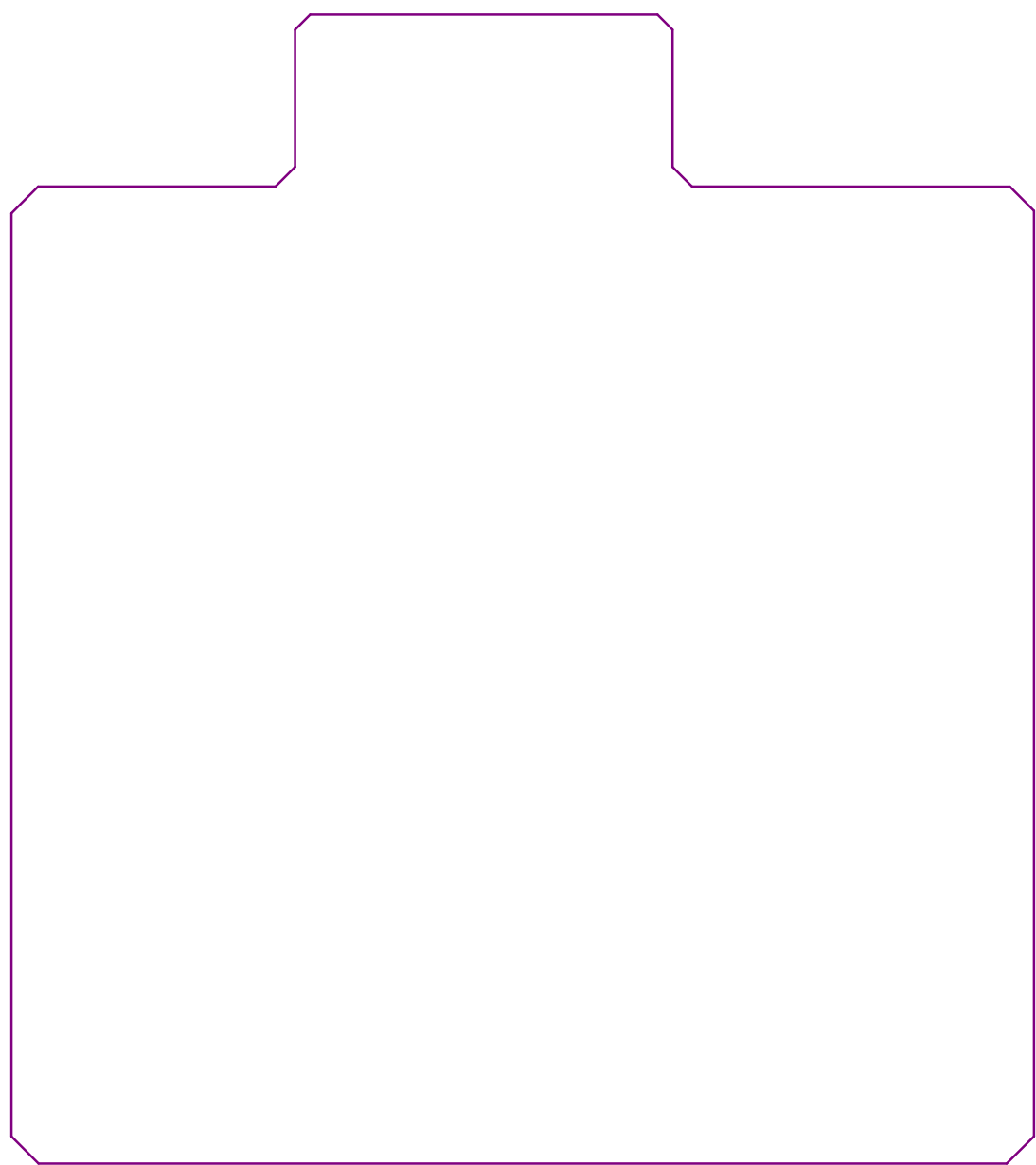
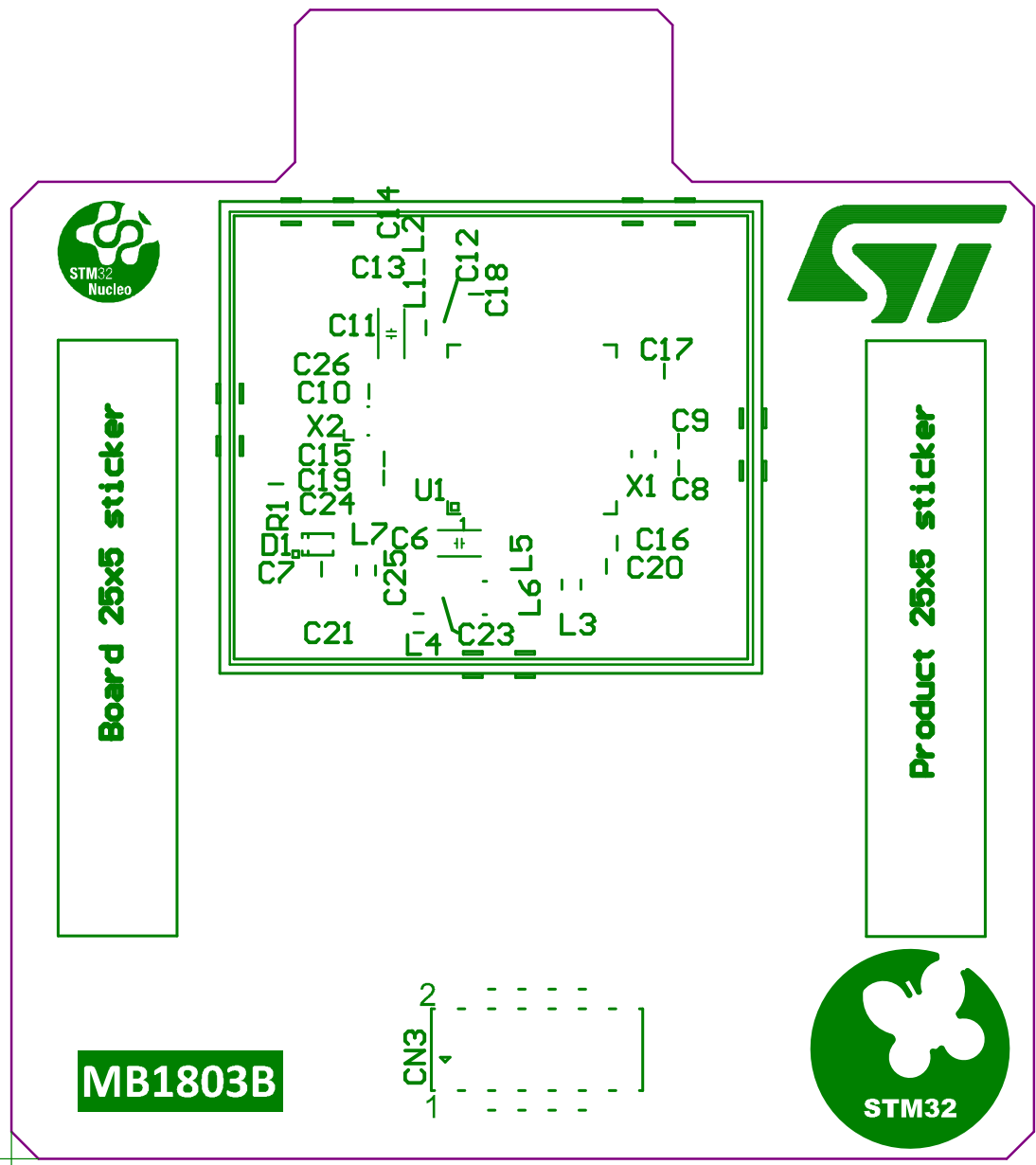
