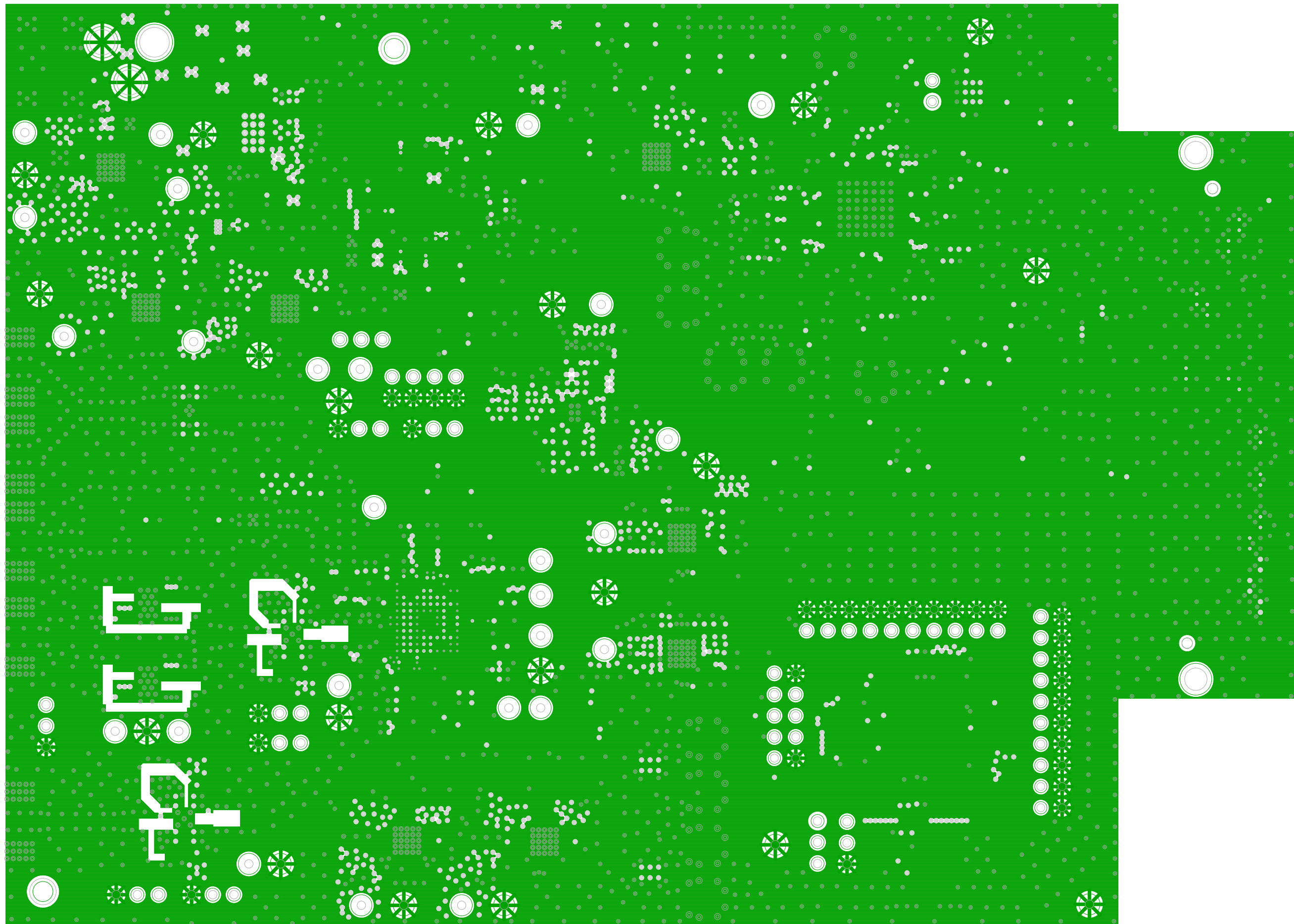
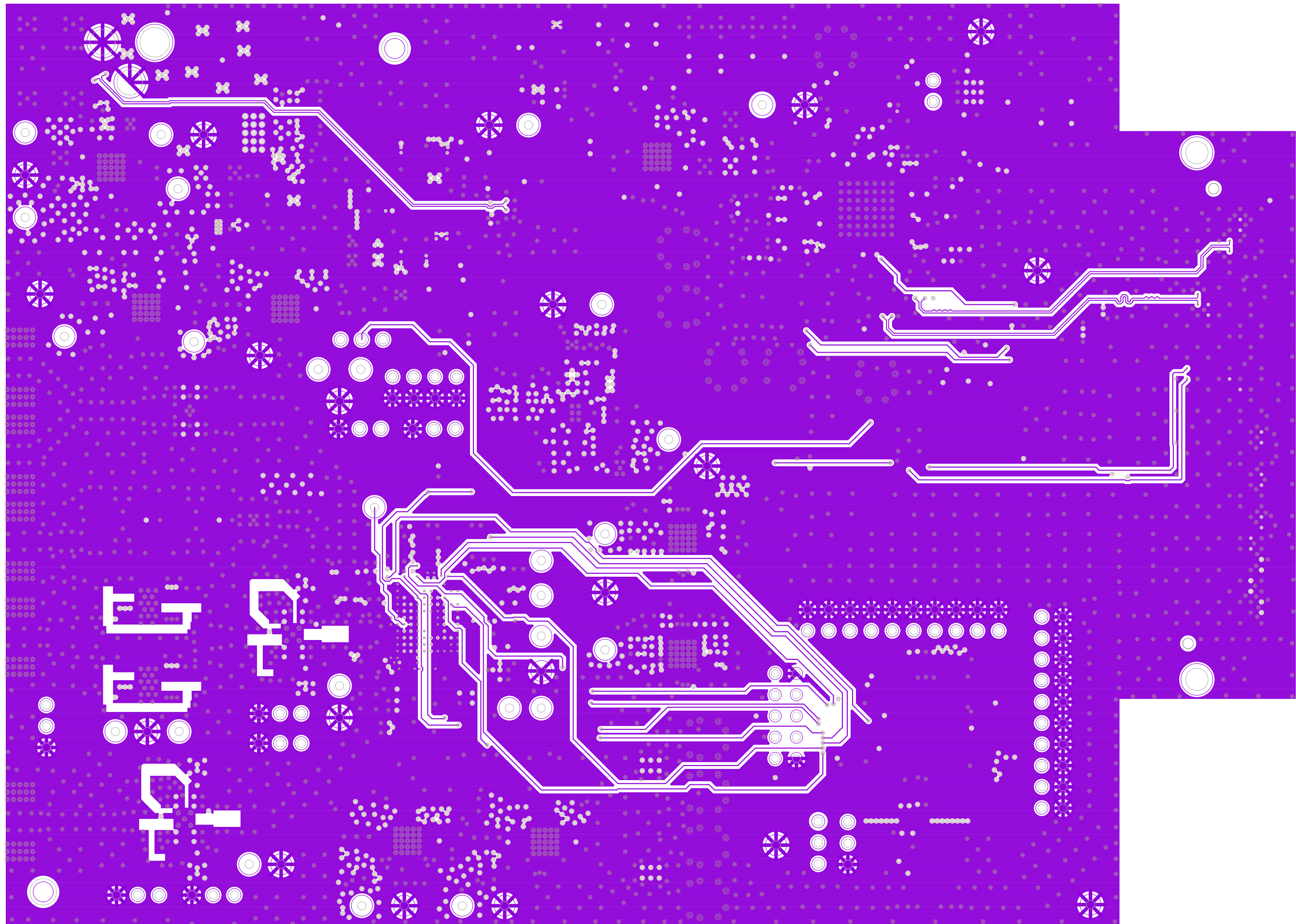


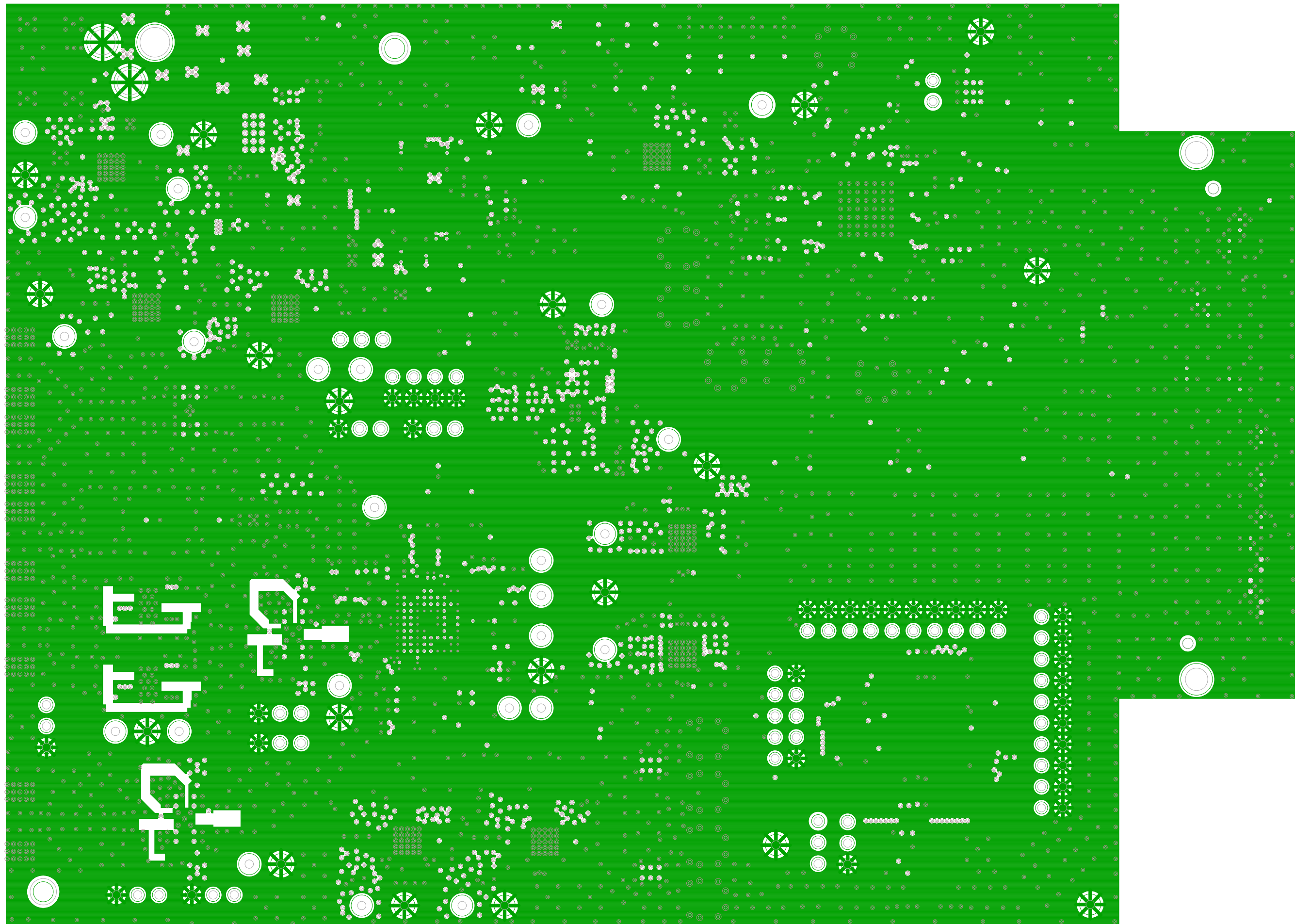
LAYER 1 (TOP SIDE)



