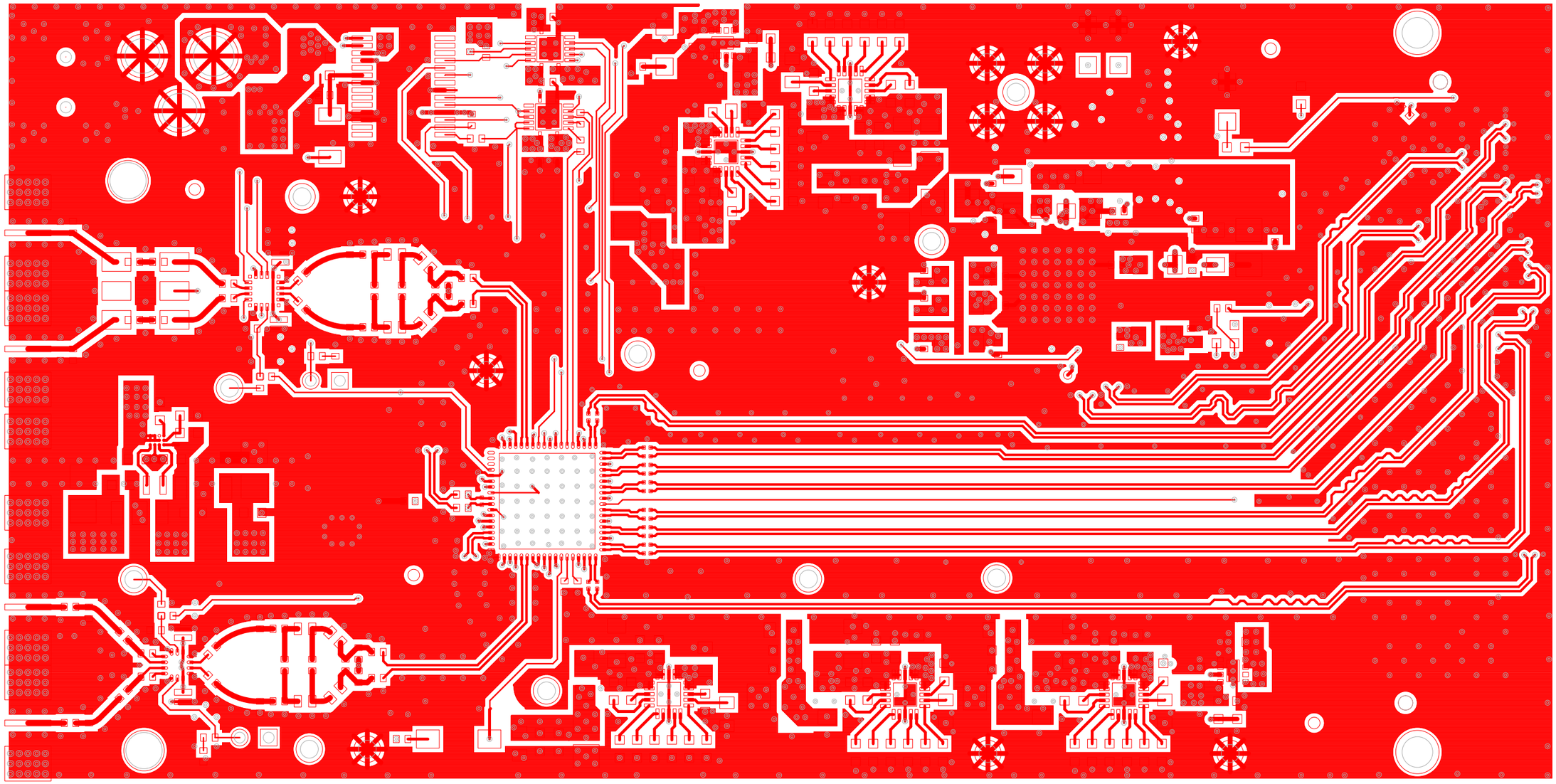