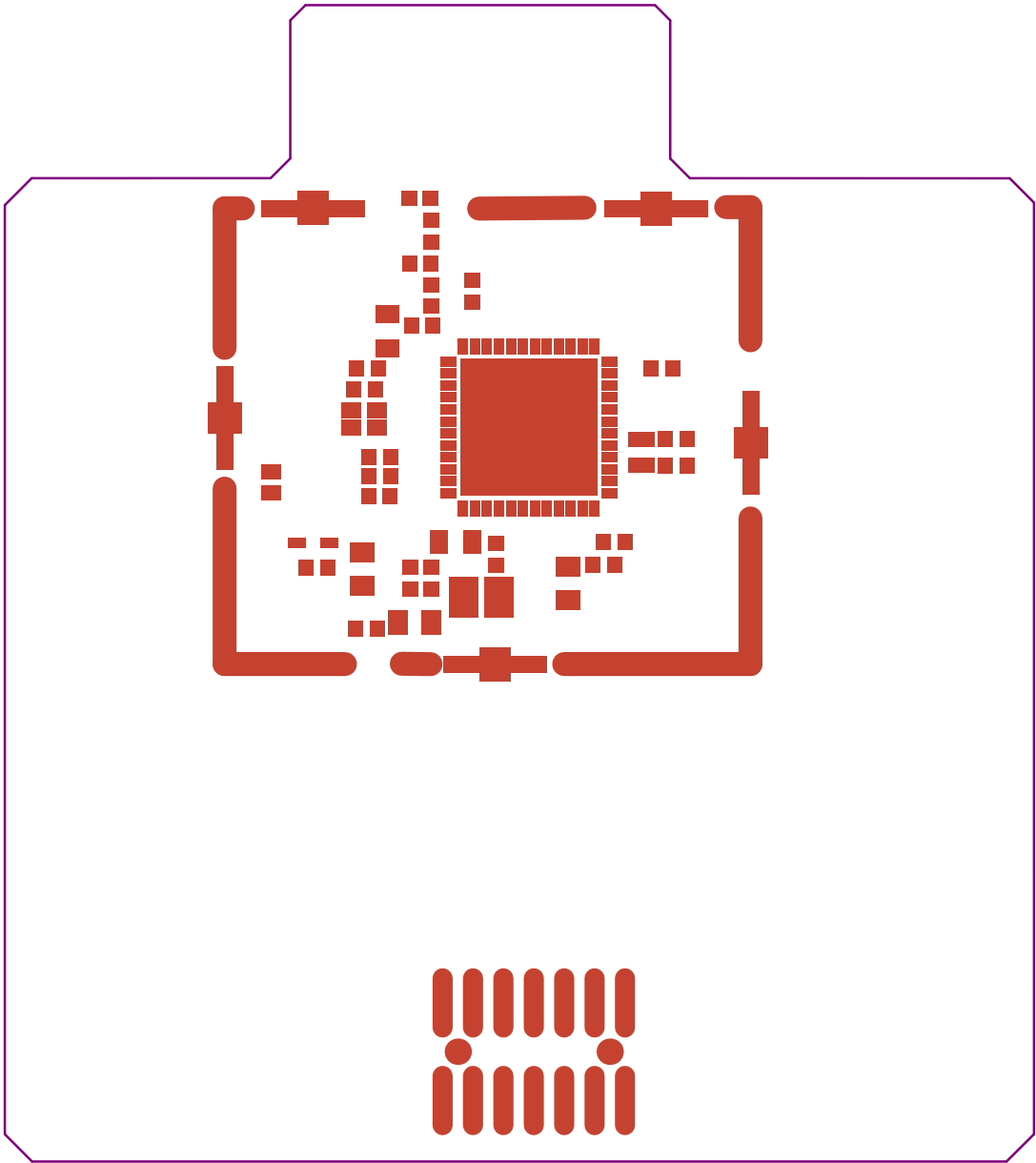


