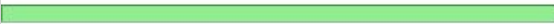
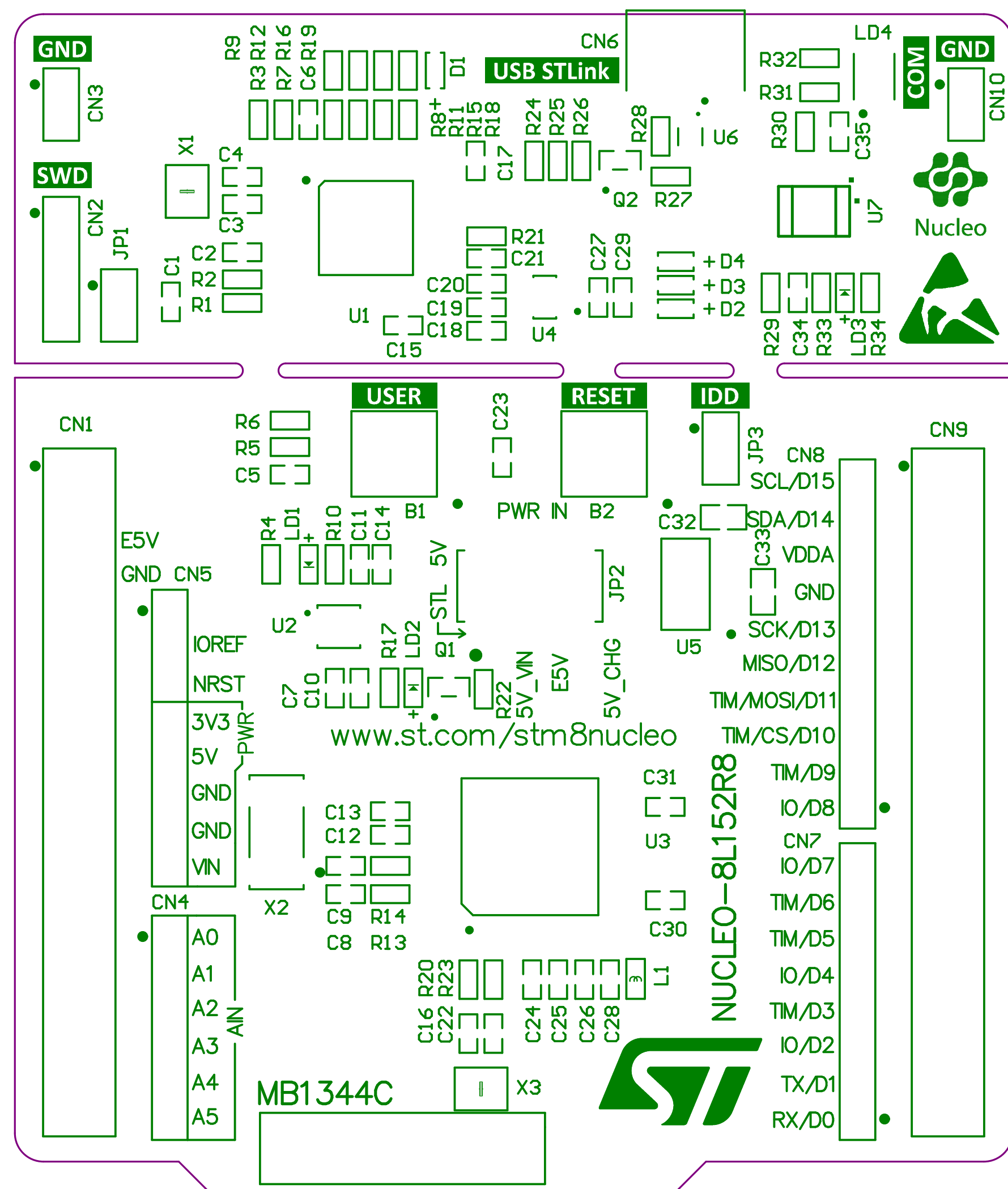


