
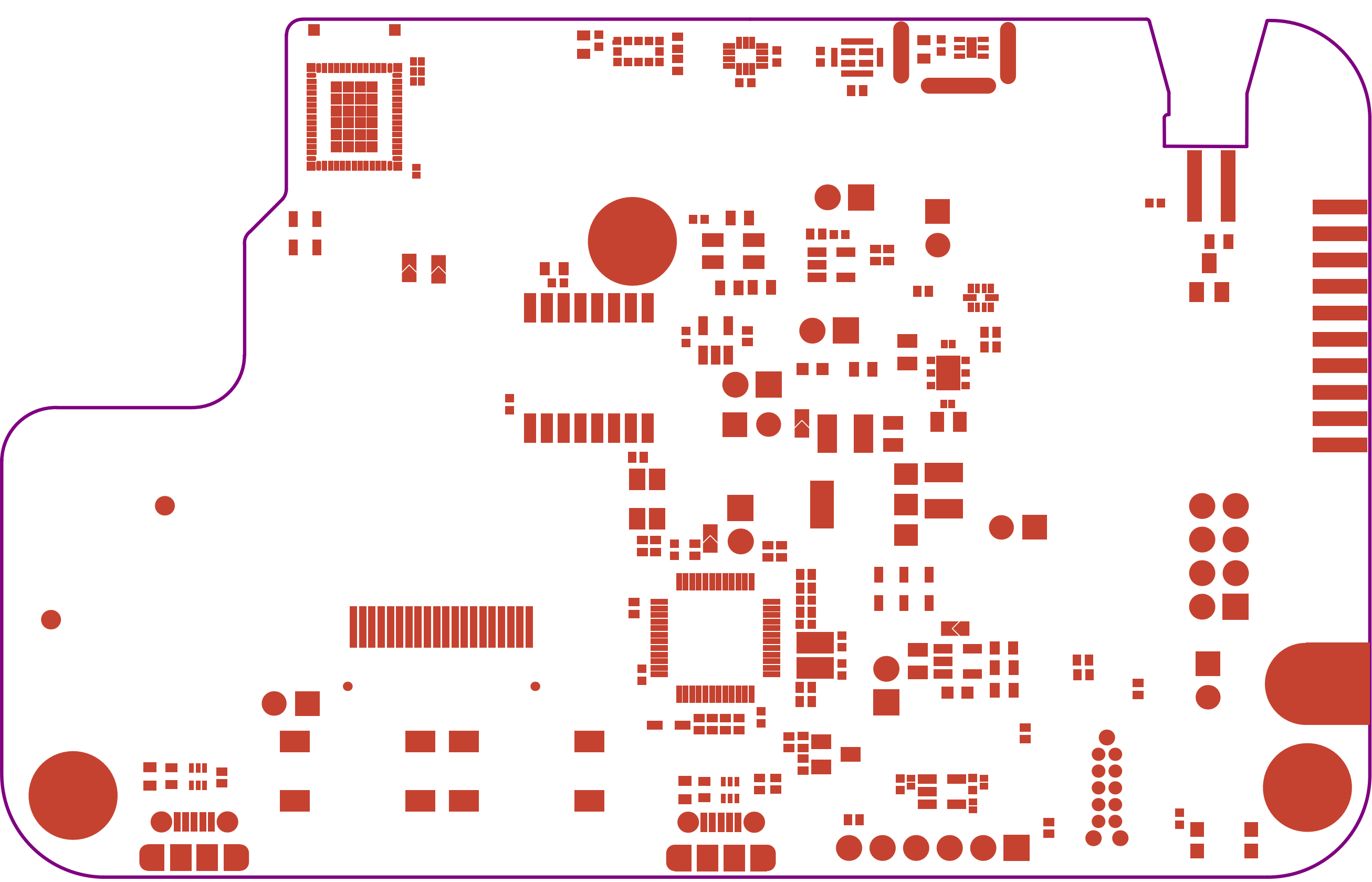

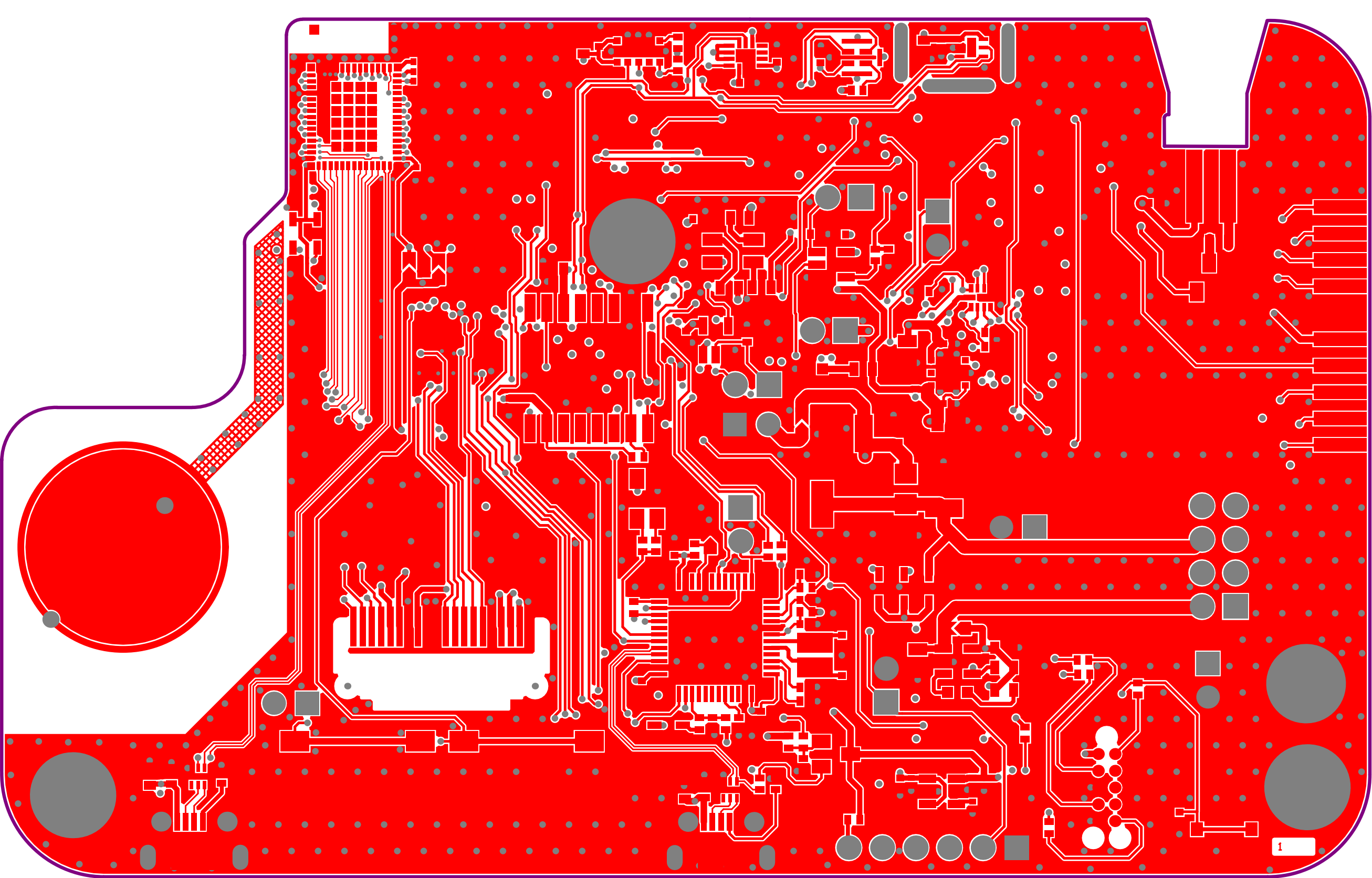



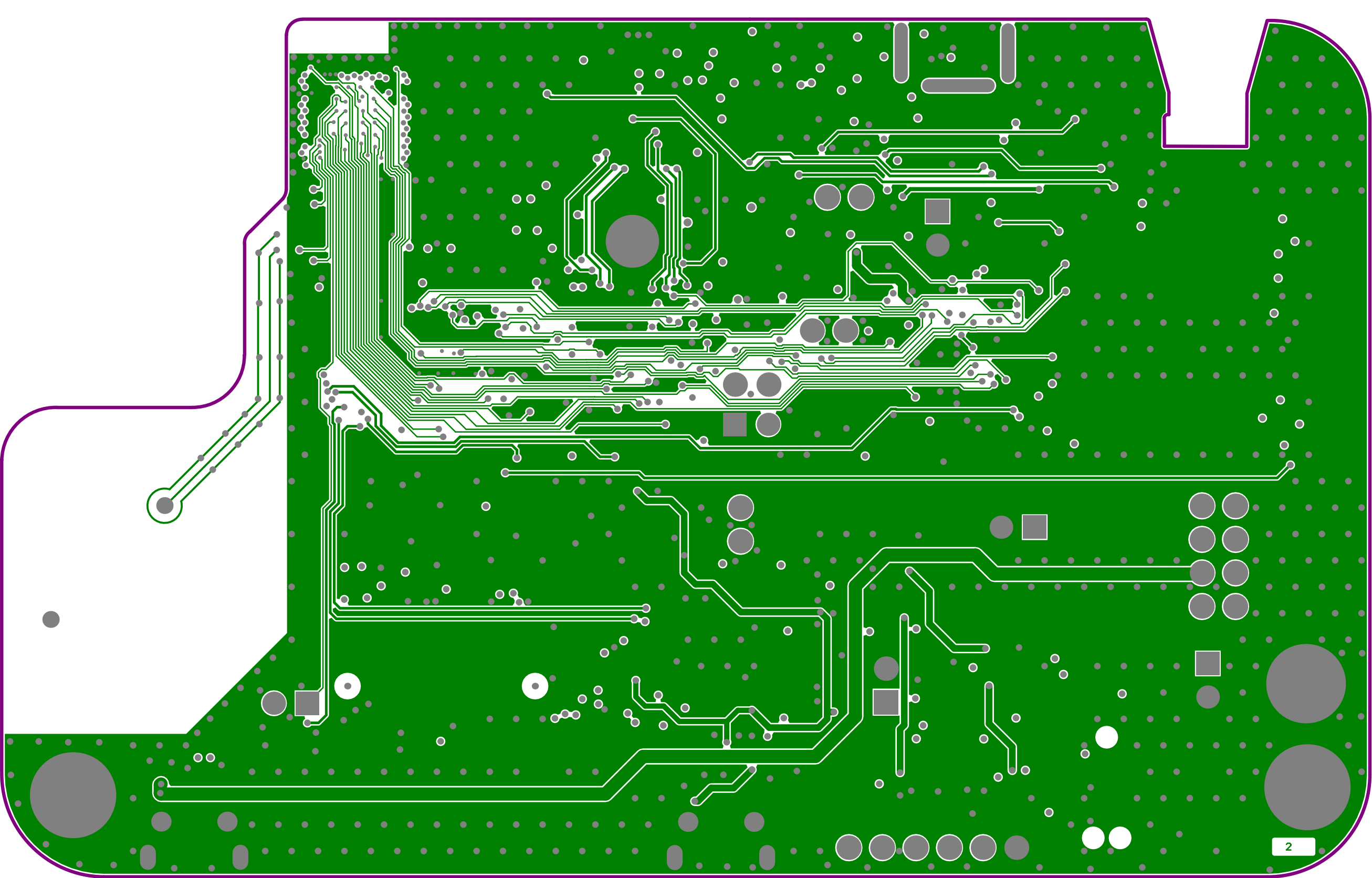