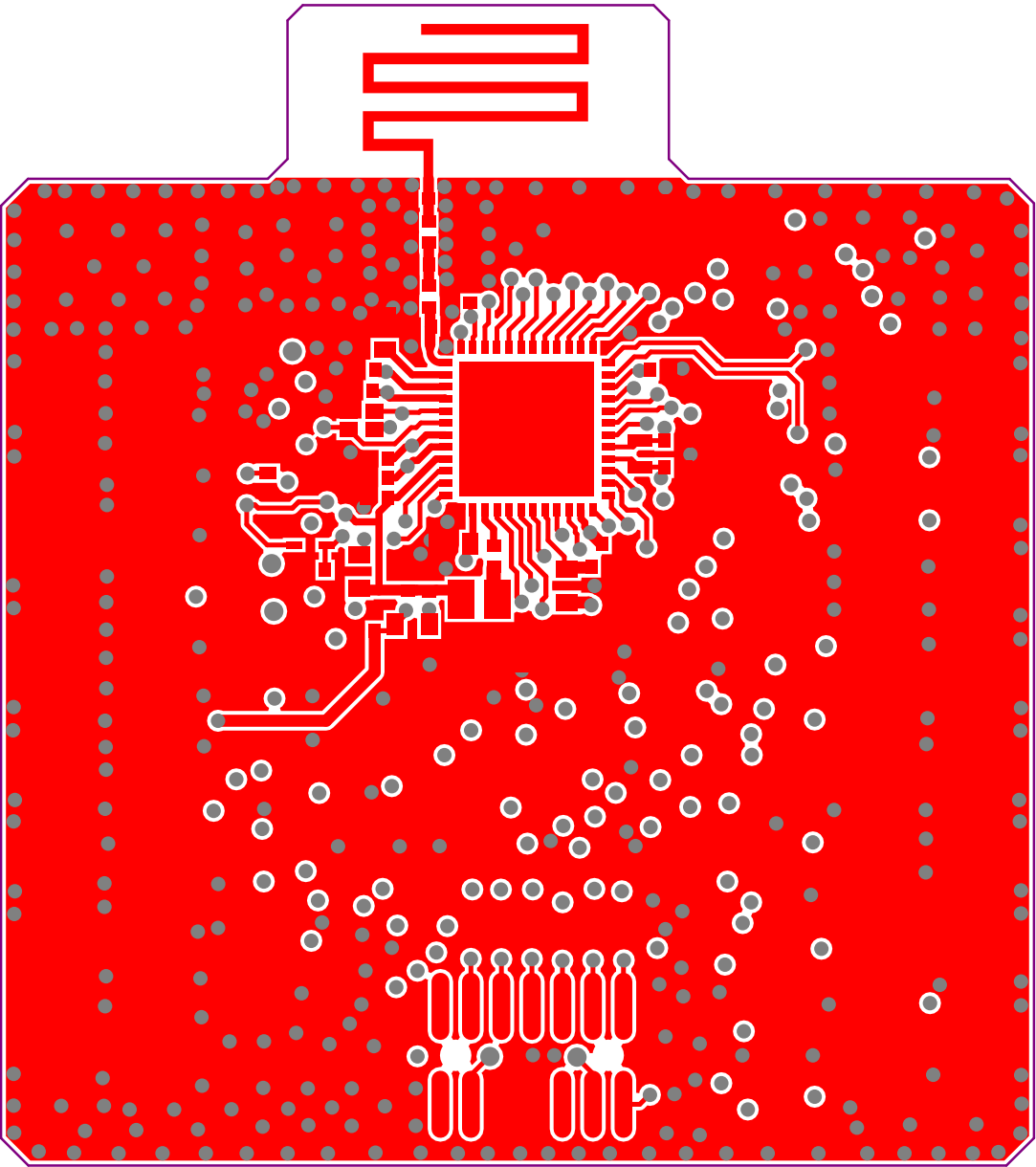




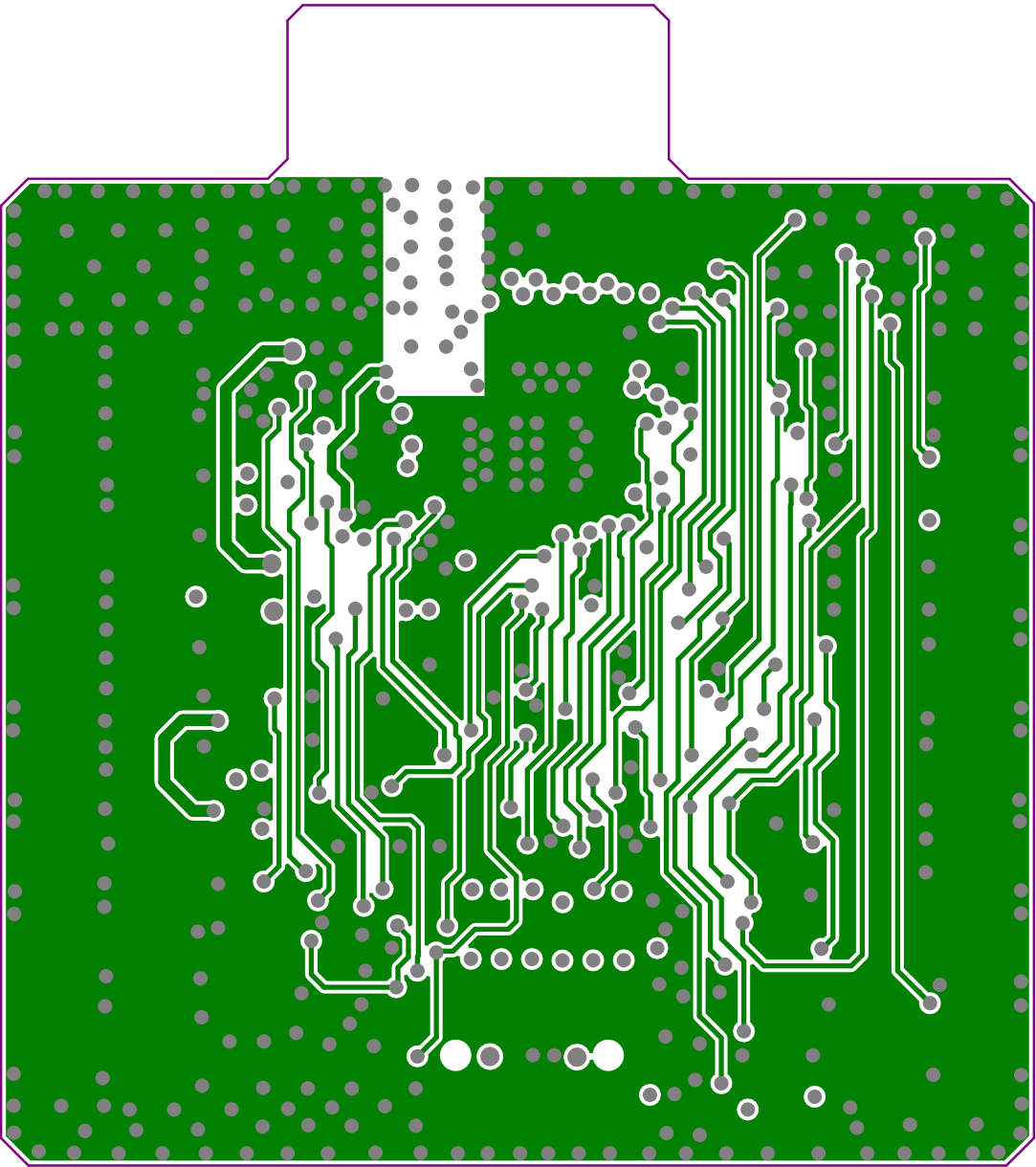
Project: MiniBoard_WBA5x_QFN48_SMPS_PCBAntenna		
Layer: Top Overlay	Gerber: .GTO	
Variant: [No Variations]	Ref: MB1803	
Date: 24-August-2022	Rev: B	



