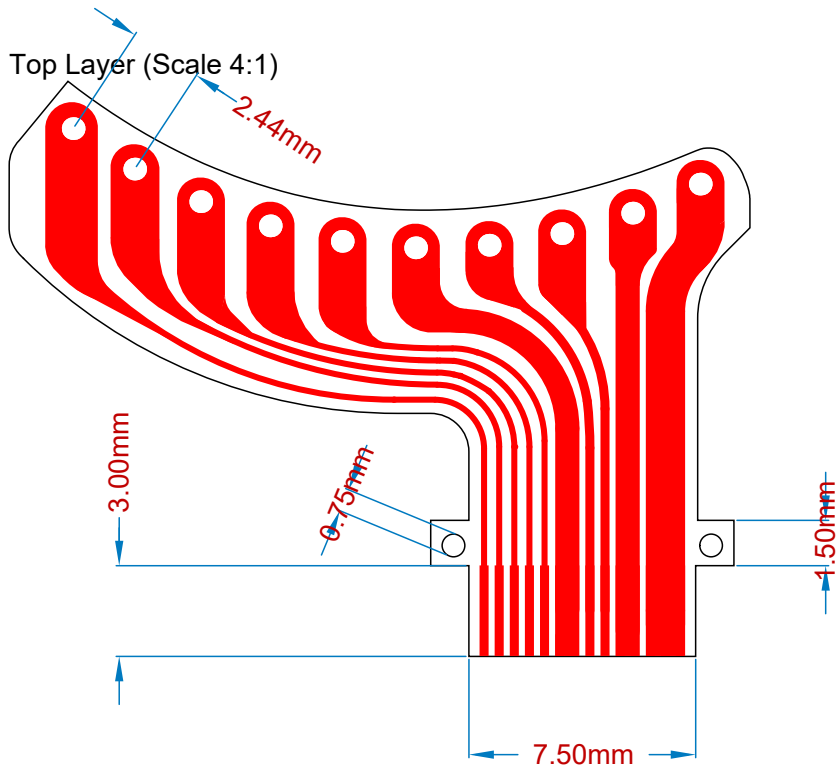
A

B

C

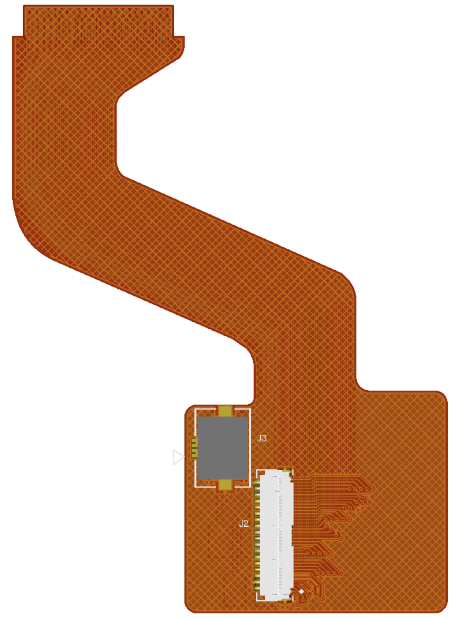
D

E

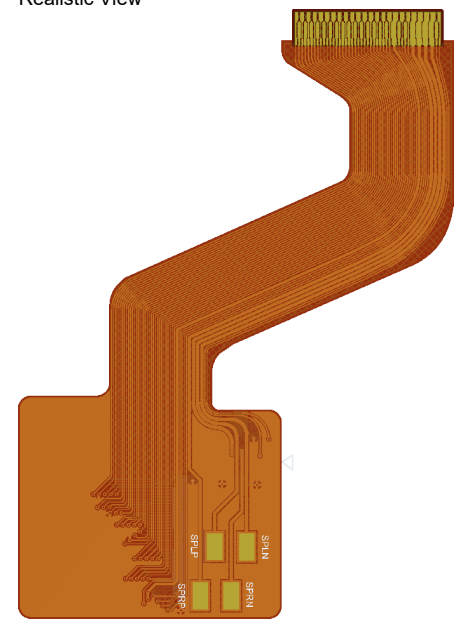


PI STIFFENER on the bottom
 $0.3 = (\text{board thickness} + \text{Stiffener thickness})$