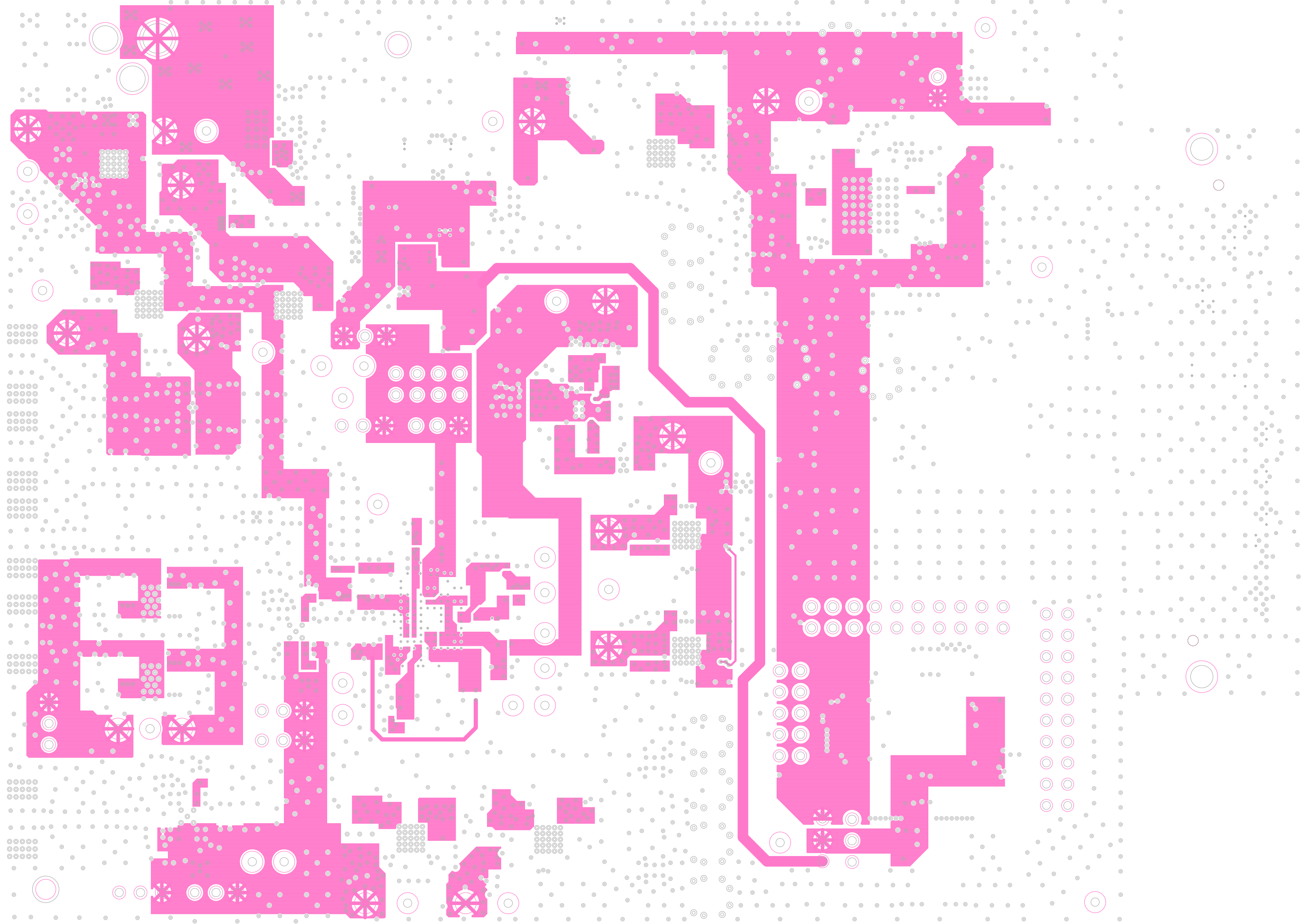
LAYER 2 - GND



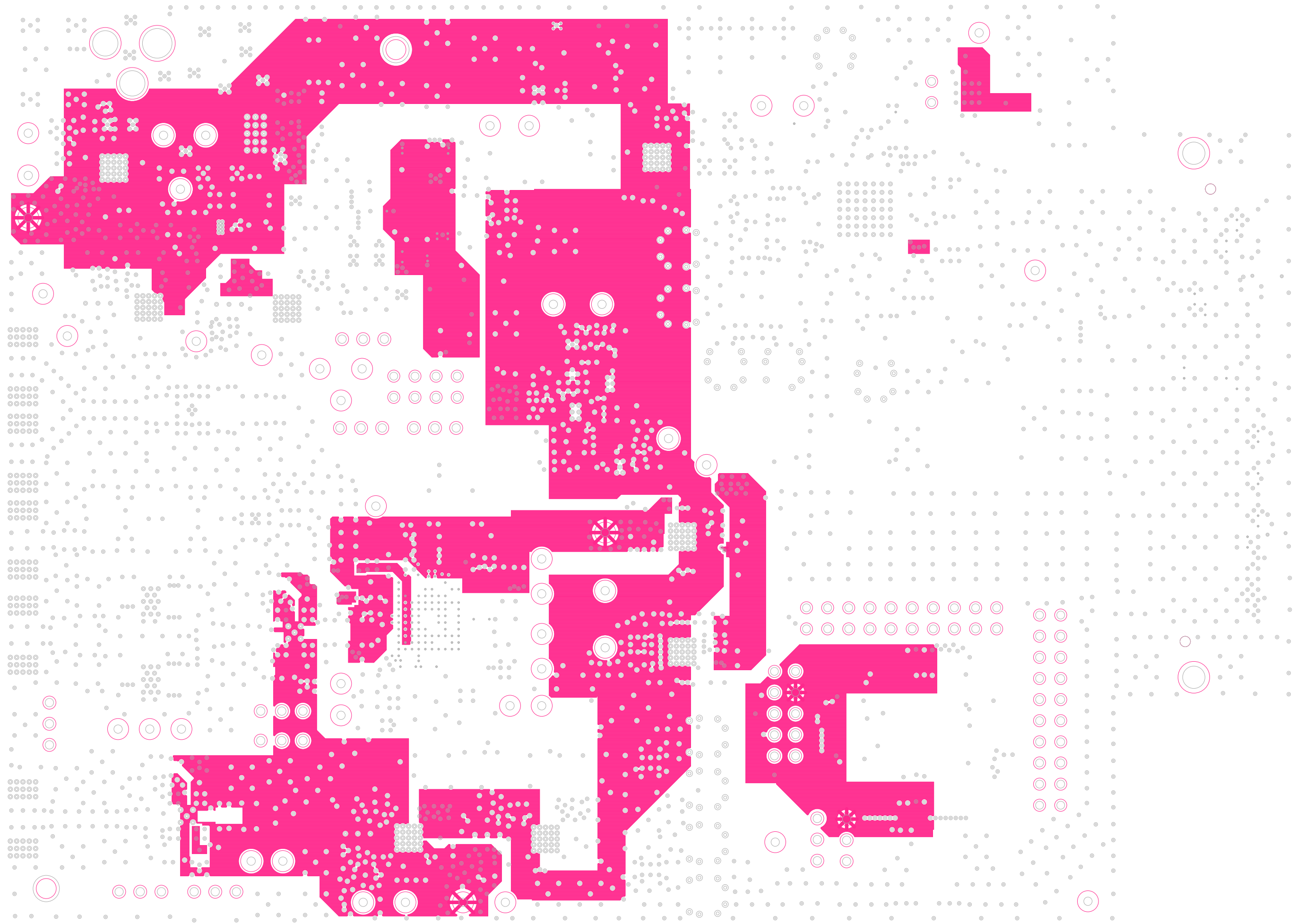
LAYER 3 - ISIG1



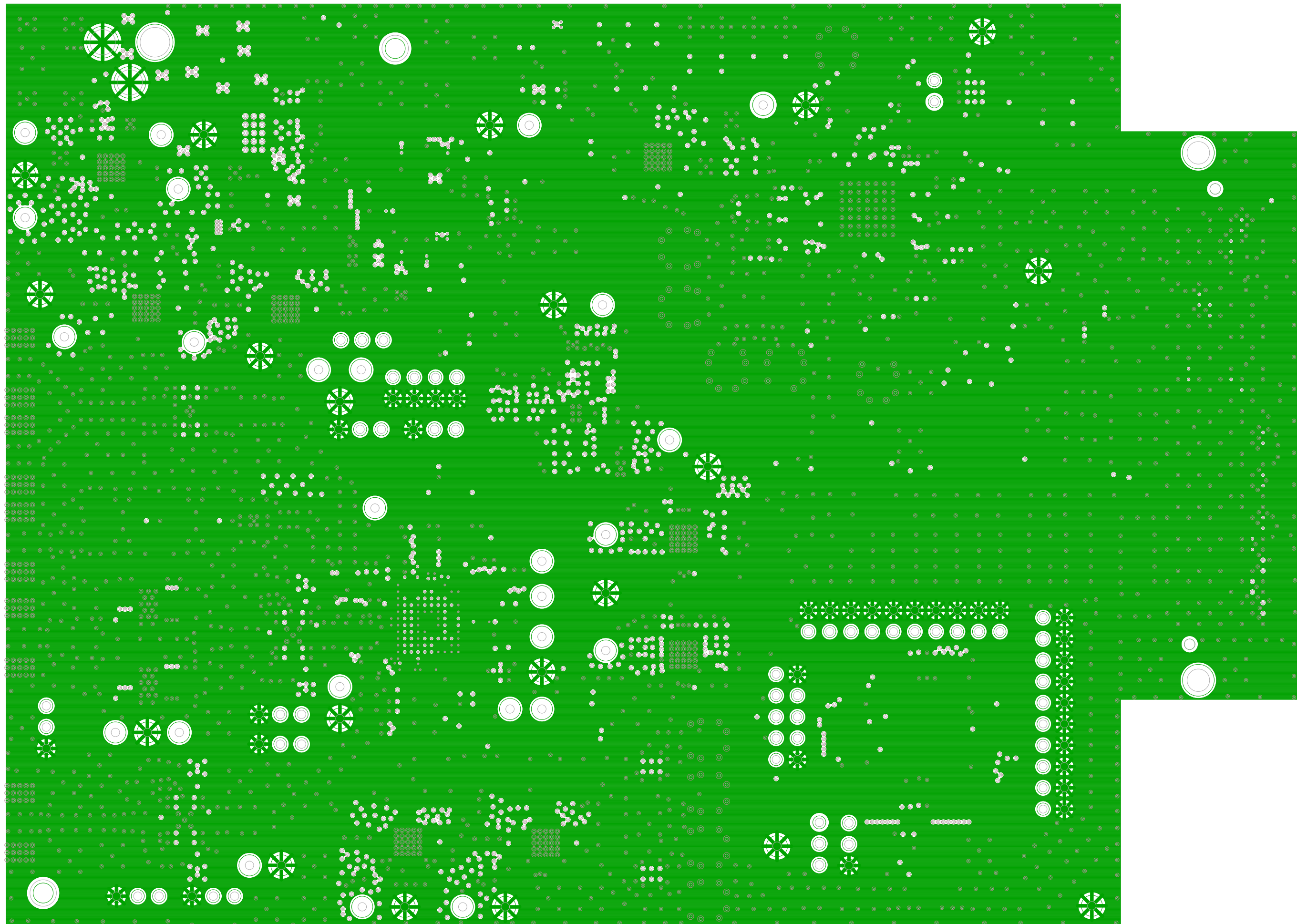