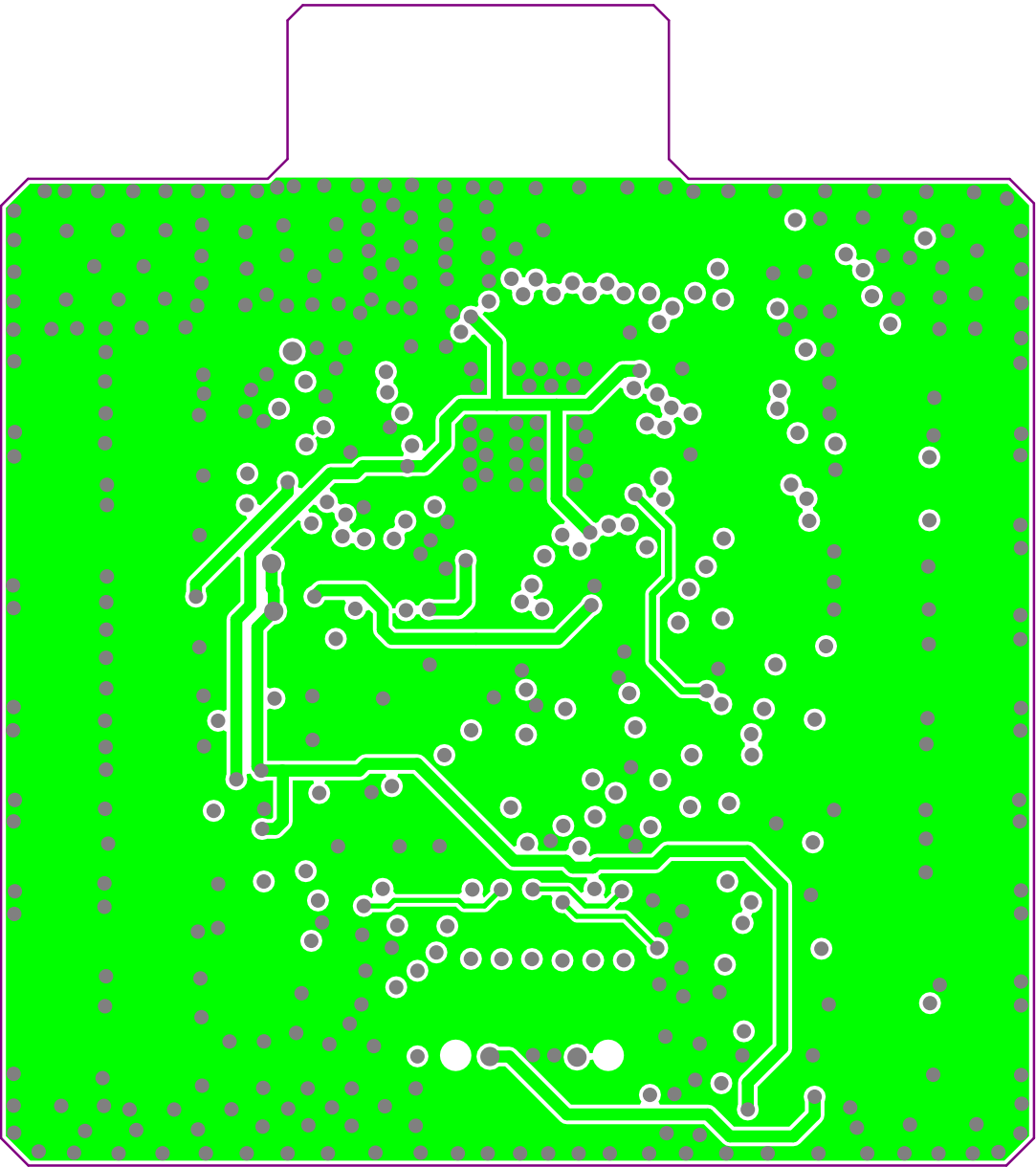
Project: MiniBoard_WBA5x_QFN48_SMPS_PCBAntenna		
Layer: Top Solder	Gerber: .GTS	
Variant: [No Variations]	Ref: MB1803	
Date: 24-August-2022	Rev: B	