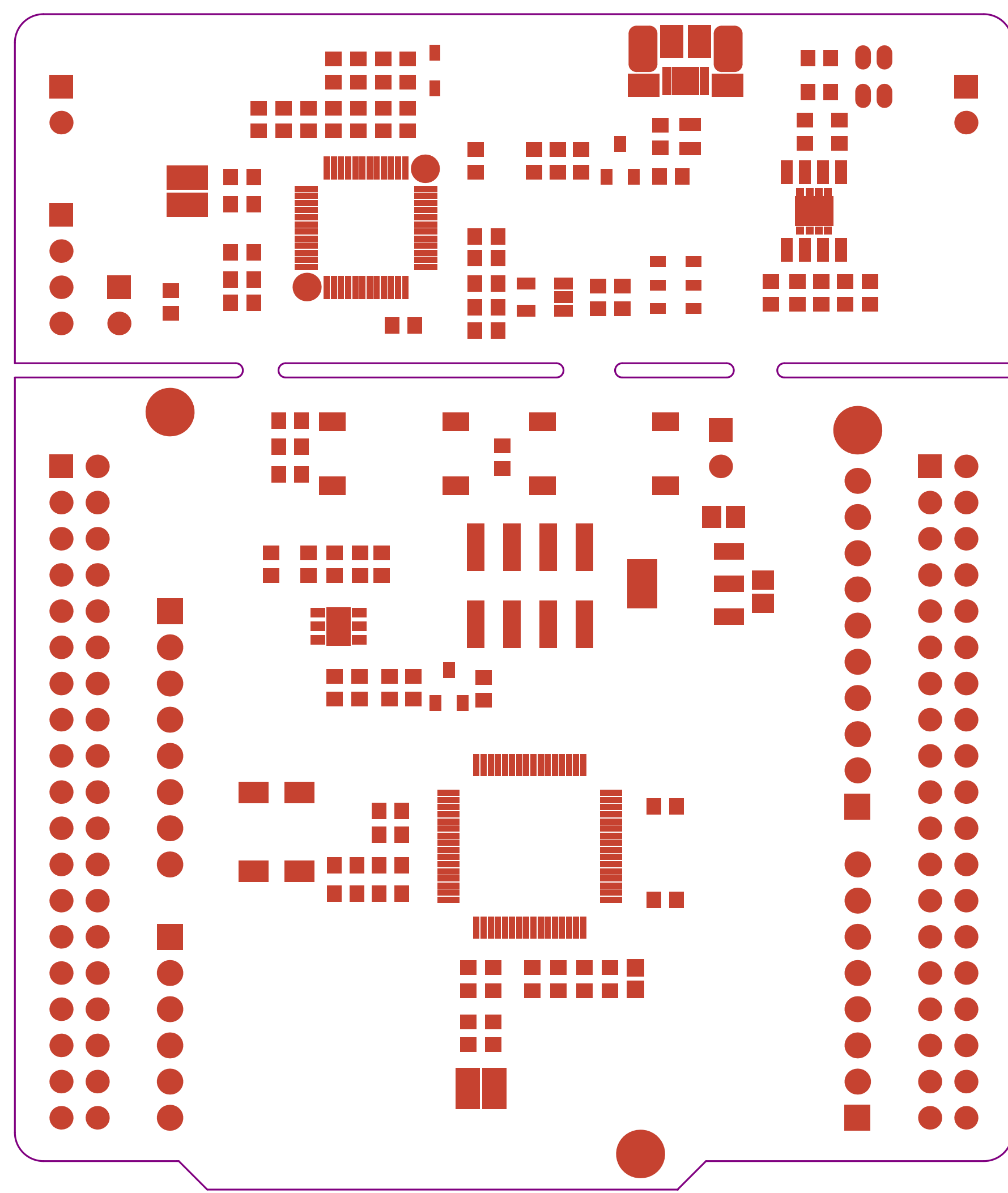
Board Stack Report

Stack Up		Layer Stack			
Layer	Board Layer Stack	Name	Material	Thickness	Constant
1		Top Paste			
2		Top Overlay			
3	  	Top Solder	Solder Resist	0,015mm	3,5
4	  	Top Layer	Copper	0,035mm	
5		Dielectric 1	FR-4	1,500mm	4,8
6	  	Bottom Layer	Copper	0,035mm	
7		Bottom Solder	Solder Resist	0,015mm	3,5
8		Bottom Overlay			
9		Bottom Paste			
	Height : 1,600mm				