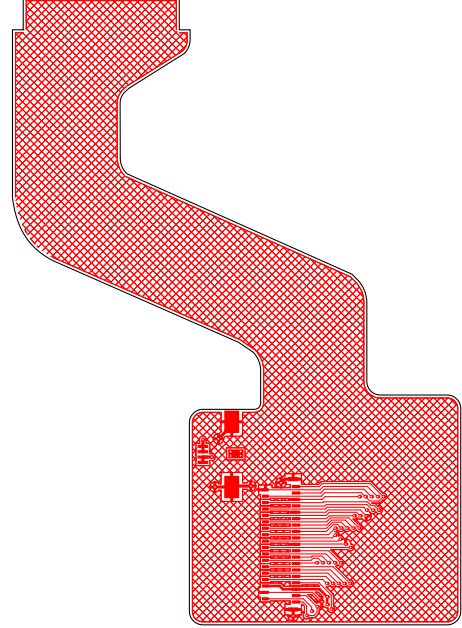
Realistic View



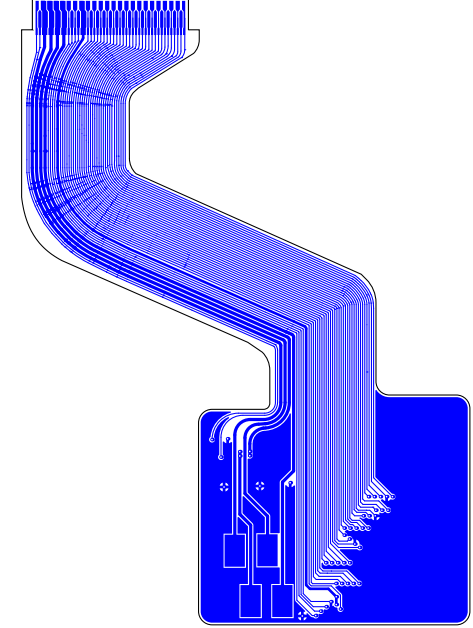
Realistic View



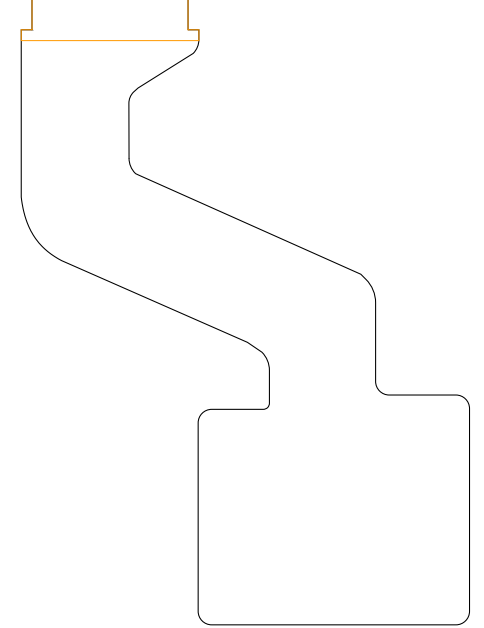
Top Layer (Scale 2:1)



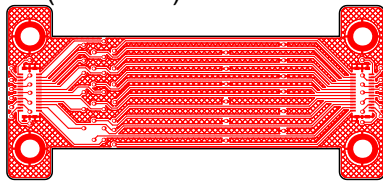
Bottom Layer (Scale 2:1)



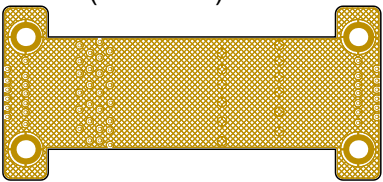
0.1mm PI STIFFENER on the TOP
Stiffener (Scale 2:1)



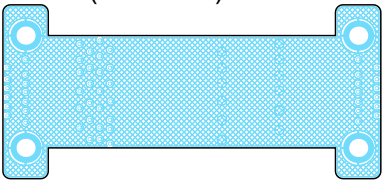
L1 (Scale 1:1)



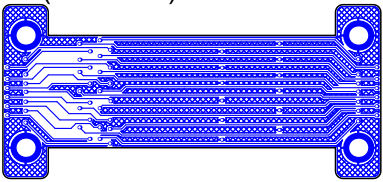
GND1 (Scale 1:1)



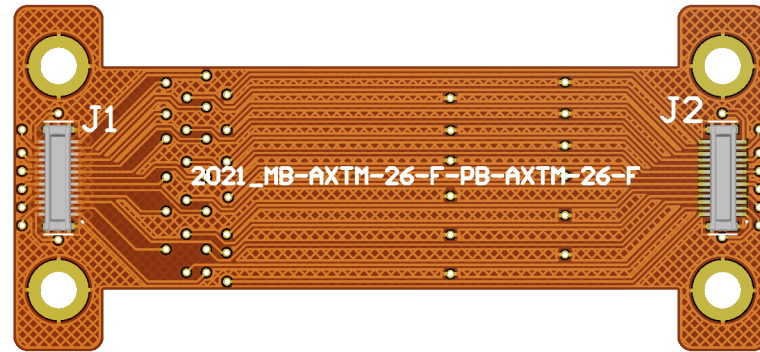
GND2 (Scale 1:1)



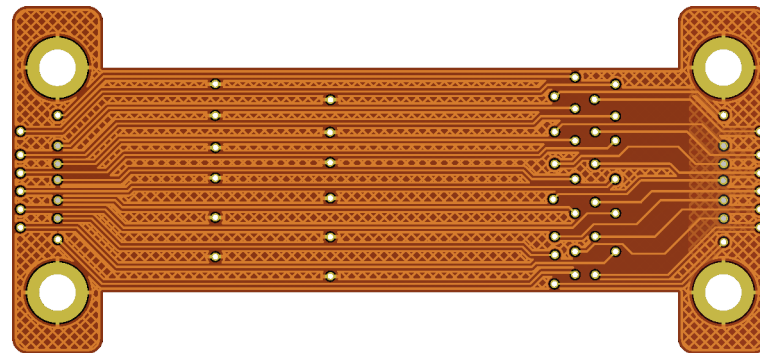
L2 (Scale 1:1)