Project: MiniBoard_WBA5x_QFN48_SMPS_PCBAntenna		
Layer: Top Layer	Gerber: .GTL	
Variant: [No Variations]	Ref: MB1803	
Date: 24-August-2022	Rev: B	

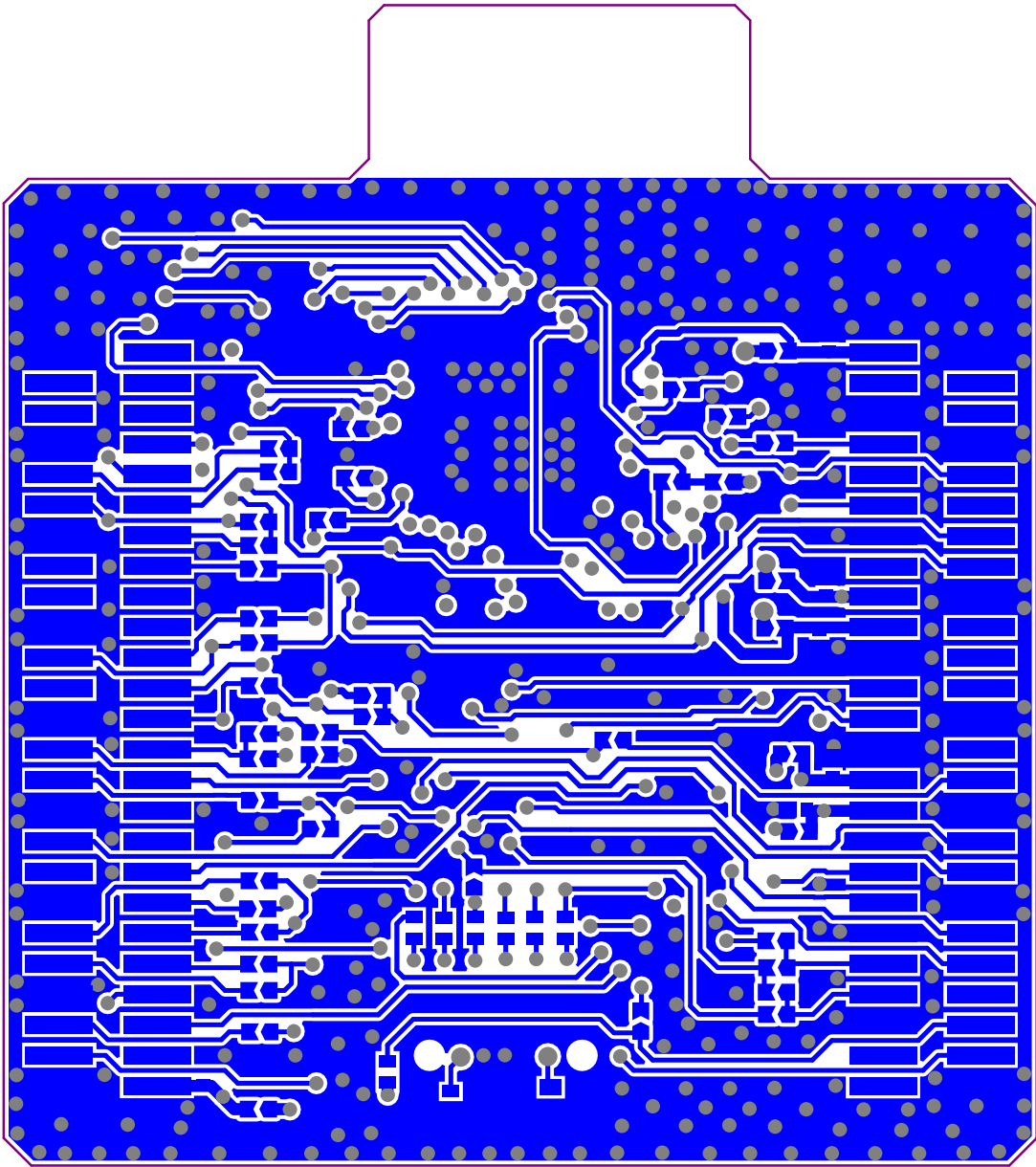


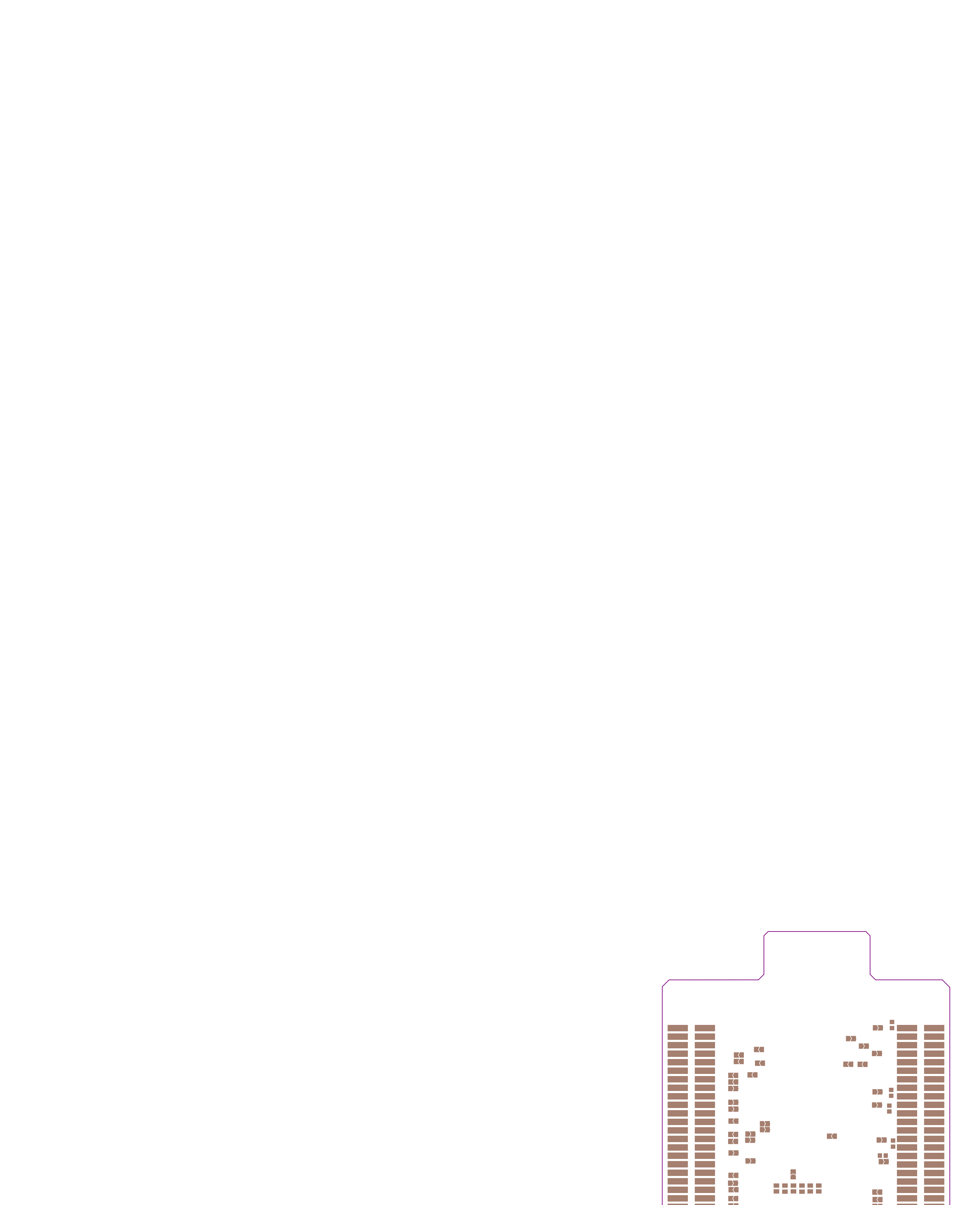
Project: MiniBoard_WBA5x_QFN48_SMPS_PCBAntenna		