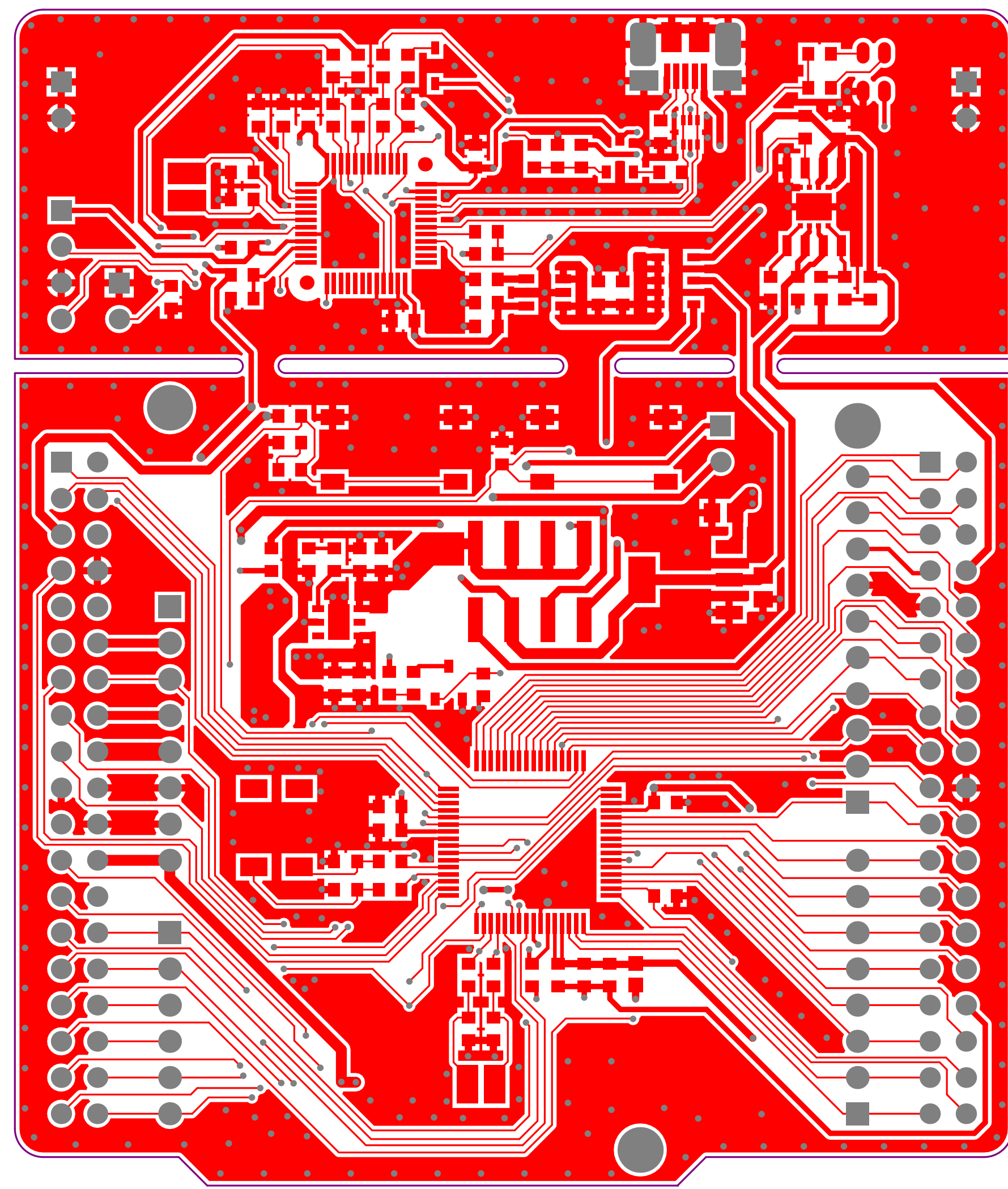
Top Overlay

.GTO