Project: STM32WB5MM Discovery Kit		
Layer: Top Overlay	Gerber: .GTO	
Variant: [No Variations]	Ref: MB1292	
Date: 27-Nov-20	Rev: B	




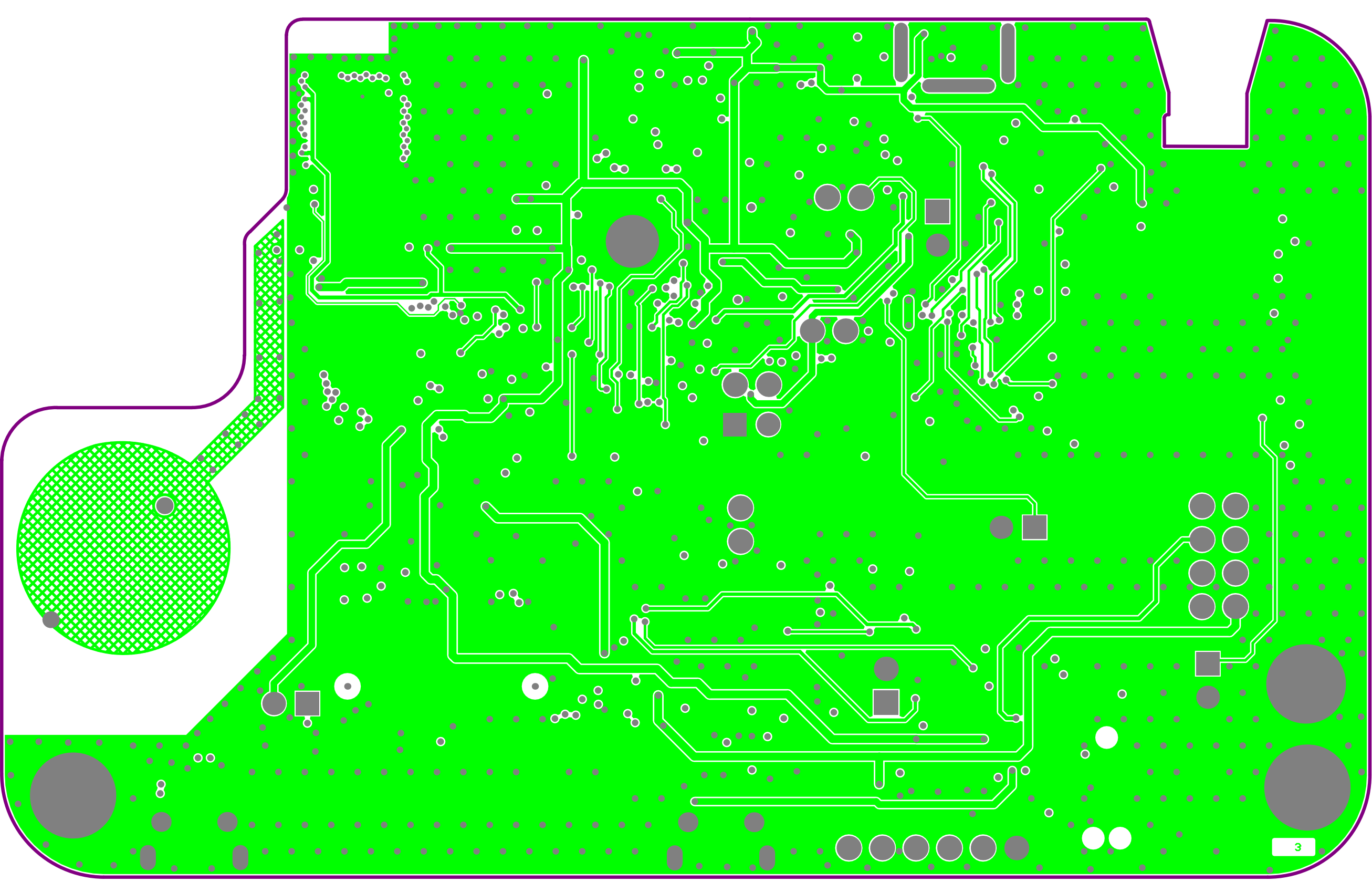
Project: STM32WB5MM Discovery Kit		
Layer: Top Solder	Gerber: .GTS	
Variant: [No Variations]	Ref: MB1292	
Date: 27-Nov-20	Rev: B	