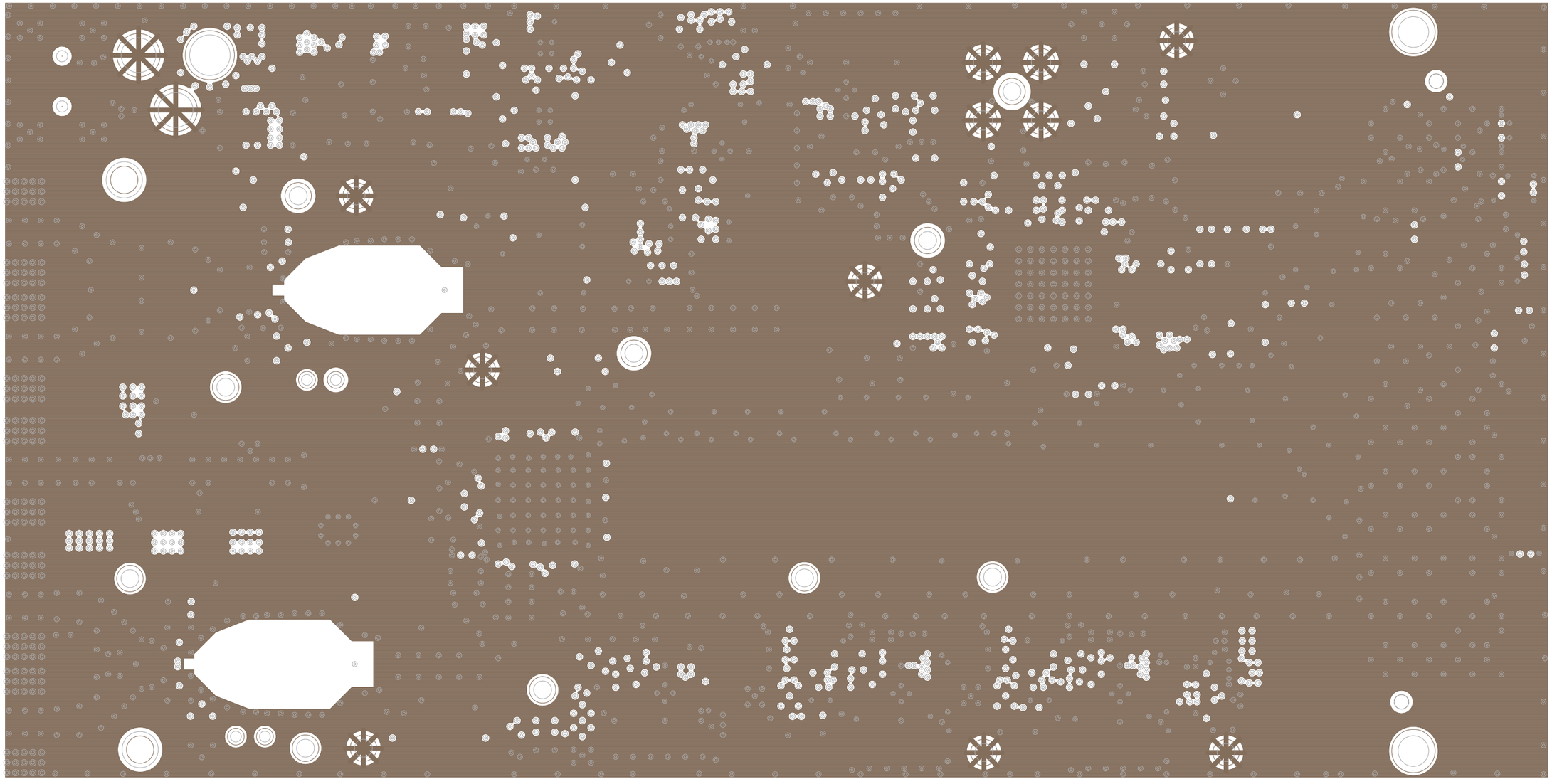