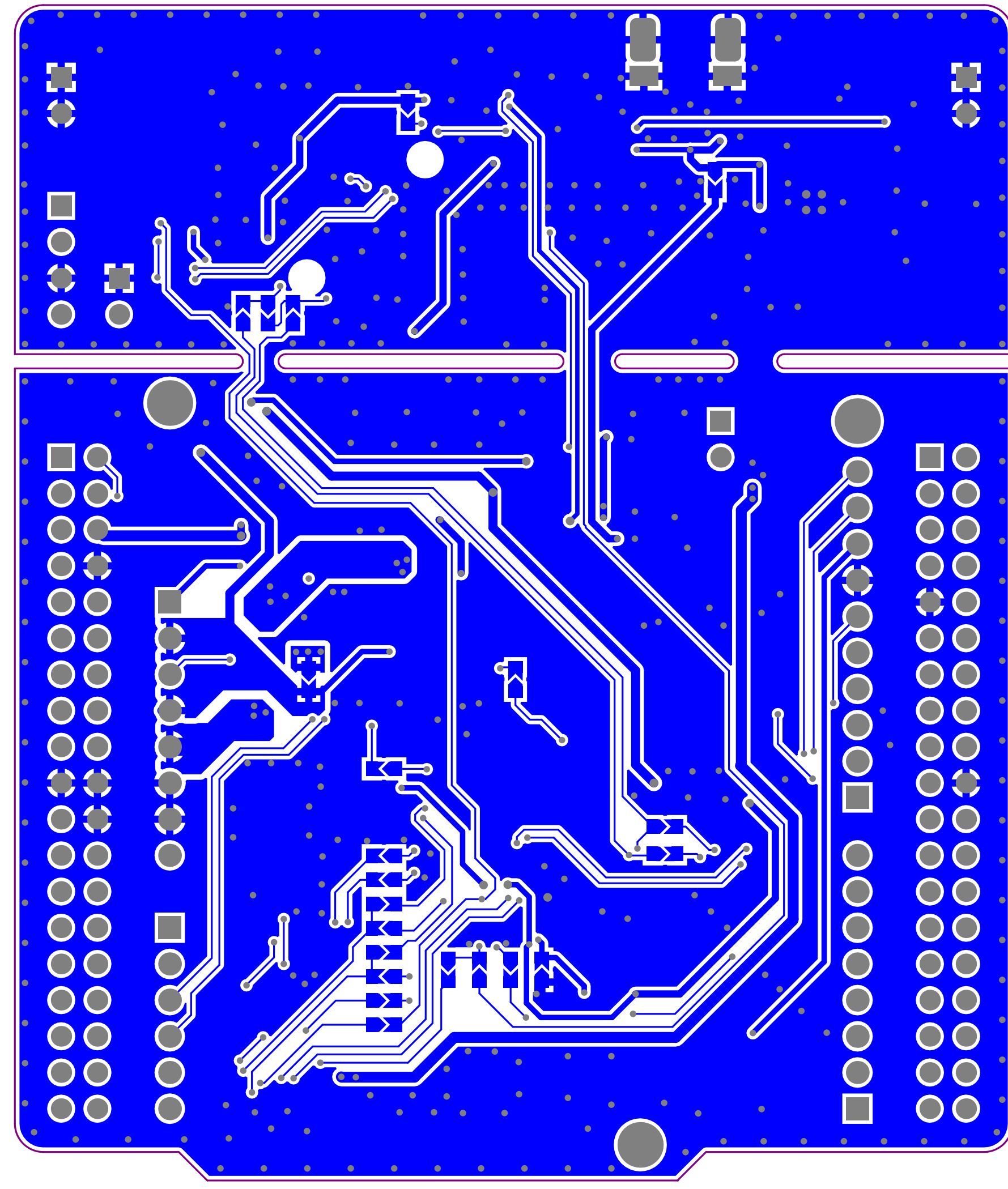
Top Solder

.GTS