Layer: Internal 1	Gerber: .G1	
Variant: [No Variations]	Ref: MB1803	
Date: 24-August-2022	Rev: B	



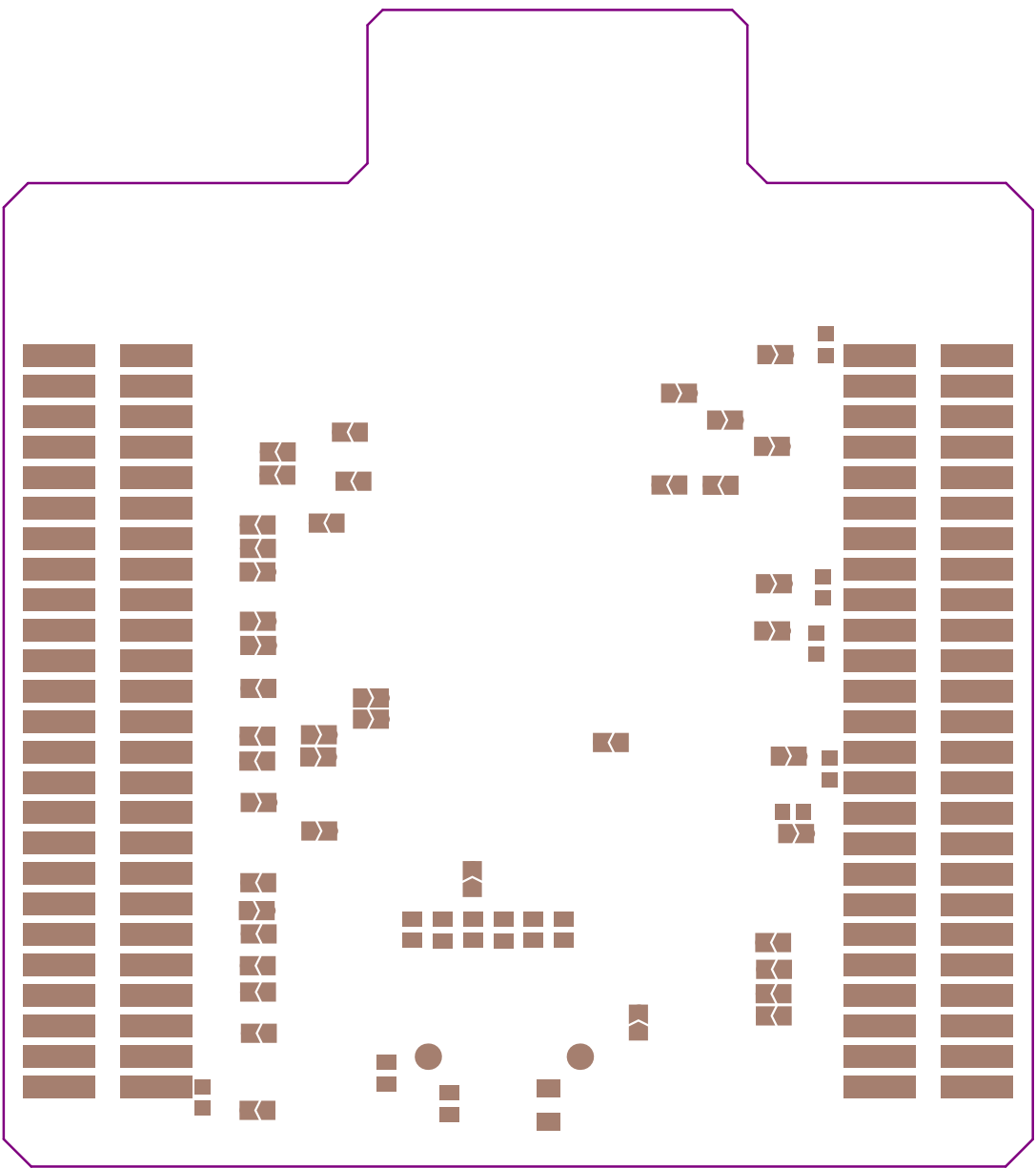
Project: MiniBoard_WBA5x_QFN48_SMPS_PCBAntenna		
Layer: Internal 2	Gerber: .G2	
Variant: [No Variations]	Ref: MB1803	
Date: 24-August-2022	Rev: B	