LAYER 4 - GND



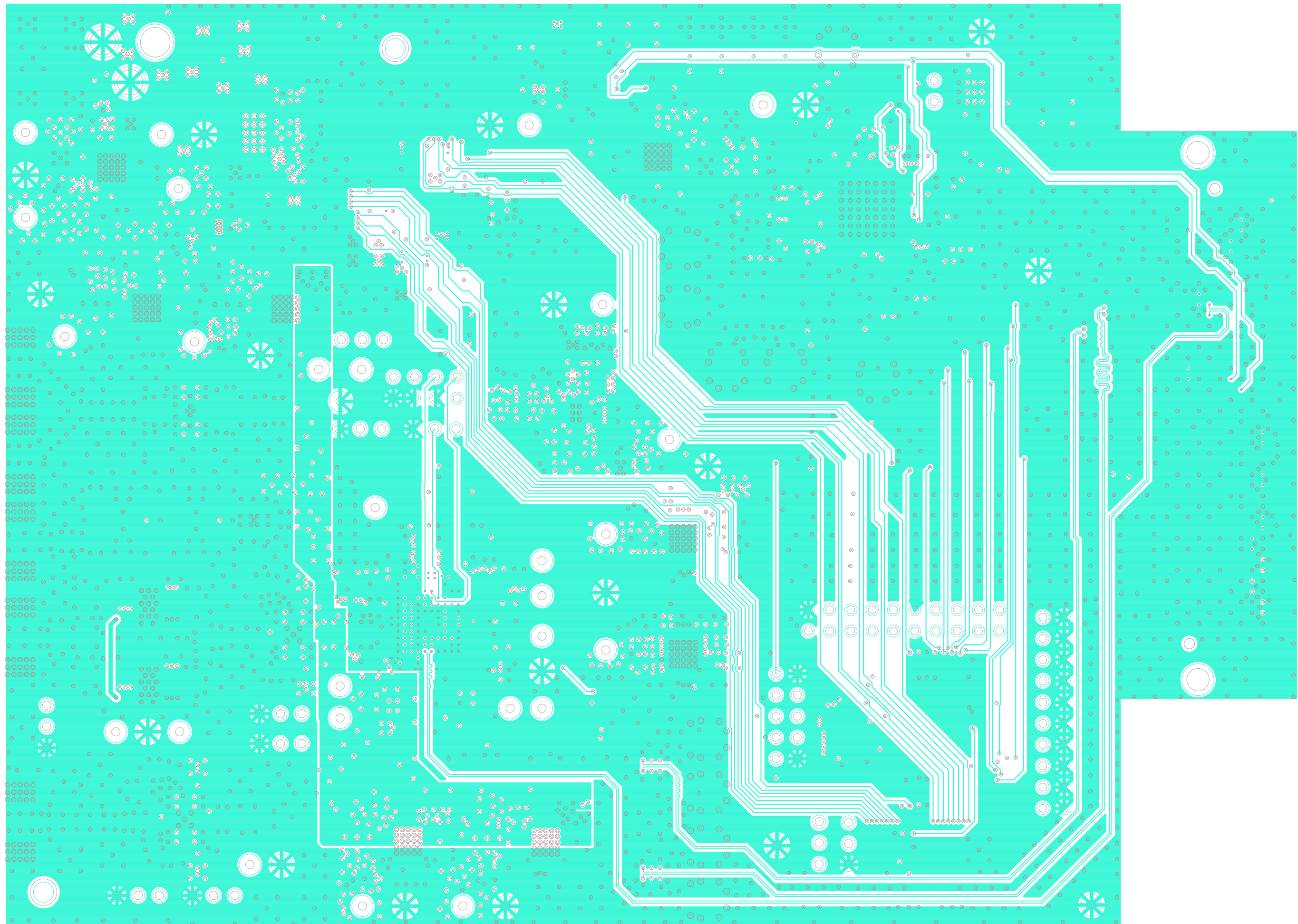
LAYER 5 - POWER



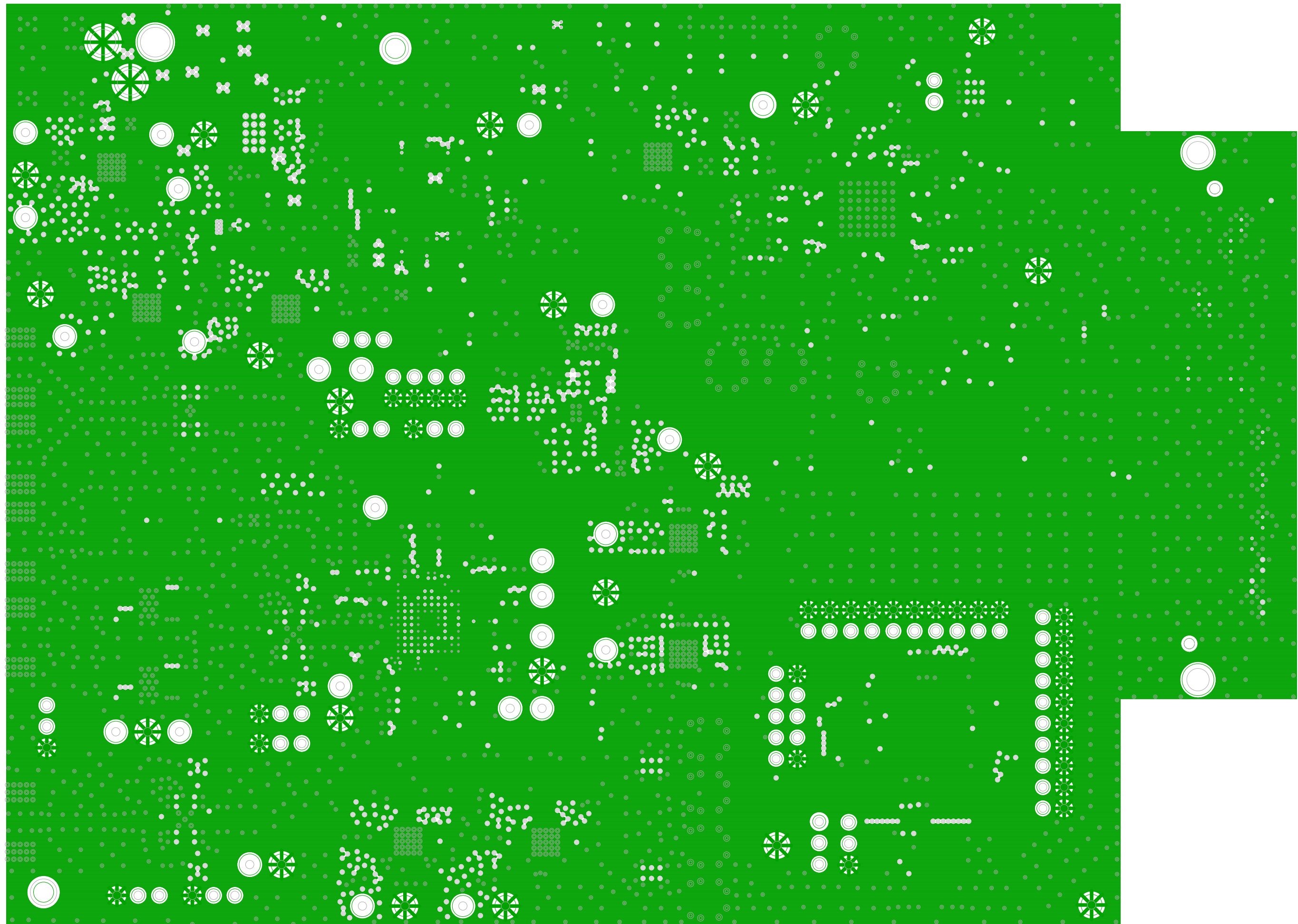
LAYER 6 - POWER