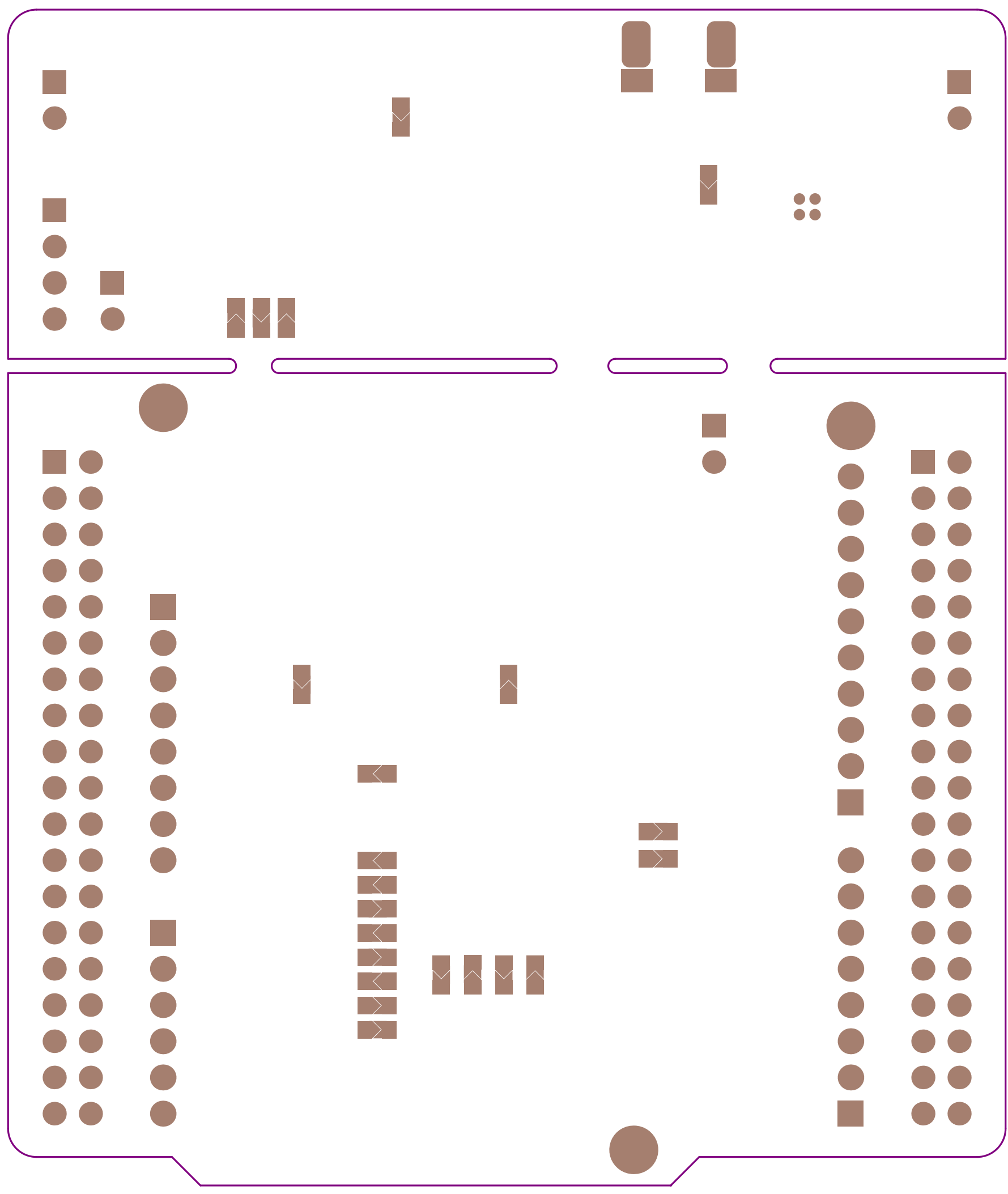


Top Layer

.GTL