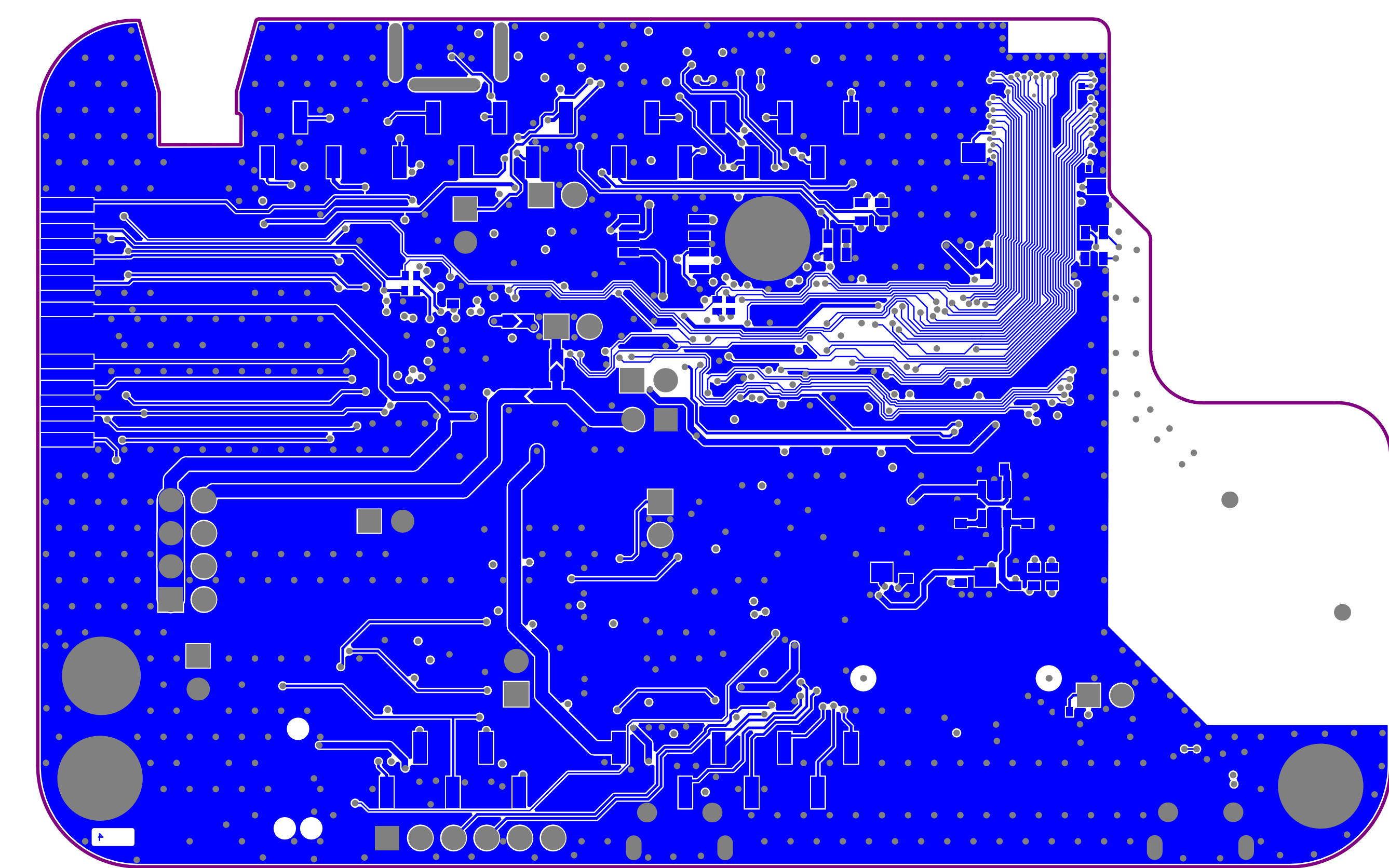
Project: STM32WB5MM Discovery Kit		
Layer: L1	Gerber: .GTL	
Variant: [No Variations]	Ref: MB1292	
Date: 27-Nov-20	Rev: B	