Project: MiniBoard_WBA5x_QFN48_SMPS_PCBAntenna		
Layer: Bottom Layer	Gerber:.GBL	
Variant: [No Variations]	Ref: MB1803	
Date: 24-August-2022	Rev: B	

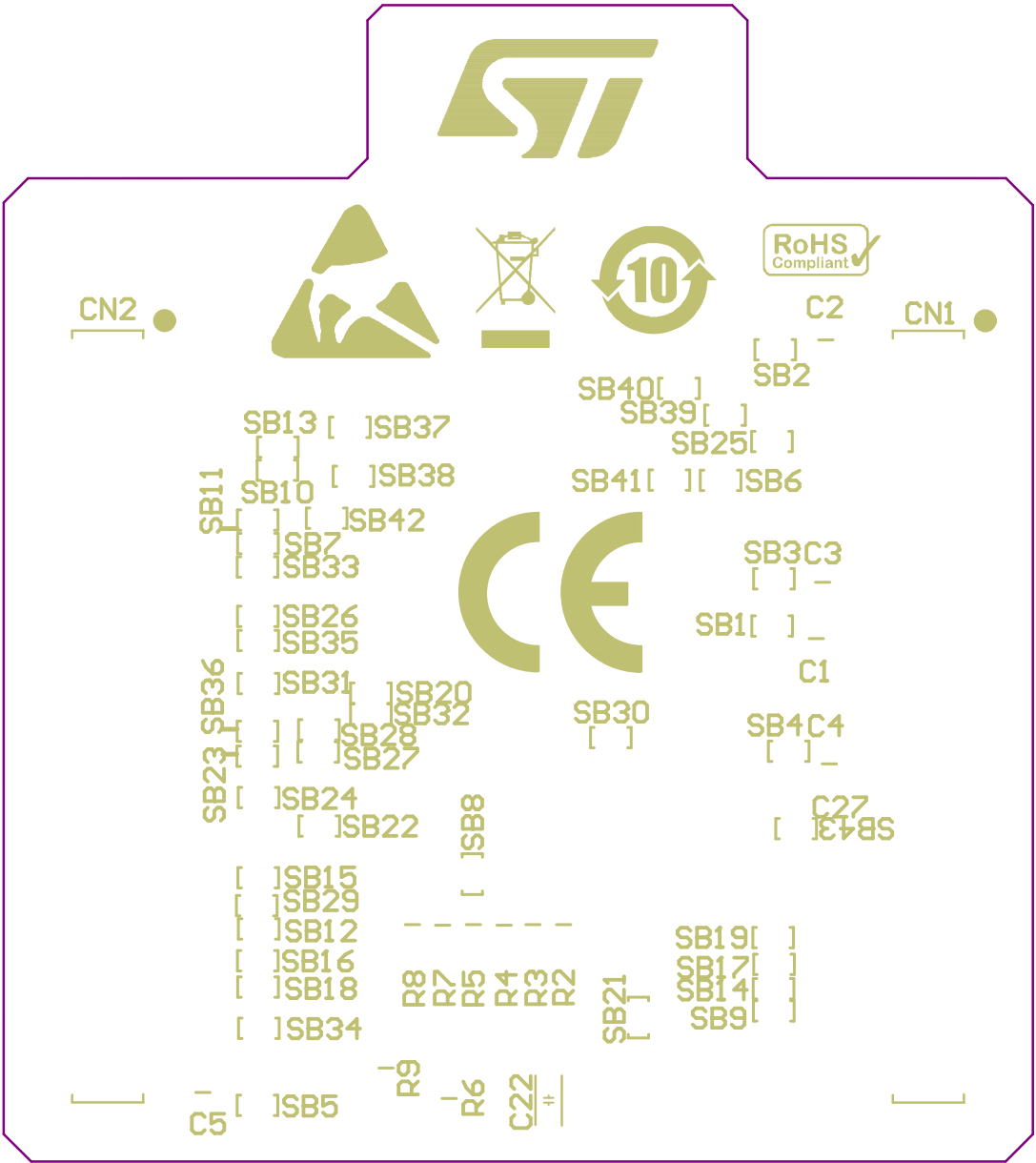




Project: MiniBoard_WBA5x_QFN48_SMPS_PCBAntenna		
Layer: Bottom Solder	Gerber:.GBS	
Variant: [No Variations]	Ref: MB1803	
Date: 24-August-2022	Rev: B	



Project: MiniBoard_WBA5x_QFN48_SMPS_PCBAntenna		
Layer: Bottom Overlay	Gerber:.GBO	
Variant: [No Variations]	Ref: MB1803	
Date: 24-August-2022	Rev: B	



IMPEDANCE TABLE					
LAYER	TRACE mils	SPACING mils	IMPEDANCE (Single ended)	IMPEDANCE (Differentiel)	TOL.
TOP	17.716	5.118	50 ohm	NA	+/- 10%

PCB SPECIFICATIONS :

A. MATERIAL :

FR-4

☒ TG-170

☐ TG-150

☐ TG-140

B. MATERIAL FAMILY :

N/A

C. SOLDERMASK COLOR :

☐ GREEN

☒ BLUE

☐ RED

☐ BLACK

D. SILKSCREEN COLOR :

☒ WHITE

☐ YELLOW

☐ BLACK

E. SURFACE FINISH :

☒ ENIG

☐ IMMERSION SILVER

☐ IMMERSION TIN

☐ HASL

☐ HASL (PB-FREE)

☐ GOLDEN FINGER

☐ F. IMPEDANCE CONTROL :

☐ NO

☒ YES (SEE IMPEDANCE TABLE FOR DETAIL INFORMATION)

G. THROUGH VIA :

PLUG THE VIAS WHICH ARE COVERED WITH SOLDERMASK ONE OR TWO SIDE.