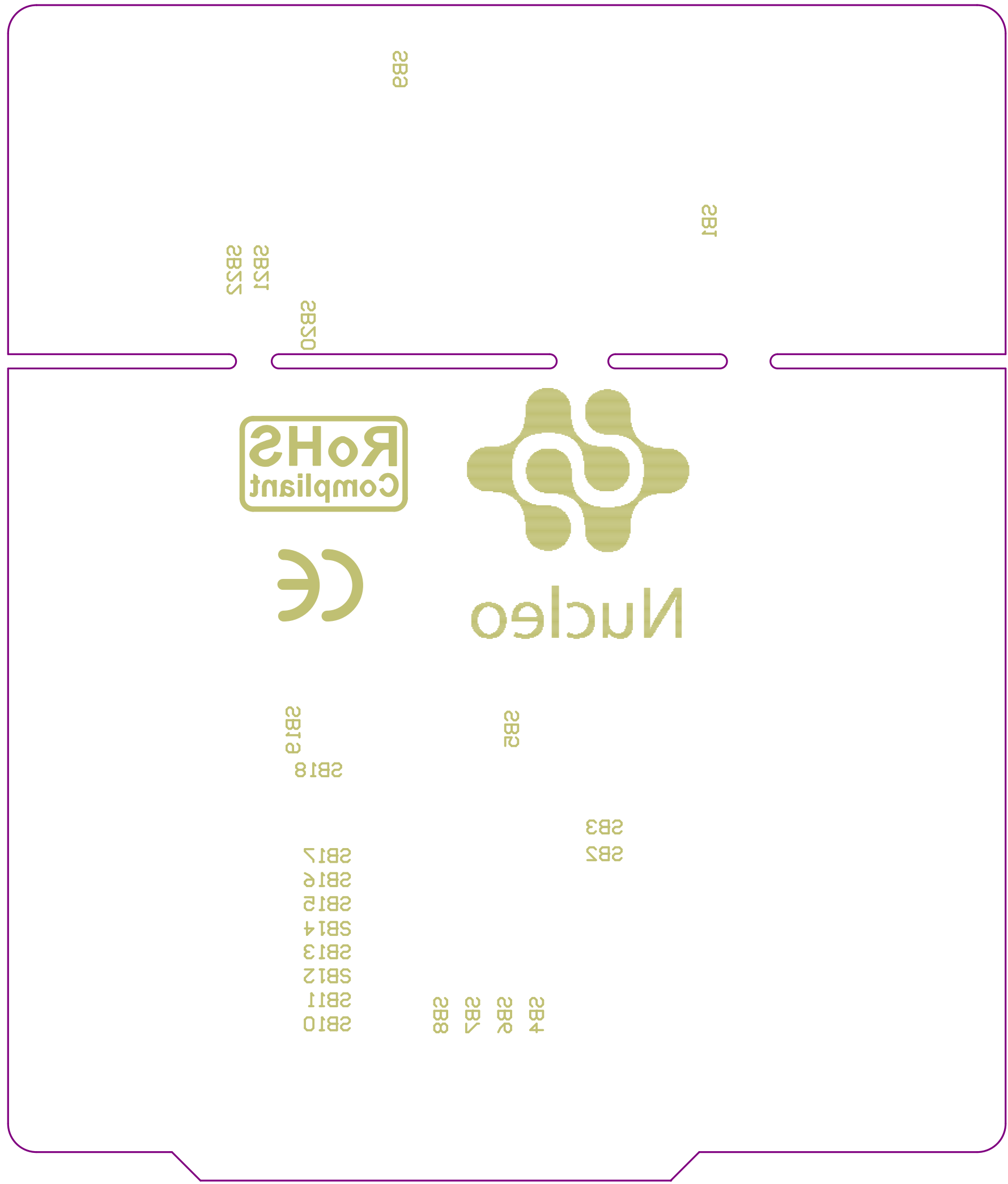


Bottom Layer
.GBL



GBS.