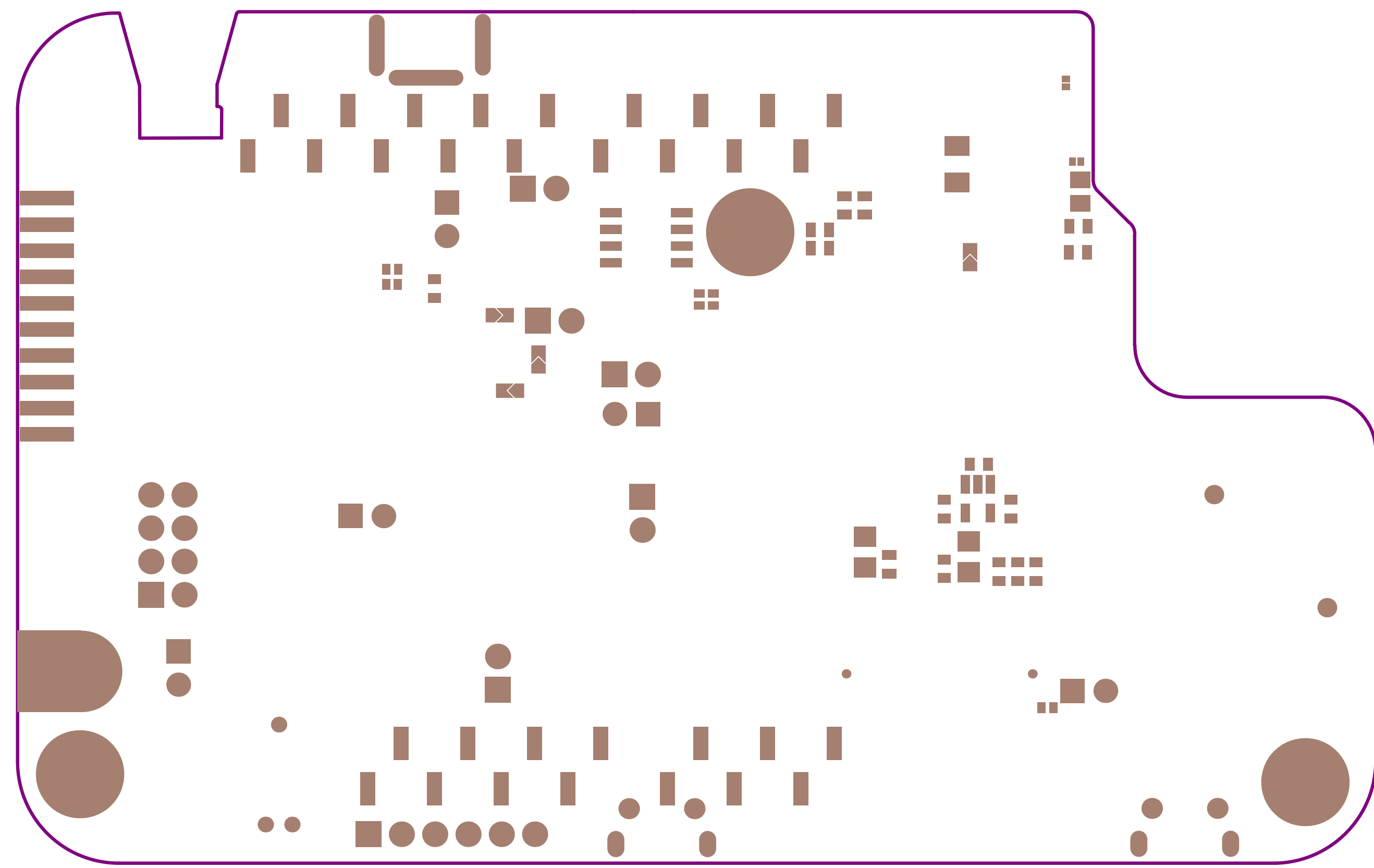
Project: STM32WB5MM Discovery Kit		
Layer: L2	Gerber: .G1	
Variant: [No Variations]	Ref: MB1292	
Date: 27-Nov-20	Rev: B	