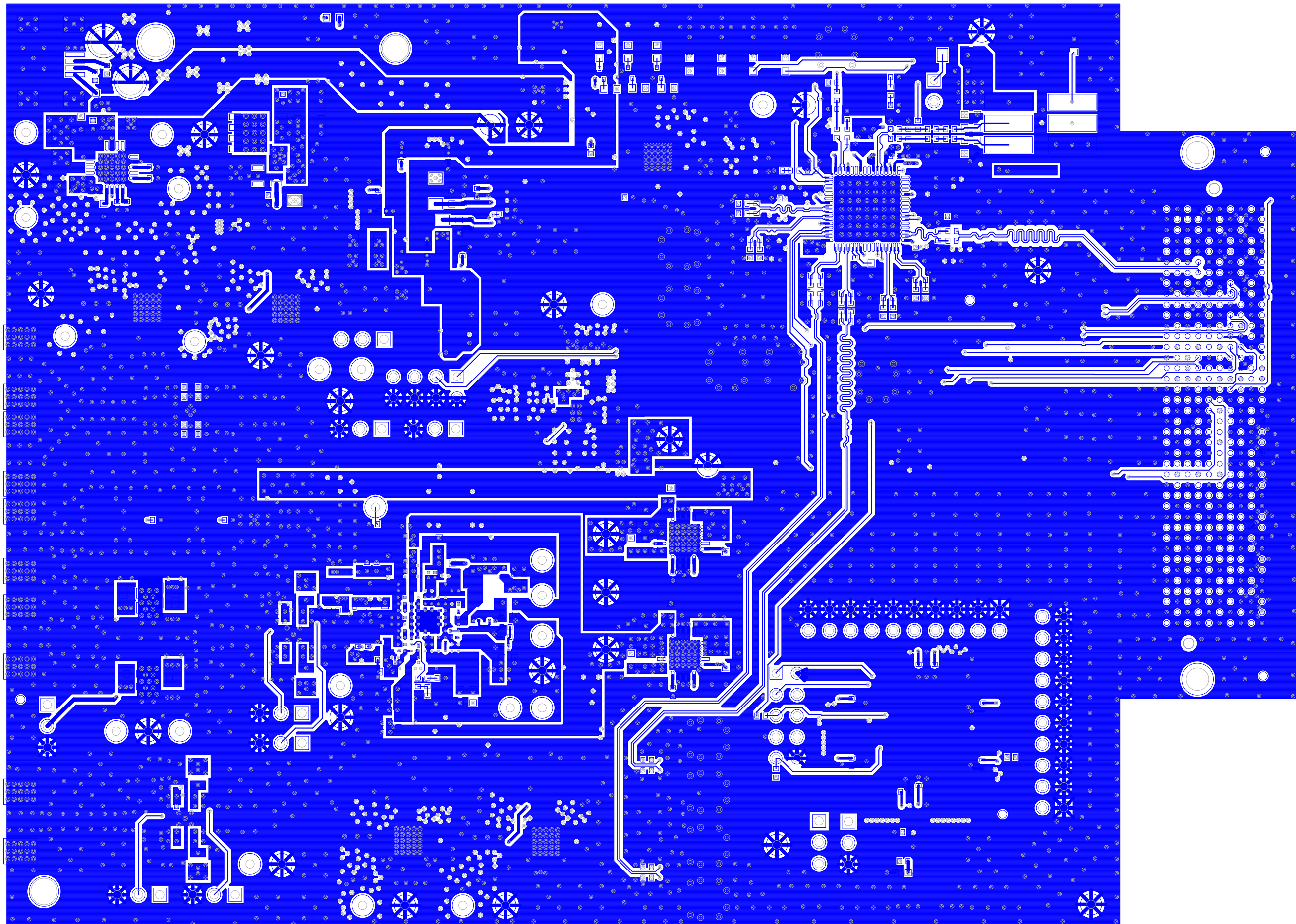
LAYER 7 - GND



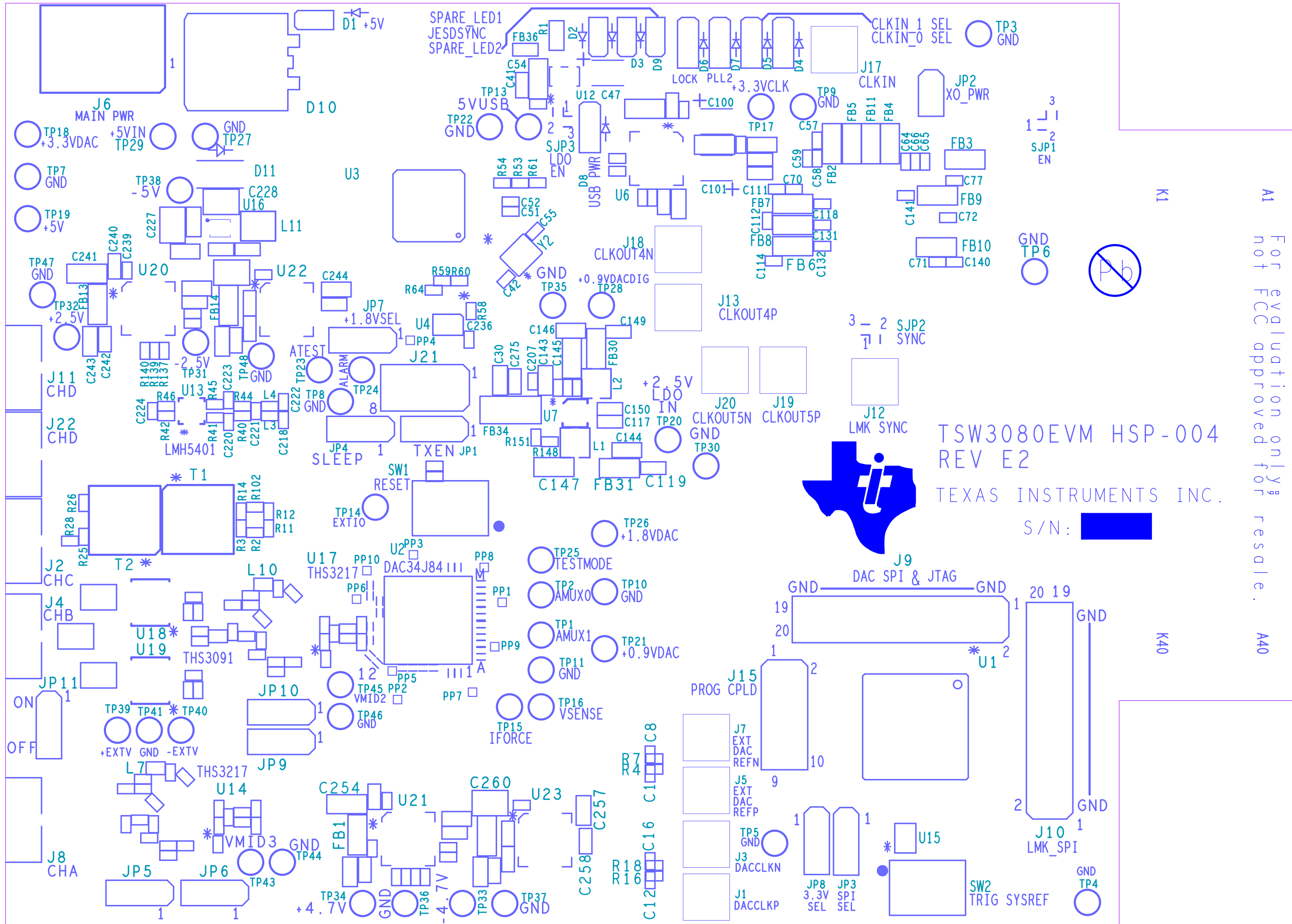
LAYER 8 - ISIG2



LAYER 9 - GROUND



LAYER 10 (BOTTOM SIDE)