Bottom Solver

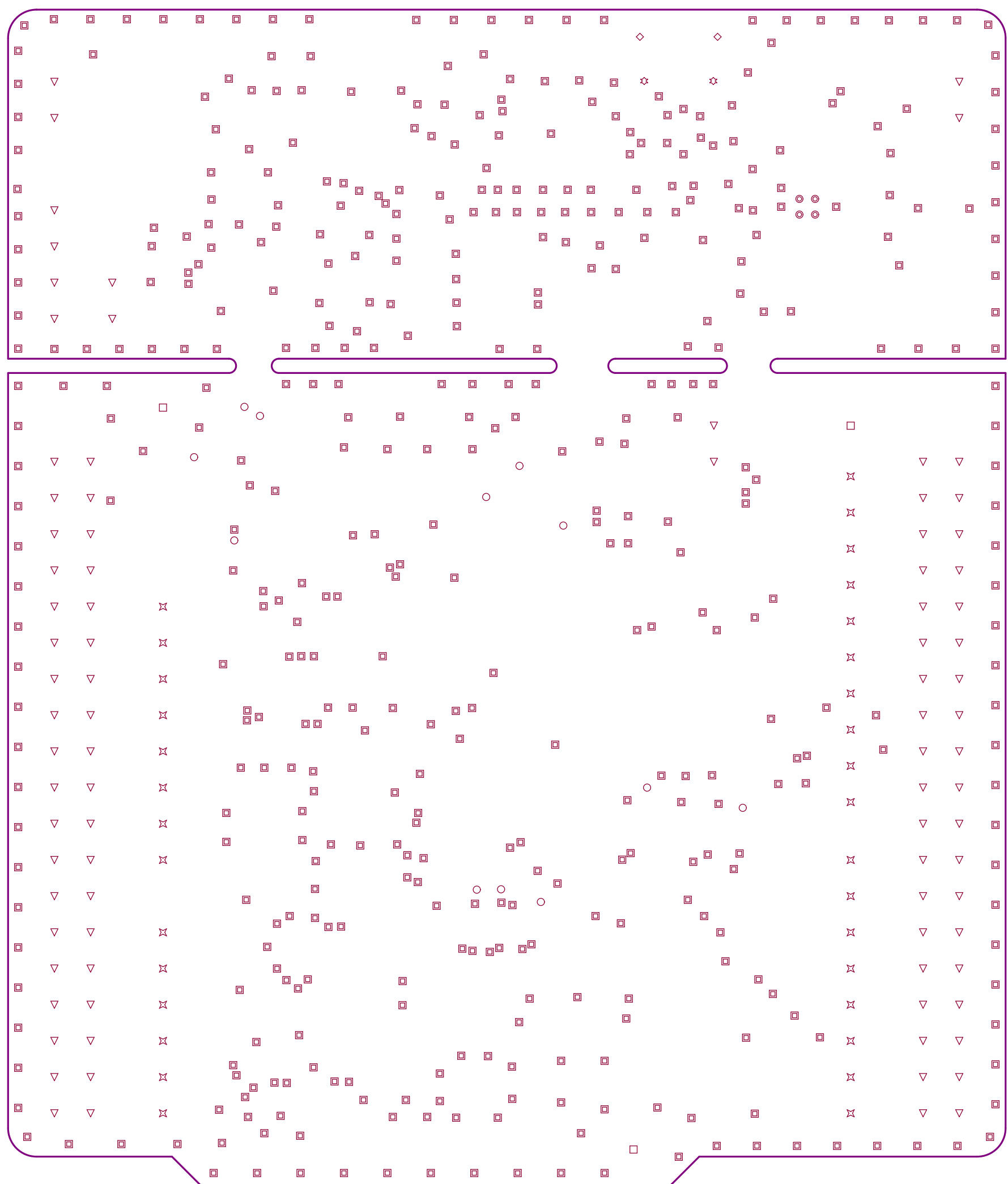


Bottom Overlay .GBO

LAYERS LAMINATION & IMPENDANCE CONTROL

LAYERS STACKUP	IMPEDANCE						
	LAYER	MATERIAL	THICKNESS	LAYER TYPE	SINGLE 50ohm+/-10% Line width(mil)	DIFFERENCE 90ohm-/+10% Line width/Space(mil)	DIFFERENCE 100ohm-/+10% Line width/Space(mil)
	TOP	COPPER	1 OZ	ROUTING	5mil	mil	mil
	PREPREG	FR4	4.3mil				
LAYERS STACKUP							
	BOTTOM	COPPER	1 OZ	PLANE	5mil		

THE TOTAL THICKNESS: 1.6MM+/-10%



Symbol	Count	Hole Size	Plated	Hole Type	Hole Length
⊙	4	7,87mil (0,200mm)	PTH	Round	-
■	474	10,00mil (0,254mm)	PTH	Round	-
○	12	12,00mil (0,305mm)	PTH	Round	-
✱	2	23,62mil (0,600mm)	PTH	Slot	41,34mil (1,050mm)
◇	2	23,62mil (0,600mm)	PTH	Slot	47,24mil (1,200mm)
▽	88	37,40mil (0,950mm)	PTH	Round	-
⌵	32	40,16mil (1,020mm)	PTH	Round	-
□	3	125,98mil (3,200mm)	NPTH	Round	-
617 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

REVISIONS

REV	ACTION	DATE	AUTH
A	First release	2017/05/25	Amy Kuang
C	second release	2017/09/05	Amy Kuang