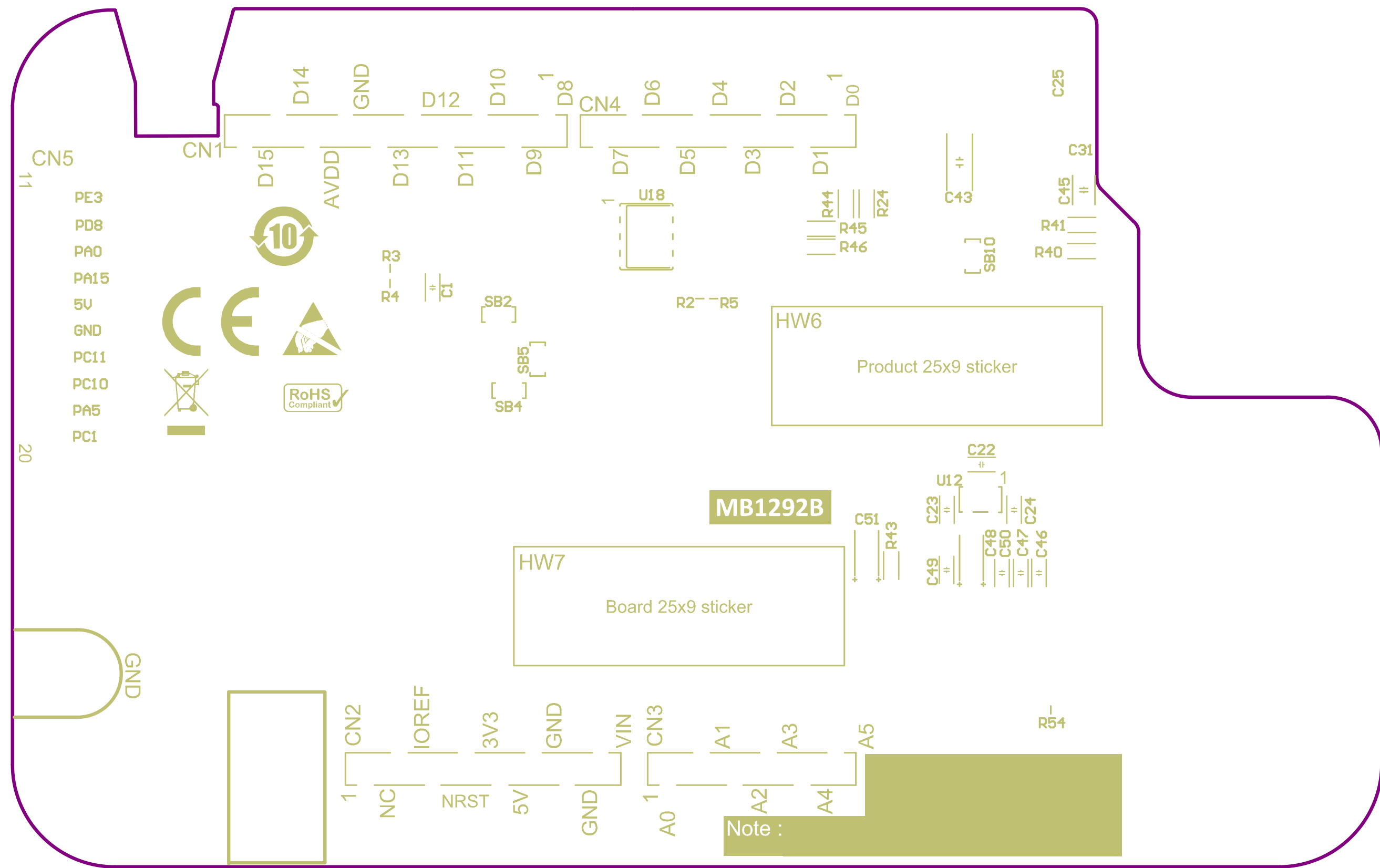
Project: STM32WB5MM Discovery Kit		
Layer: L3	Gerber: .G2	
Variant: [No Variations]	Ref: MB1292	
Date: 27-Nov-20	Rev: B	