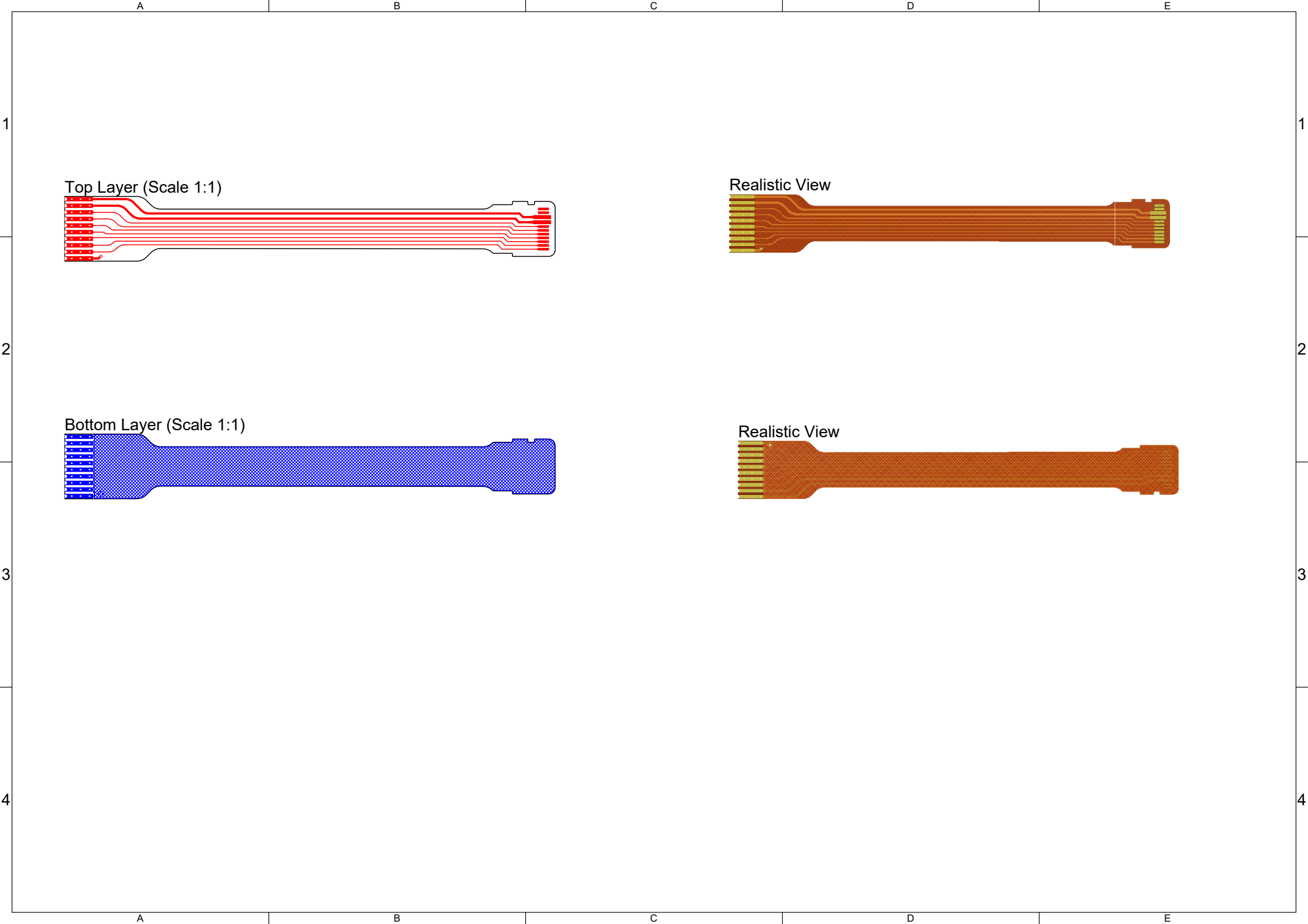


Realistic View

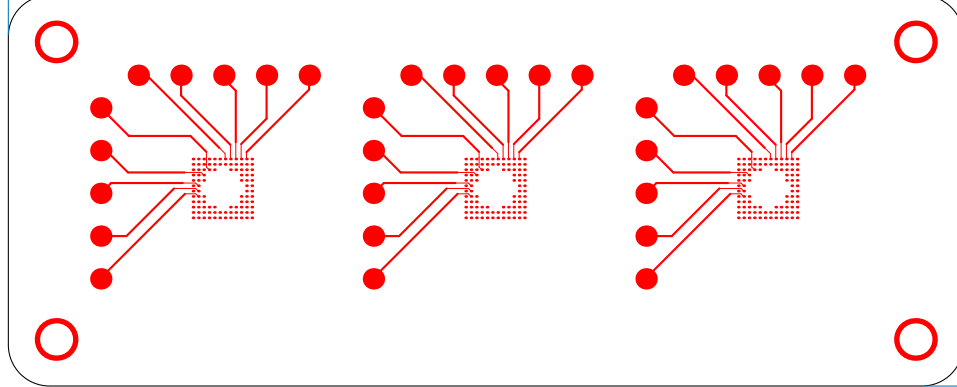


Realistic View

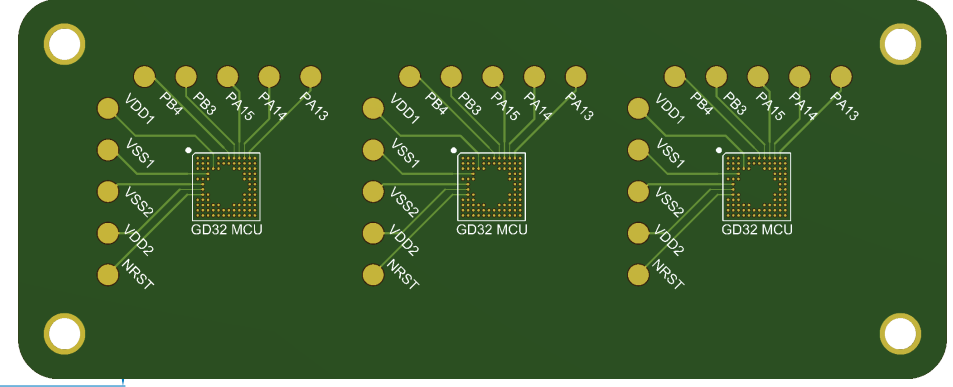




Top Layer (Scale 2:1)



Realistic View



Layer Stack Legend

Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Top Overlay			Legend	GTO
Surface Material	Top Solder	0.01mm	Solder Resist	Solder Mask	GTS
Copper	Top Layer	0.04mm		Signal	GTL
		<i>0.32mm</i>	<i>FR-4</i>	<i>Dielectric</i>	
Copper	Bottom Layer	0.04mm		Signal	GBL
Surface Material	Bottom Solder	0.01mm	Solder Resist	Solder Mask	GBS
	Bottom Overlay			Legend	GBO
Total thickness: 0.41mm					