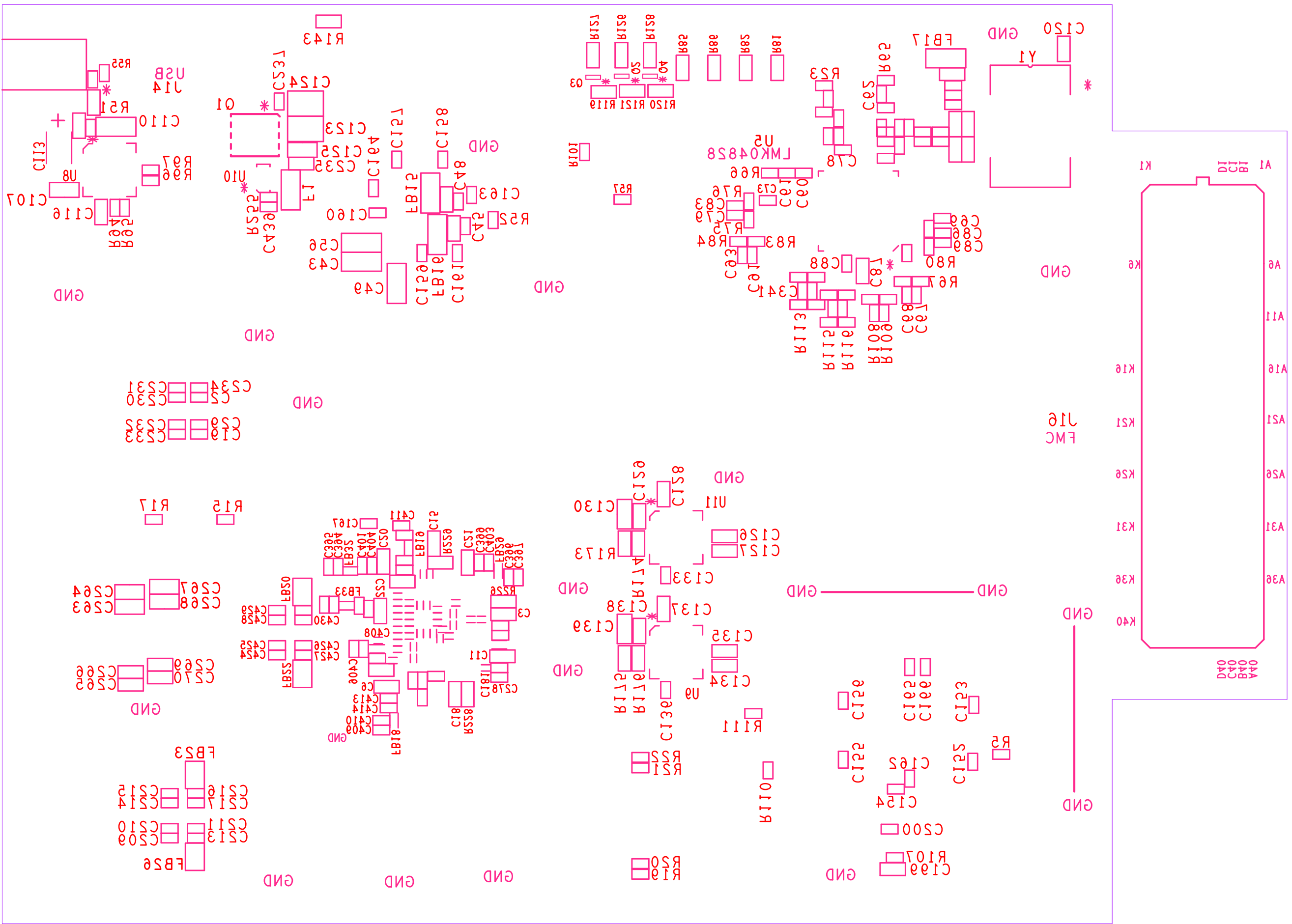
TSW3080EVM HSP-004
REV E2

TEXAS INSTRUMENTS INC.

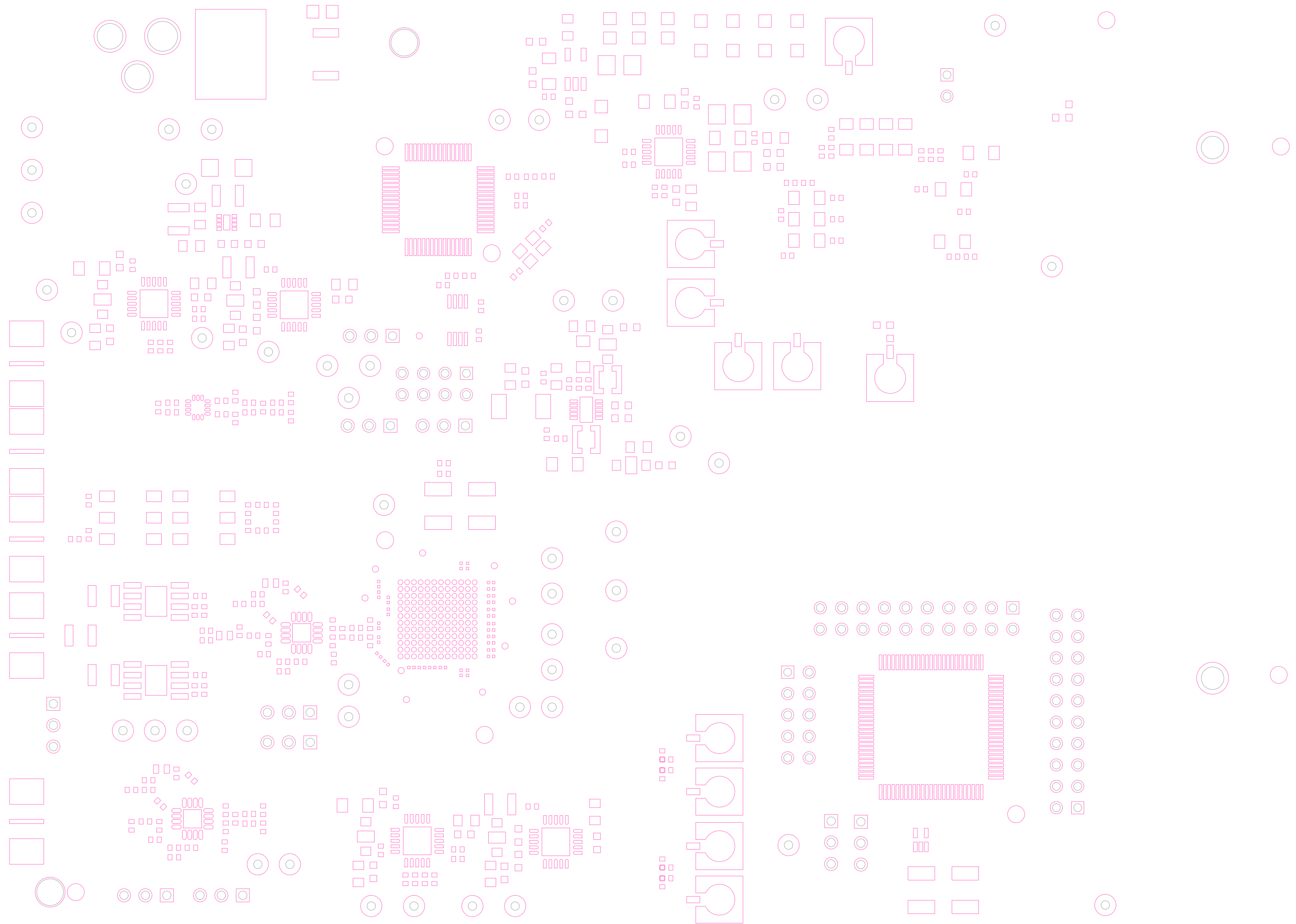
S/N: XXXXXXXXXX



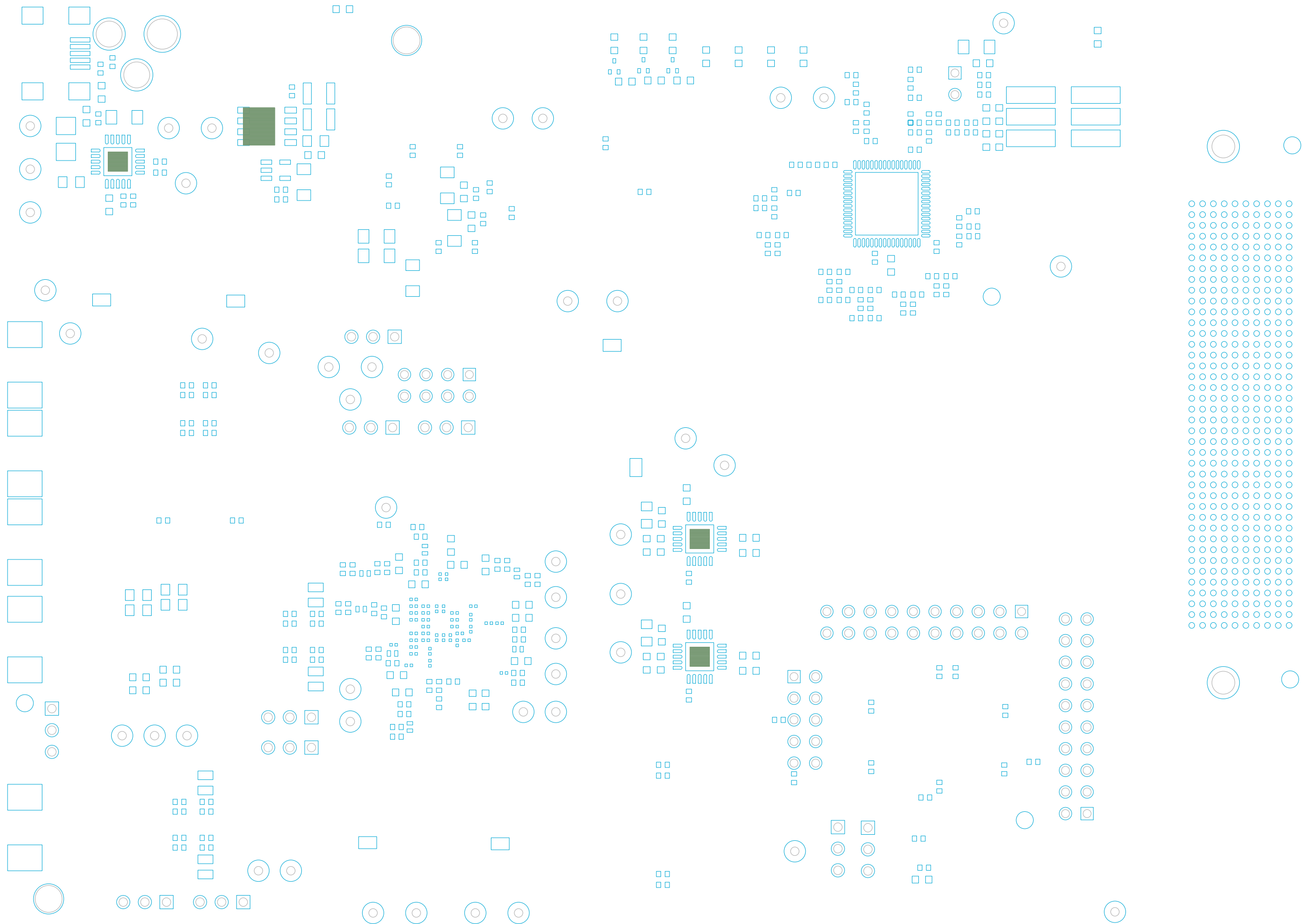
A1 Not for FCC approval only for resale. A40