NOTE

- ACCEPTABILITY:
PRINTED WIRING BOARD SHALL MEET THE REQUIREMENTS OF IPC- 6012C CLASS 2.
- MATERIAL:
GLASS EPOXY FR-4 FIRE RETARDANT AND UL 94V-0 RATING MATERIAL SHOULD MEET IPC-4101C
- FABRICATION REQUIREMENTS:
A). FAB TO MEET THE REQUIREMENTS PER IPC-A-600, CLASS 2
B). ALL ARTWORK OR ELECTRONIC DATA MAY BE ADJUSTED BY THE BOARD MANUFACTURER TO COMPENSATE FOR MANUFACTURING PROCESS TOLERANCES, ADDITION OF FILLETS TEARDROPS AT LINE / PAD INTERFACE IS PREFERRED. THIEVING IS ALLOWED TO COMPENSATE FOR HIGH COPPER DENSITY AREAS
C). FABRICATE ACCORDING TO THE FILES PART NO: 1001001000655_STMBL_GERBER_RevC FILE FOR MANUFACTURING
D). SOLDER MASK COLOR: WHITE,SILKSCREEN COLOR:BLUE INK PANTONE 2955
E). FINISH:ENIG
- FABRICATION TOLERANCE:
A). WIRE WIDTH TOLERANCE: INTERNAL CONTROL STANDARD +/-20%
B). PTH DIAMETER TOLERANCE +/-0.076mm,NPTH DIAMETER TOLERANCE +/-0.05mm
C). ALL OUTER LAYER PADS REQUIRE +/-0.05mm TOLERANCE.
D). LAYER REGISTRATION BETWEEN ADJACENT LAYER MAXIMUM 150um, THE INTERLAYER DIELECTRIC THICKNESS TOLERANCE +/-15%
E). THICKNESS IS LESS THAN 1mm PCB TO A TOLERANCE OF +/-0.1mm,THICKNESS IS GREATER THAN OR EQUAL TO 1mm PCB TO A TOLERANCE OF +/-10%
- SOLDER MASK:
A). MATERIALS IN ACCORDANCE WITH IPC-SM-840E CLASS T STANDARDS AND ROHS REQUIREMENTS
B). SOLDER MASK BOTH PRIMARY AND SECONDARY SIDES, THE ADHESION OF SOLDER MASK MEET THE REQUIREMENTS OF IPC-A-600F LEVEL 2
C). SOLDER MASK COVERAGE ON THE MIDDLE OF THE COPPER WIRE MINIMUM 10um,EDGE COVERAGE OF THE COPPER WIRE MINIMUM 4um, SOLDER MASK MISREGISTRATION MAXIM 2.5mil
D). ALL HOLES WITH SOLDER MASK COVERED IN THE GERBER SHOULD BE PULGED
E). SOLDER MASK BRIDGE BETWEEN PADS SHOULD BE MINIMUM 0.10mm
- FINISH:
A). ENIG, GOLD THICKNESS IS 0.05 um ~0.23um,NICKEL THICKNESS IS 3 um ~6 um.
B). OSP, THE OSP COATING THICKNESS IS 0.2 um ~0.5um.
C). LF HASL, Sn THICKNESS IS 1 um ~40um .
- SILKSCREEN:
A). PRIMARY AND SECONDARY SIDES USING A GLOSSY , NON-CONDUCTIVE, RoHS COMPLIANT, EPOXY BASED INK
B). NO SILKSCREEN ALLOWED ON PADS OR IN HOLES
C). MANUFACTUREERS CAN ADD SYMBOL IN SILKSCREEN LAYER OR SOLDER MASK LAYER, ALLOW TO INCREASE SYMBOL :ASSEMBLY REF , DATE CODE, LEAD-FREE SYMBOL, UL FILE NUMBER,UL TYPE, UL SYMBOL AND FIRE RATING,NO LIST DOES NOT ALLOW TO INCREASE.
- BOW AND TWIST:
MAX BOW & TWIST OF PCB SHALL NOT EXCEED 0.75% OF MAXIMUM DIMENSION, MEASUREMENT METHOD IN 2.4.22 OF IPC-TM-650 IS FOR REFERENCE
- MEASUREMENTS:
INTERPRET ALL DIMENSIONS AND TOLERANCES PER IPC-D-300G, CLASS B AND ALL DIMENSIONS ARE METRIC, DIMENSIONS ARE AFTER ETCHING AND PLATING.
- ENVIRONMENTAL:
THE PCB SUPPLIER SHALL PROVIDE A SIGNED CERTIFICATE OF COMPLIANCE BY AUTHORIZED QA REPRESENTATIVE. THE BASE MATERIAL OF PCB SHALL NOT CONTAIN THE BANNED SUBSTANCES LISTED IN THE CERTIFICATE OF COMPLIANCE.

Embest Technology co.,Ltd.

TITLE: STMBL	
PART NUMBER: 1001001000655	ELEC ENGR: Andy Meng
ADD: www.embest-tech.com	REV: C
	DATE: 2017/09/05