A

B

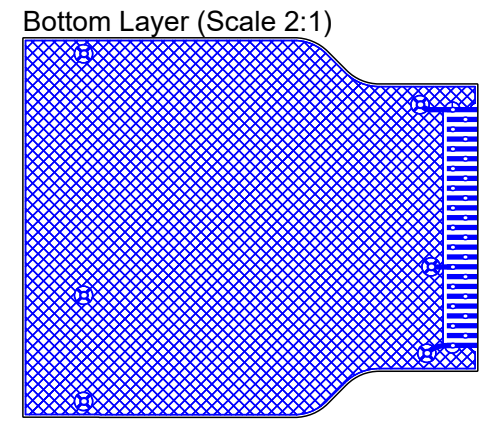
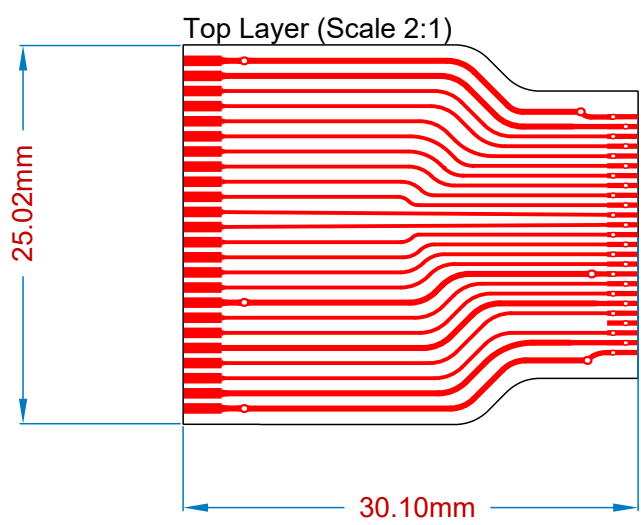
C

D

E

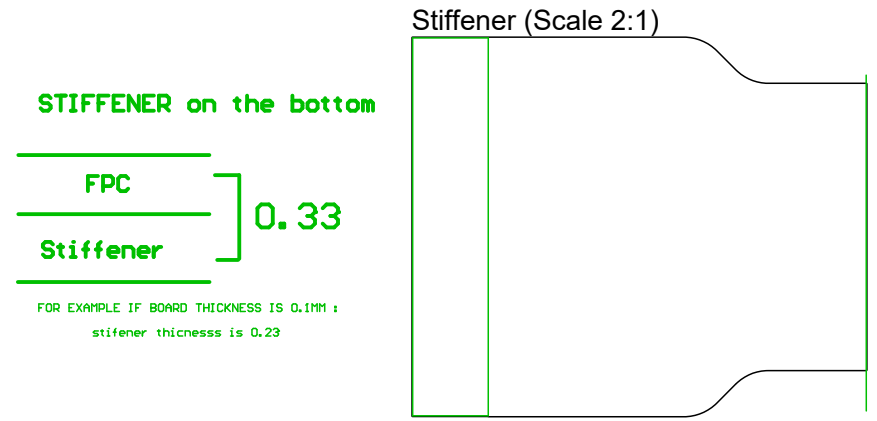
1

1



2

2



3

3

4

4

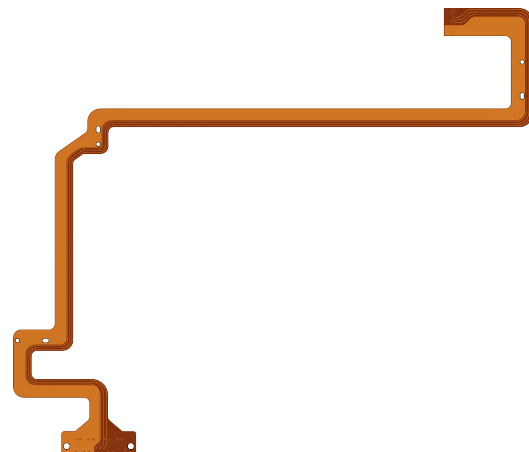
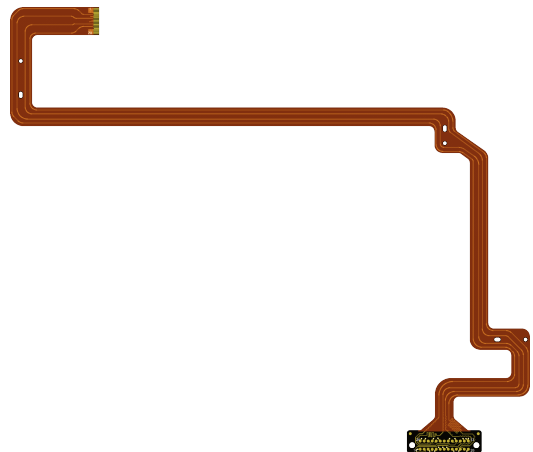
A