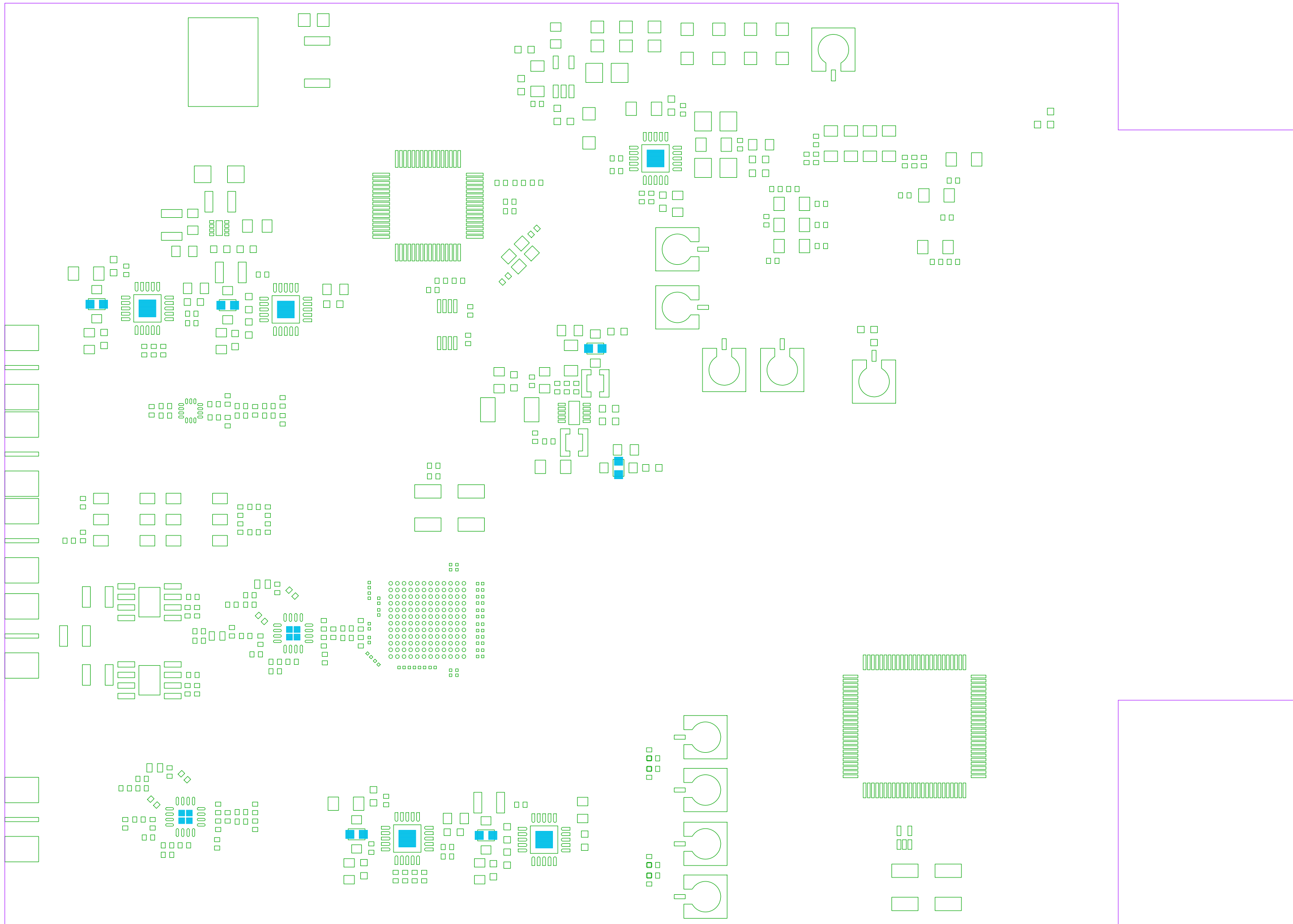
SILKSCREEN BOTTOM



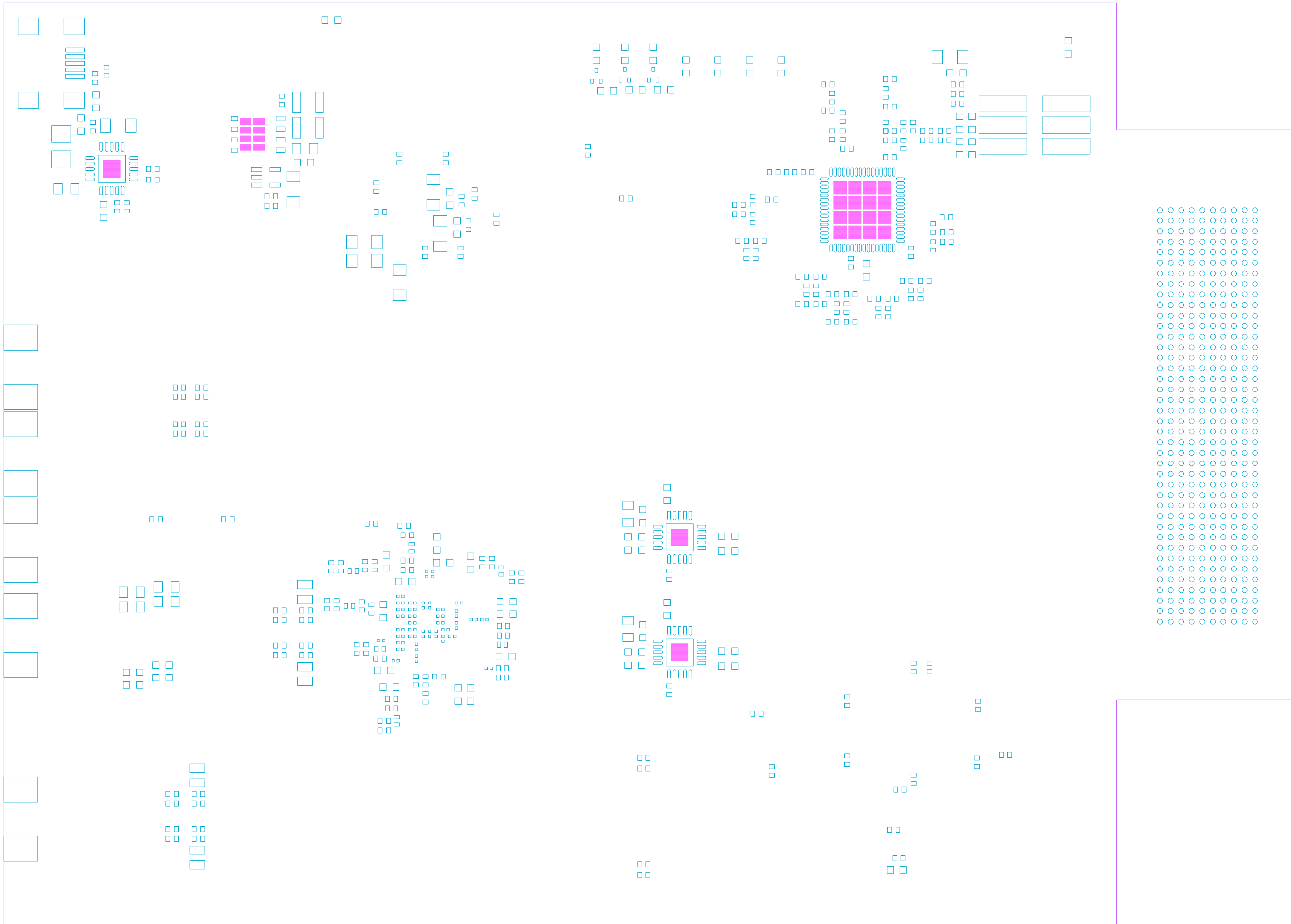
SOLDERMASK TOP



SOLDERMASK BOTTOM



PASTEMASK TOP



PASTEMASK BOTTOM

THIS DRAWING IS INTENDED TO HELP IN THE ASSEMBLY OF THE DESIGN.

ZONE		LTR		REVISIONS		DATE	APPROVED
				DESCRIPTION			

1. REFER TO ODB++ FILE FOR SPECIFIC COMPONENT LOCATION INFORMATION.
2. USE WATER SOLUBLE FLUX DURING BOARD ASSEMBLY. ASSEMBLY MUST BE RoHS COMPLIANT AND LEAD FREE.