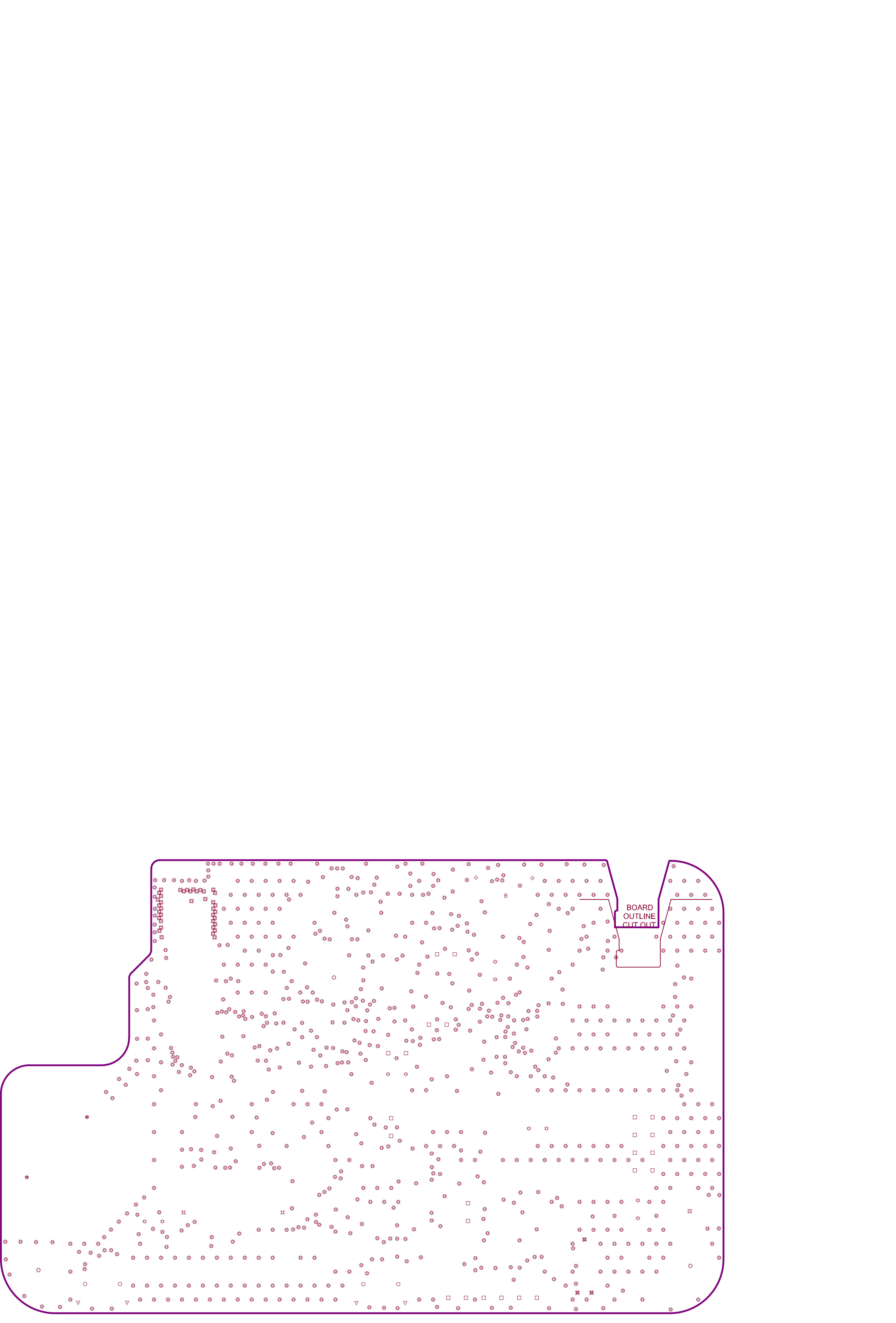
Project: STM32WB5MM Discovery Kit		
Layer: L4	Gerber: .GBL	
Variant: [No Variations]	Ref: MB1292	
Date: 27-Nov-20	Rev: B	



Project: STM32WB5MM Discovery Kit		
Layer: Bottom Solder	Gerber: .GBS	
Variant: [No Variations]	Ref: MB1292	
Date: 27-Nov-20	Rev: B	



Project: STM32WB5MM Discovery Kit		
Layer: Bottom Overlay	Gerber: GBO	
Variant: [No Variations]	Ref: MB1292	
Date: 27-Nov-20	Rev: B	



PCB SPECIFICATIONS:

A. MATERIAL;

FR-4,

☐ TG-170

☐ TG-150

☒ TG-140

B. MATERIAL FAMILY;

N/A.

C. SOLDERMASK COLOR;

☐ GREEN

☒ BLUE

☐ RED

☐ BLACK

☐ WHITE

D. SILKSCREEN COLOR;

☒ WHITE

☐ YELLOW

☐ BLACK

☐ BLUE

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.