B

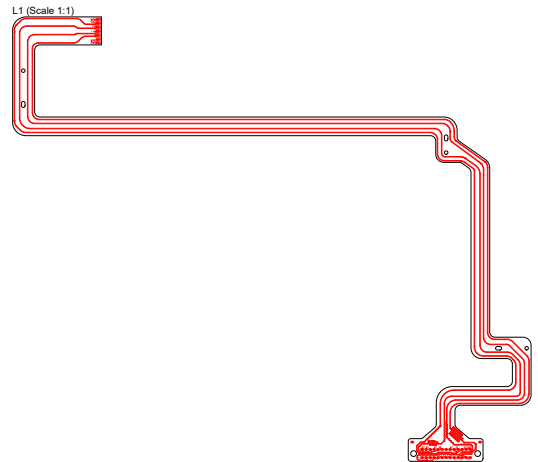
C

D

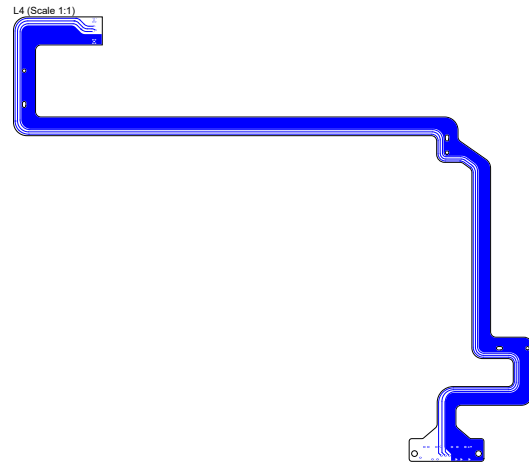
E



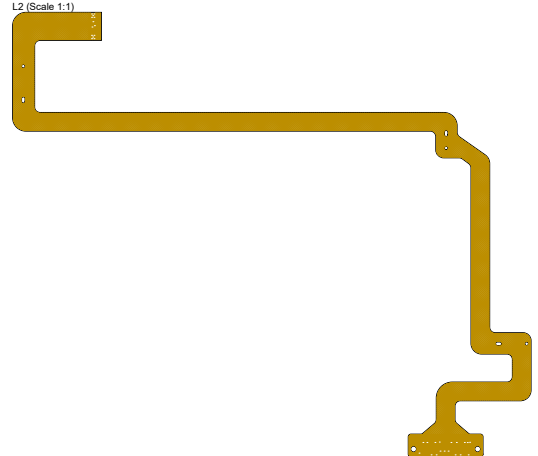
L1 (Scale 1:1)



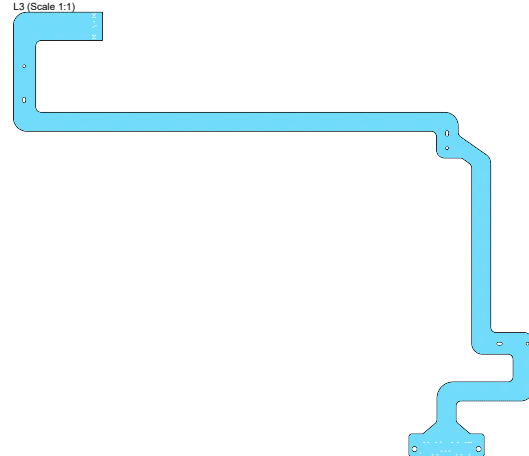
L4 (Scale 1:1)



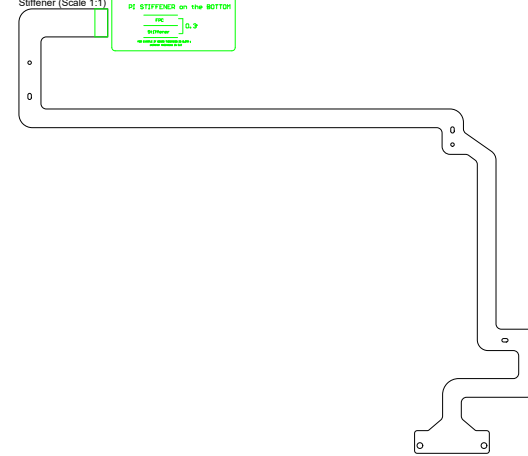
L2 (Scale 1:1)



L3 (Scale 1:1)



Stiffener (Scale 1:1)



IS STIFFENER on the BOTTOM

PCB

Stiffener

0.5

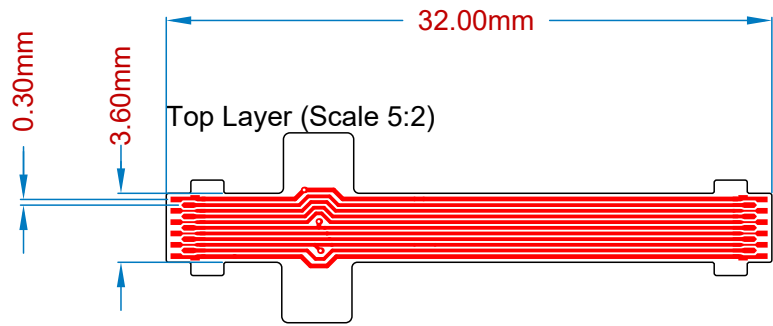
0.5

0.5

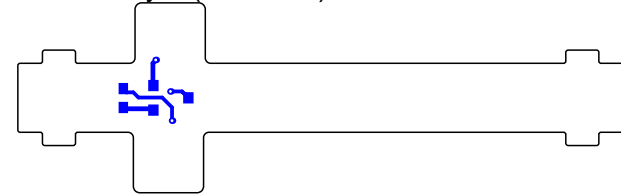
Realistic View



Realistic View



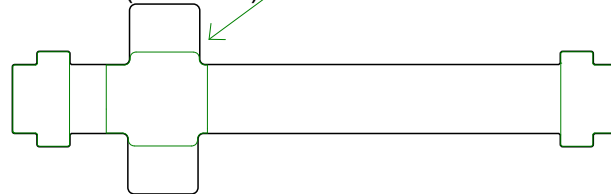
Bottom Layer (Scale 5:2)



PI STIFFENER on the TOP
0.1 mm

PI STIFFENER on the BOTTOM
0.1 mm

Stiffener (Scale 5:2)