D

C

B

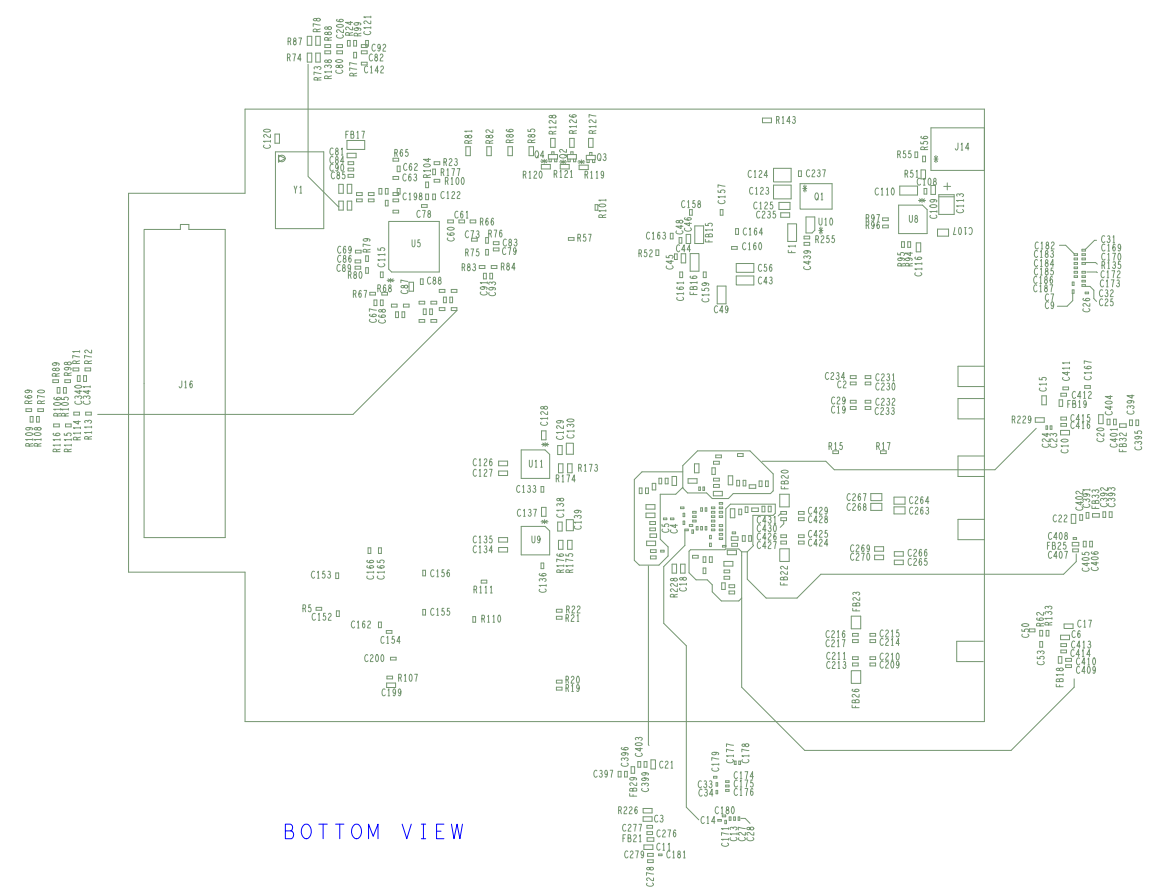
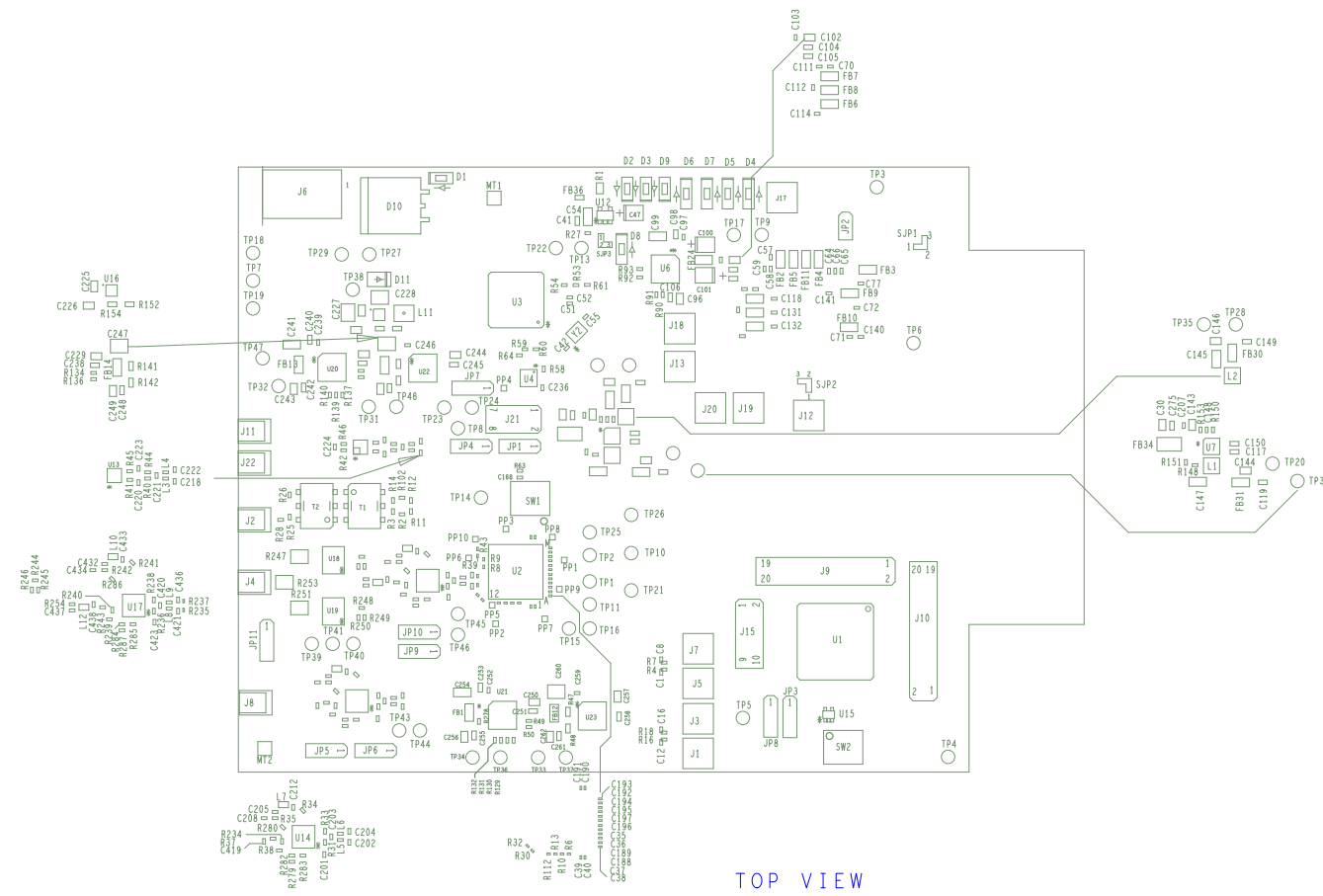
A

D

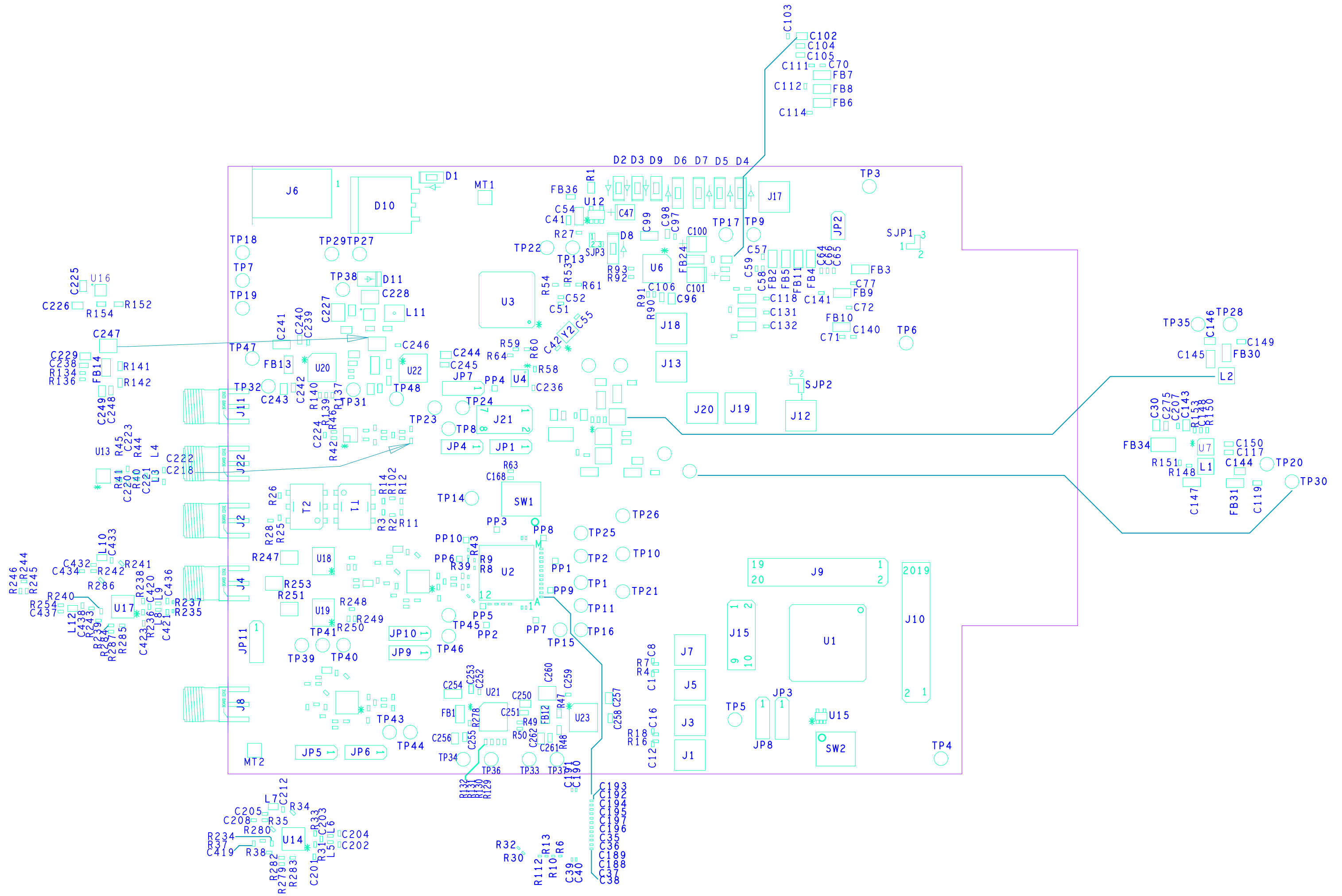
C

B

A



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES +/- .XX +/- .01 +/- +/- .XXX +/- .005 +/-	CONTRACT NO.		TEXAS INSTRUMENTS INC.			
	APPROVALS	DATE	ASSEMBLY DRAWING			
MATERIAL SEE NOTE 5	DRAWN	JV SMITH	01-25-16		TSW3080 EVM - HSP-004	
	ENGR	K CHAN	01-25-16			
FINISH SEE NOTES 7, 8, 9			SIZE	CODE IDENT NO.	DRAWING NO.	REV.
	DO NOT SCALE DRAWING		B			E2
			SCALE	1.5:1	SHEET 1 OF 1	