PCB REQUIREMENTS:

1. THIS BOARD WILL CONFORM TO:
IPC-A-600. CURRENT REV., CLASS II
IPC-6012, CURRENT REV., CLASS II
2. UNLESS OTHERWISE SPECIFIED ALL HOLE DIMENSIONS APPLY AFTER PLATING.
ALL HOLES SHALL BE LOCATED WITHIN .003" DIAMETER OF TRUE POSITION.
3. PLATED HOLE WALL THICKNESS SHALL NOT BE LESS THAN .001 INCH MINIMUM
AVERAGE, WITH NO READING LESS THAN .0008 BY COROSS SECTION.
4. MATERIAL FR4 RATING 94V-0 MINIMUM EPOXY GLASS LAMINATE.
5. BOARD SHALL BE LPI SOLDER MASKED OVER BARE COPPER BOTH SIDES PER
IPC-SM-840 CLASS II.
6. SILKSCREEN SHALL BE PERMANENT NON-CONDUCTIVE INK AND WITH NO OVERLAP
ON ANY COMPONENT PAD OR THROUGH HOLE.
7. MFGR, TO LEGIBLY ETCH OR STAMP/SCREEN WITH PERMANENT NON-CONDUCTIVE INK

A. U.L. CODE

B. DATE CODE

C. FLAMMABILITY RATING

D. MFGR. LOGO

E. SUCCESSFUL ELECTRICAL BOARD TEST.
8. REMOVE THE FLASHS WHICH SMALLER THAN HOLE SIZE.
9. REMOVE ALL SHAPE EDGES AND BURRS .005 MAXIMUM.
10. PLEASE USE THE SUPPLIED IPC 356 NETLIST TO VERIFY BOARD BEFORE
FABRICATING BOARD.

Layer	Name	Material	Thickness	Constant	Board Layer Stack	Board Layer Stack	Board Layer Stack	Board Layer Stack	Board Layer Stack	Board Layer Stack
	Top Overlay									
	Top Solder	Solder Resist	0,59mil	3,5						
1	L1	Copper	1,38mil							
	Dielectric 1	FR-4	2,76mil	4,2						
2	L2	Copper	1,42mil							
	Dielectric 3		48,43mil	4,2						
3	L3	Copper	1,42mil							
	Dielectric 2		2,76mil	4,2						
4	L4	Copper	1,38mil							
	Bottom Solder	Solder Resist	0,59mil	3,5						
	Bottom Overlay									

Project: STM32WB5MM Discovery Kit

Layer: Drill Drawing

Variant: [No Variations]

Date: 27-Nov-20

Gerber: .DRL

Ref: MB1292

Rev: B

Symbol	Count	Hole Size	Plated	Hole Type	Drill Layer Pair	Via/Pad	Pad Shape	Template	Description	Hole Tolerance (+)	Hole Tolerance (-)	Hole Length	Routed Path Length
B	1	1,00mm (39,37mil)	NPTH	Slot	L1 - L4	Pad	Rounded	r100_550hn100_550r100				5,50mm (216,54mil)	4,50mm (177,17mil)
⊗	1	4,50mm (177,17mil)	PTH	Round	L1 - L4	Pad	Rounded	c600h450				-	-
✱	2	0,75mm (29,53mil)	PTH	Round	L1 - L4	Pad	Rounded	c127h75				-	-
✱	2	0,80mm (31,50mil)	NPTH	Round	L1 - L4	Pad	Rounded	c50hn80				-	-
◇	2	1,00mm (39,37mil)	NPTH	Slot	L1 - L4	Pad	Rounded	r100_450hn100_450r100				4,50mm (177,17mil)	3,50mm (137,79mil)
⊗	3	1,10mm (43,31mil)	NPTH	Round	L1 - L4	Pad	Rounded	c0hn110m115				-	-
⊕	3	3,30mm (129,92mil)	PTH	Round	L1 - L4	Pad	Rounded	(Mixed)				-	-
▽	4	0,60mm (23,62mil)	PTH	Slot	L1 - L4	Pad	Rounded	r190_120h60_130r100m195_125				1,30mm (51,18mil)	0,70mm (27,56mil)
○	4	0,90mm (35,43mil)	PTH	Round	L1 - L4	Pad	Rounded	c150h90m155				-	-
✱	10	1,05mm (41,34mil)	PTH	Round	L1 - L4	Pad	(Mixed)	(Mixed)				-	-
□	24	1,00mm (39,37mil)	PTH	Round	L1 - L4	Pad	(Mixed)	(Mixed)				-	-
■	38	0,20mm (7,87mil)	PTH	Round	L1 - L4	Via	Rounded	(Mixed)				-	-
⊙	880	0,30mm (11,81mil)	PTH	Round	L1 - L4	Via	Rounded	(Mixed)				-	-
	974 Total												

Slot definitions : Routed Path Length = Calculated from tool start centre position to tool end centre position.
Hole Length = Routed Path Length + Tool Size = Slot length as defined in the PCB layout