PI STIFFENER on the BOTTOM
0.1 mm

A

B

C

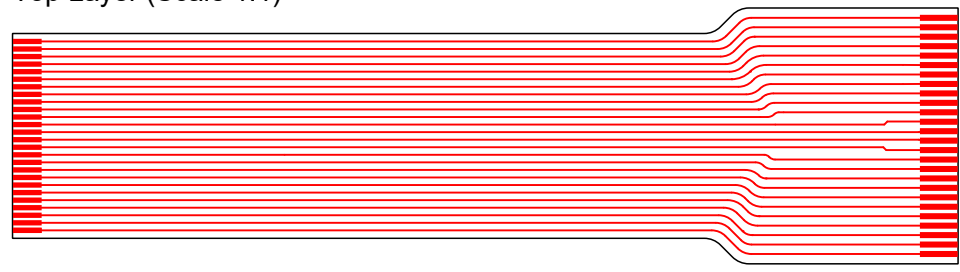
D

E

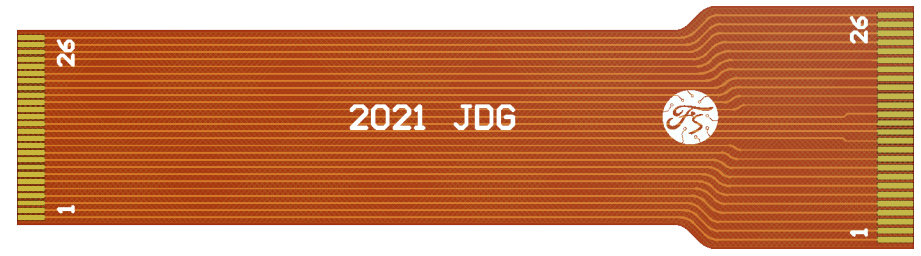
1

1

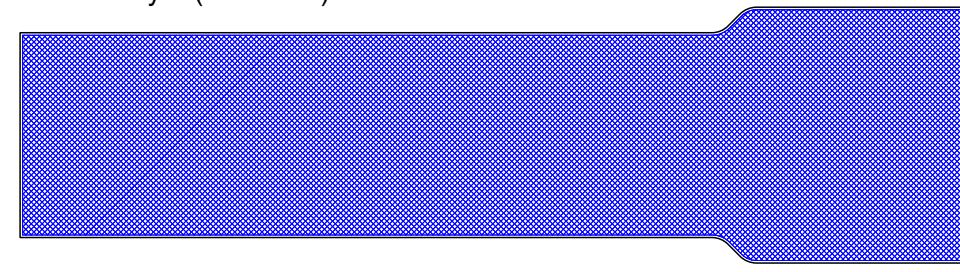
Top Layer (Scale 1:1)



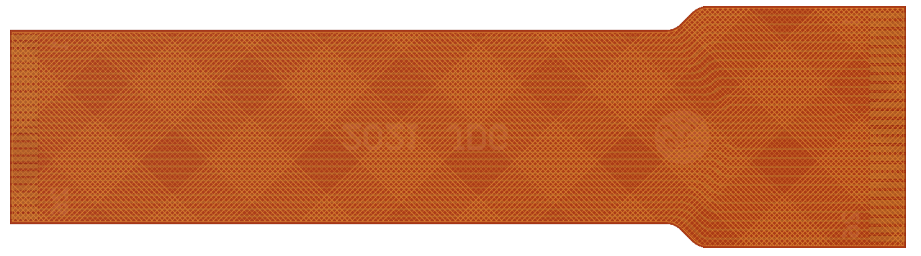
Realistic View



Bottom Layer (Scale 1:1)