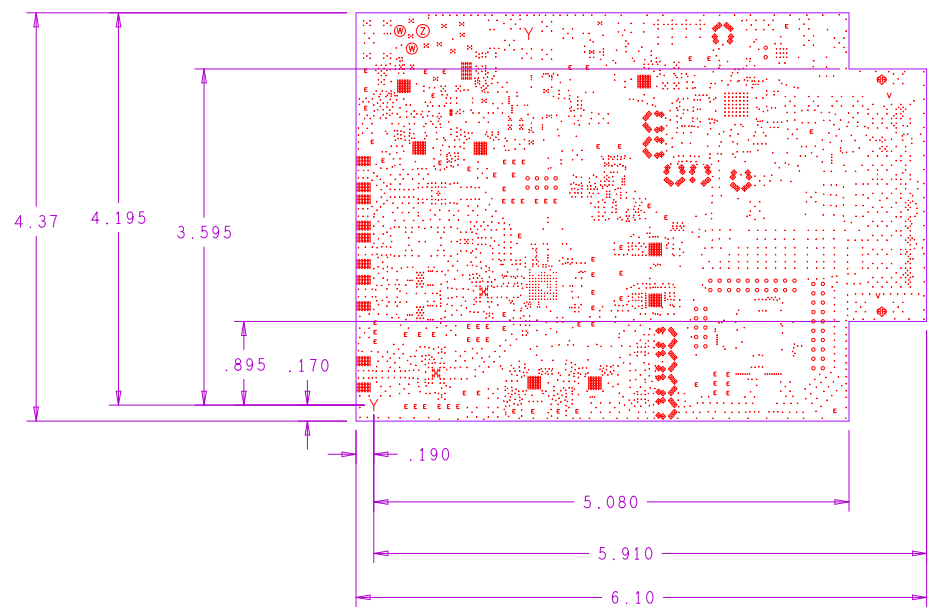
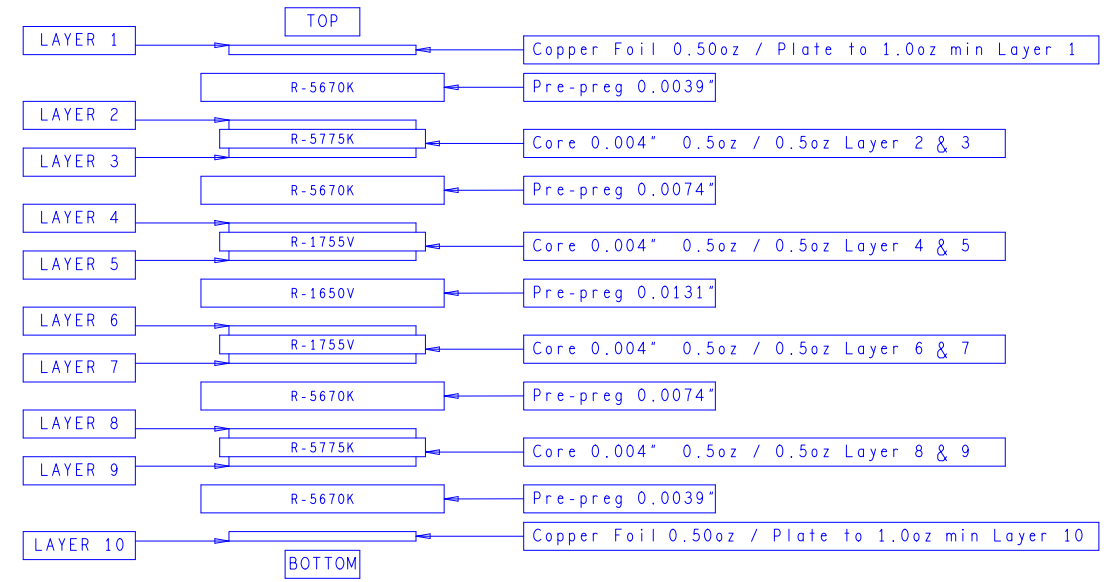
REVISIONS			
ZONE	LTR	DESCRIPTION	DATE

UNLESS OTHERWISE SPECIFIED, ALL NOTES ARE APPLICABLE.

- APPLICATION DESIGN, MANUFACTURING AND INSPECTION DOCUMENTS, IPC-2221A & IPC-2222 / DESIGN STANDARD FOR RIGID PRINTED CIRCUIT BOARDS AND RIGID PRINTED BOARD ASSEMBLIES, IPC-6012 / QUALIFICATION AND PERFORMANCE SPECIFICATION FOR RIGID PRINTED BOARD, CLASS 2, CURRENT REVISION, IPC-A-600 / ACCEPTABILITY OF PRINTED BOARDS, CLASS 2, CURRENT REVISION.
- VIA SIZE APPLY AFTER PLATING. TOLERANCE TO BE +.003/- .010. HOLE SIZE APPLY AFTER PLATING. TOLERANCE TO BE +/- .003.
- REGISTRATION TOLERANCE: ARTWORK +/- .002. ALL HOLE CENTERS +/- .005 FROM DIMENSION DATUM.
- MINIMUM COPPER WALL THICKNESS SHALL BE .001 INCH. FOR ALL PLATED THROUGH HOLES. BREAKOUT NOT ALLOWED.
- PROCESS AND MATERIAL MUST CONFORM TO UL 796. MATERIAL MUST MEET OR EXCEED UL FLAMMABILITY RATING 94V-0. MATERIAL: MULTI-LAYER (SEE DETAIL 'A'). SEE LAYER STACKUP FOR ALL PRE-PREG & CORE THICKNESSES, COPPER OZ AND MATERIAL. FINISHED BOARD THICKNESS: .062 +/- 10%
- MANUFACTURE'S UL MARKING, FLAMMABILITY RATING, LOGO AND DATE CODE TO BE PLACED IN SILKSCREEN ON BOTTOM SIDE OF THE BOARD.
- SMOBC/IMMERSION GOLD: 2 - 5 uIN OVER 118-236 uIN NICKEL PLATING.
- SOLDERMASK BOTH SIDES USING TAIYO (OR EQUIVALENT) COLOR = RED
- SILKSCREEN BOTH SIDES USING WHITE NPI LEADFREE. REGISTRATION TOLERANCE TO BE +/- .005. INK IS NOT ALLOWED ON EXPOSED PLATED AREA.
- P.C. BOARD TO BE FREE OF DIRT, OIL, FINGER PRINTS, ETC.
- BOARD WARPAGE: WARP AND TWIST SHALL NOT EXCEED .007 INCH PER INCH MEASURED AT ANY LOCATION OR DIRECTION ON THE BOARD.
- BOARD MUST BE 100% ELECTRICALLY TESTED TO ENSURE NO SHORTS OR OPEN CIRCUITS AT 20V.

- ALL OUTER LAYERS USING A 7MIL TRACE WIDTH SHALL BE 50 OHMS SINGLE ENDED +/- 10%.
- ALL OUTER LAYERS USING A 4.5MIL TRACE WIDTH AND 5.5MIL GAP SHALL BE 100 OHMS DIFFERENTIAL +/- 10%.
- ALL INNER LAYERS USING A 4.25MIL TRACE WIDTH AND 5.75MIL GAP SHALL BE 100 OHMS DIFFERENTIAL +/- 10%.
- MINIMUM COPPER CONDUCTOR WIDTH IS: 4.25MIL. MINIMUM COPPER CONDUCTOR SPACING IS: 4.5MIL.
- ALL INNER LAYER UNCONNECTED PADS SHALL BE REMOVED.
- PWB MUST BE ROHS COMPLIANT AND SURVIVE LEAD FREE ASSEMBLY, MAX REFLOW OF 260 DEGREES C (6 PASSES).
- ALL THROUGH VIAS TO BE PLUGGED WITH NON-CONDUCTIVE EPOXY MATERIAL. PLUGGED VIAS TO BE PLATED AFTER PLUGGING TO PRESENT FLAT SURFACE TO DEVICE. NO POTHOLES.

SEE FABRICATION VENDORS STACKUP FOR MATERIAL AND THICKNESS



DRILL CHART: TOP to BOTTOM			
ALL UNITS ARE IN MILS			
FIGURE	SIZE	PLATED	QTY
-	6.0	PLATED	144
-	8.0	PLATED	3089
-	10.0	PLATED	100
-	12.0	PLATED	375
+	15.0	PLATED	79
o	38.0	PLATED	60
e	40.0	PLATED	76
◆	106.0	PLATED	2
⊙	120.0	PLATED	2
Y	125.0	PLATED	2
⊕	140.0	PLATED	1
v	50.0	NON-PLATED	2

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES +/- .XX +/- .01 +/- .XXX +/- .005 +/-	CONTRACT NO.		TEXAS INSTRUMENTS INC.	
	APPROVALS	DATE	FABRICATION DRAWING TSW3080 EVM HSP-004	
DRAWN JV SMITH	01-25-16	REV. E2		
MATERIAL SEE NOTE 5	ENG K CHAN	01-25-16	SIZE D	CODE IDENT NO.
FINISH SEE NOTE 7, 8, 9			DRAWING NO.	REV. E2
DO NOT SCALE DRAWING	SCALE NONE		SHEET 1 OF 1	

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