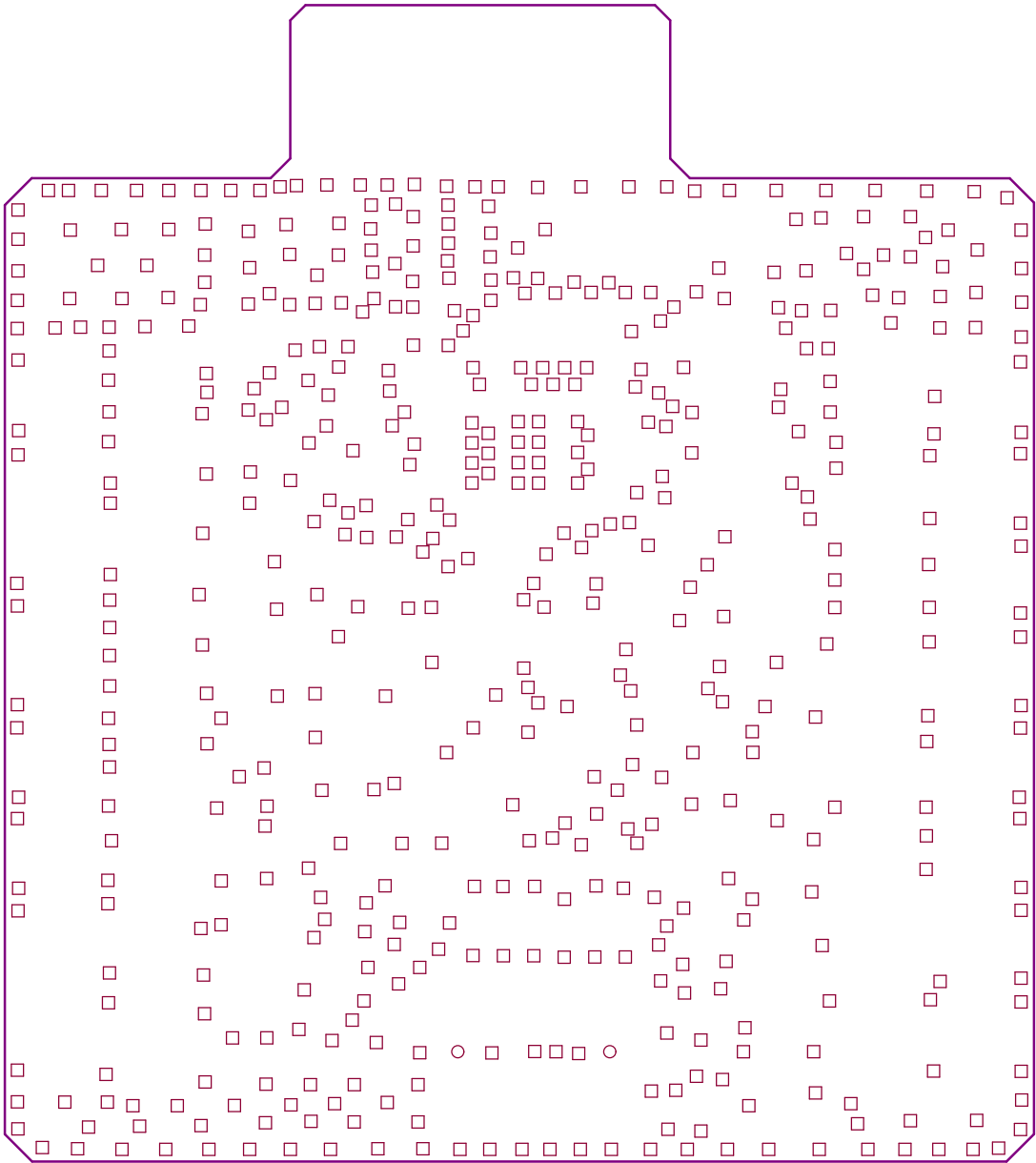
PLUG MATERIAL : ☒ SOLDERMASK ☐ NON-CONDUCTIVE EPOXY.

☐ H. STACK-UP :

SEE LAYER STACK-UP SEQUENCE FOR OVERALL THICKNESS.

Layer	Name	Material	Thickness	Constant	Board Layer Stack
	Top Overlay				
	Top Solder	Solder Resist	0.70mil	4.2	
1	Top Layer		1.60mil		
	Dielectric 1	FR-4	3.00mil	3.7	
2	Internal 1		1.20mil		
	Dielectric 3		50.00mil	4.5	
3	Internal 2		1.20mil		
	Dielectric 2		3.00mil	3.7	
4	Bottom Layer		1.60mil		
	Bottom Solder	Solder Resist	0.70mil	4.2	
	Bottom Overlay				

Symbol	Count	Hole Size	Plated	Hole Type	Drill Layer Pair	Via/Pad	Pad Shape	Template	Description
	511	11.81mil (0.30mm)	PTH	Round	Top Layer - Bottom Layer	Via	Rounded	(Mixed)	
	2	39.37mil (1.00mm)	NPTH	Round	Top Layer - Bottom Layer	Pad	Rounded	c0hn100m105p-1	
	513 Total								



Project: MiniBoard_WBA5x_QFN48_SMPS_PCB		
Layer: Drill Drawing	Gerber: .DRL	
Variant: [No Variations]	Ref: MB1803	
Date: 24-August-2022	Rev: B	