Realistic View



2

2

3

3

4

4

A

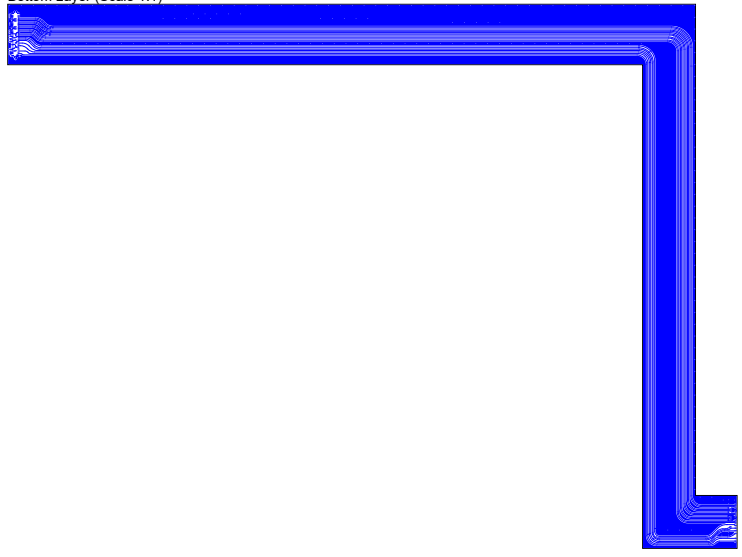
B

C

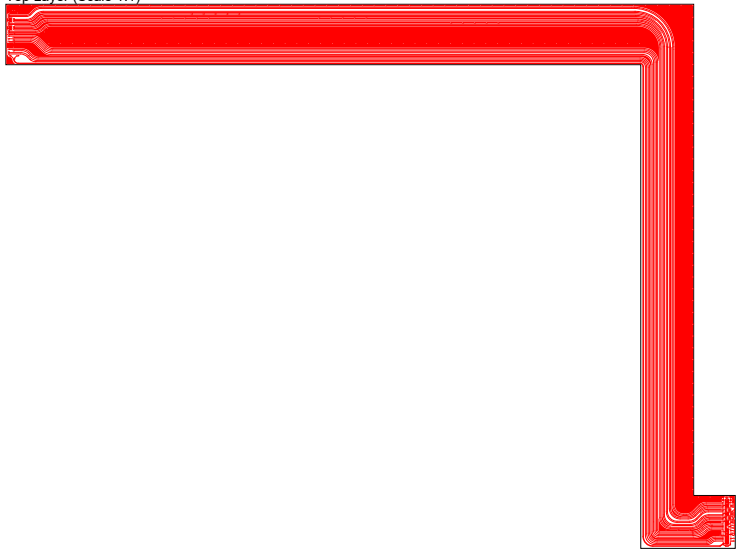
D

E

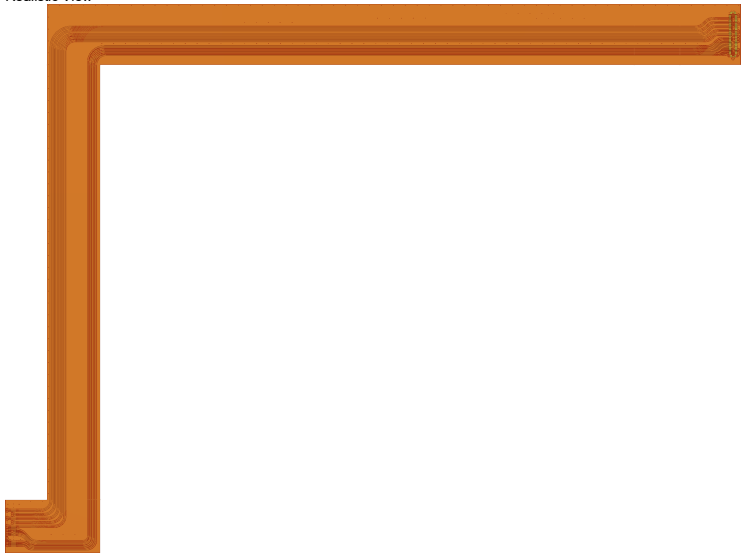
Bottom Layer (Scale 1:1)



Top Layer (Scale 1:1)



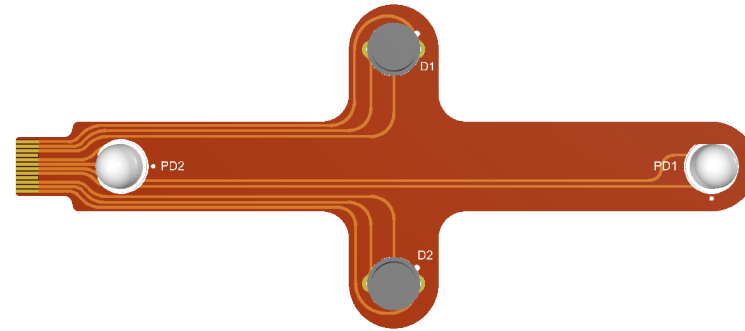
Realistic View



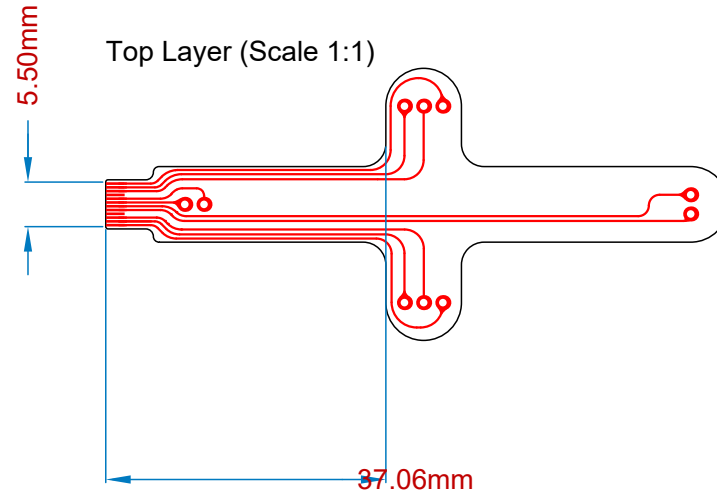
Realistic View



Realistic View

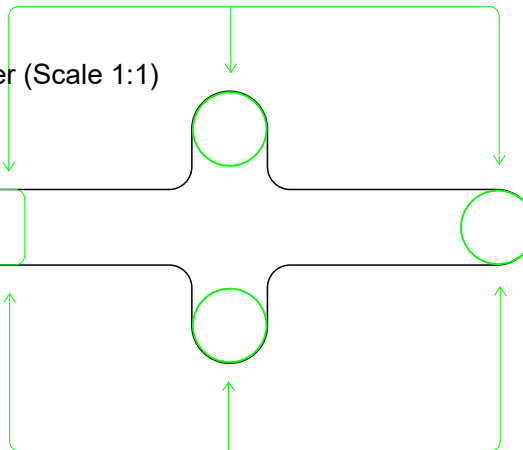
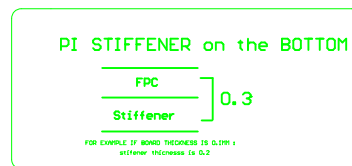


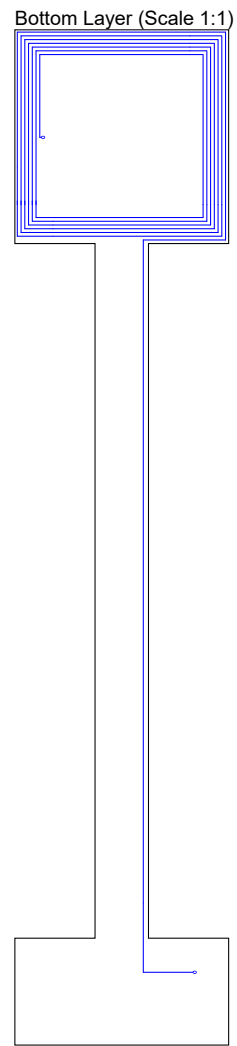
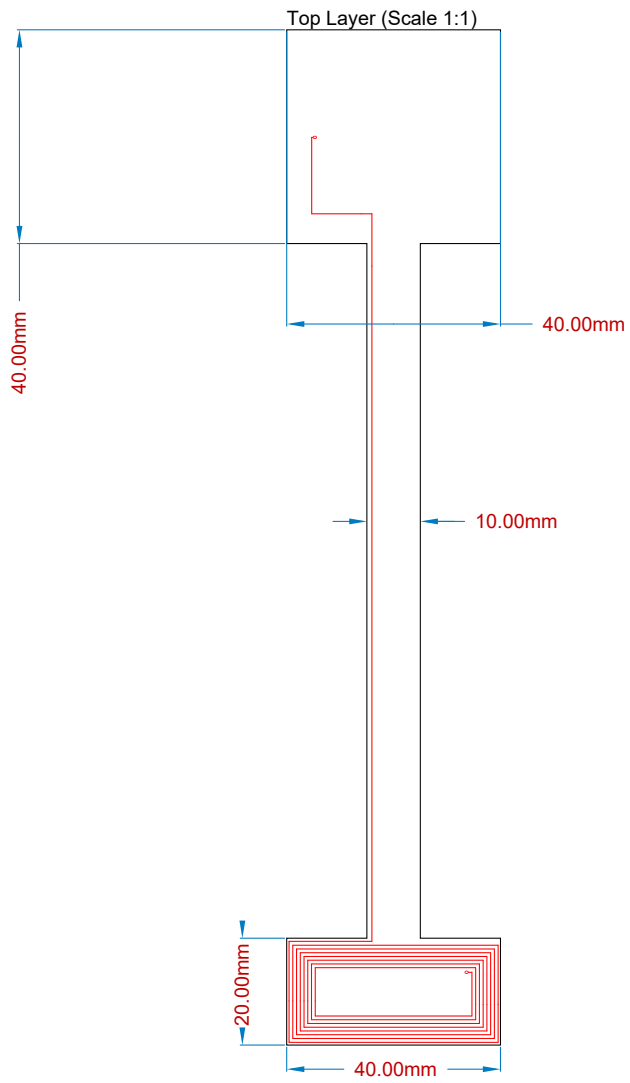
Top Layer (Scale 1:1)



FR4 0.4mm STIFFENER on the TOP

Stiffener (Scale 1:1)





A

B

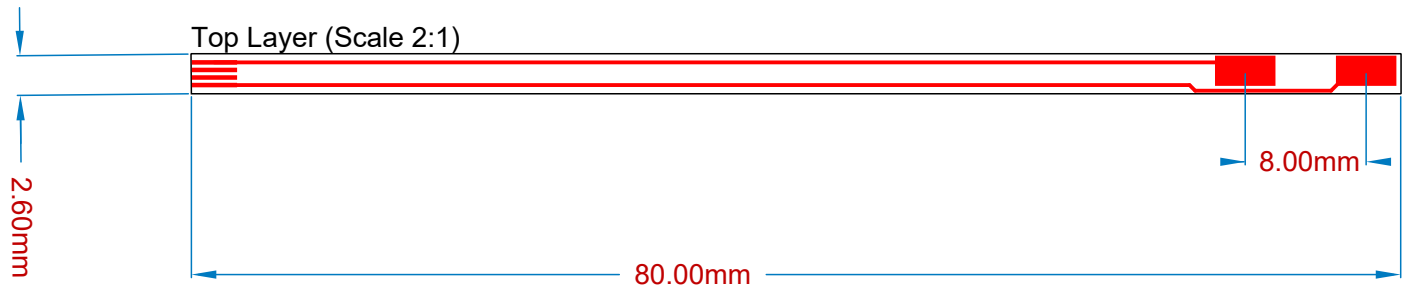
C

D

E

1

1



2

2

3

3



4

4

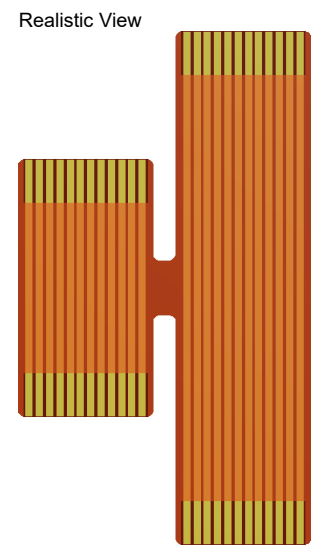
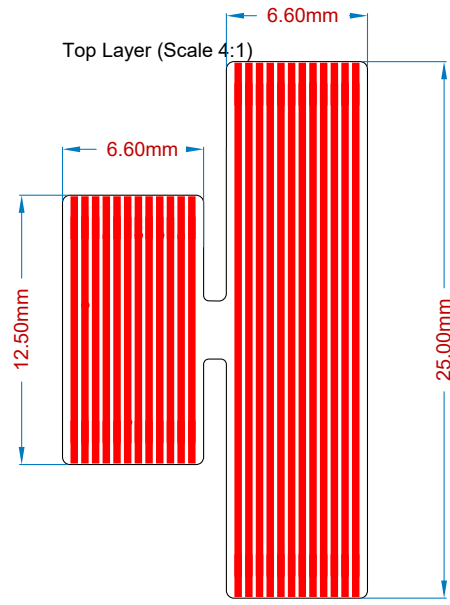
A

B

C

D

E



PI STIFFENER on the BOTTOM