TSW54J60 REV B

LAYER 1 (TOP SIDE)



TSW54J60 REV B

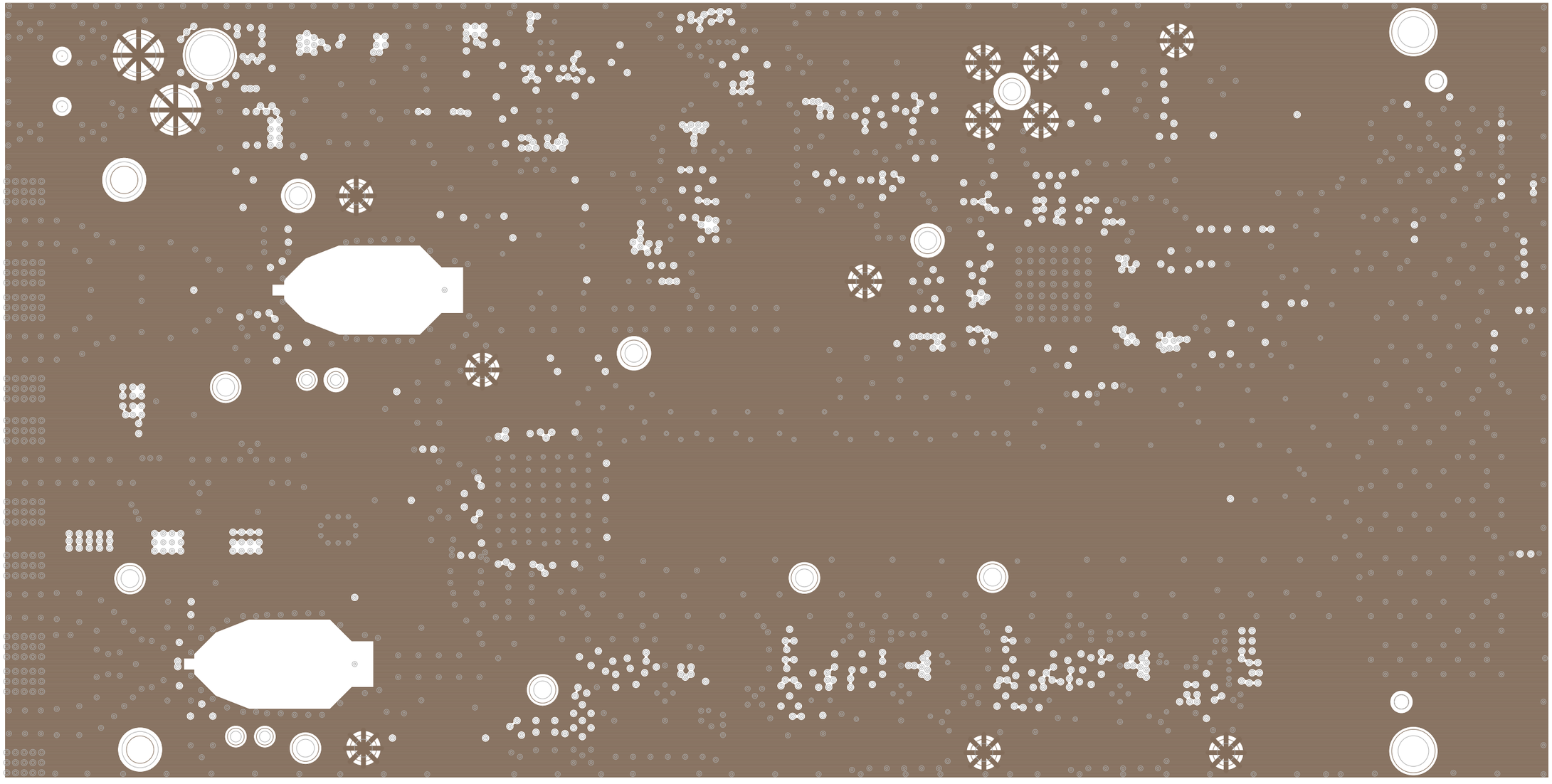
LAYER 2 - GND

TSW54J60 REV B

LAYER 3 - POWER

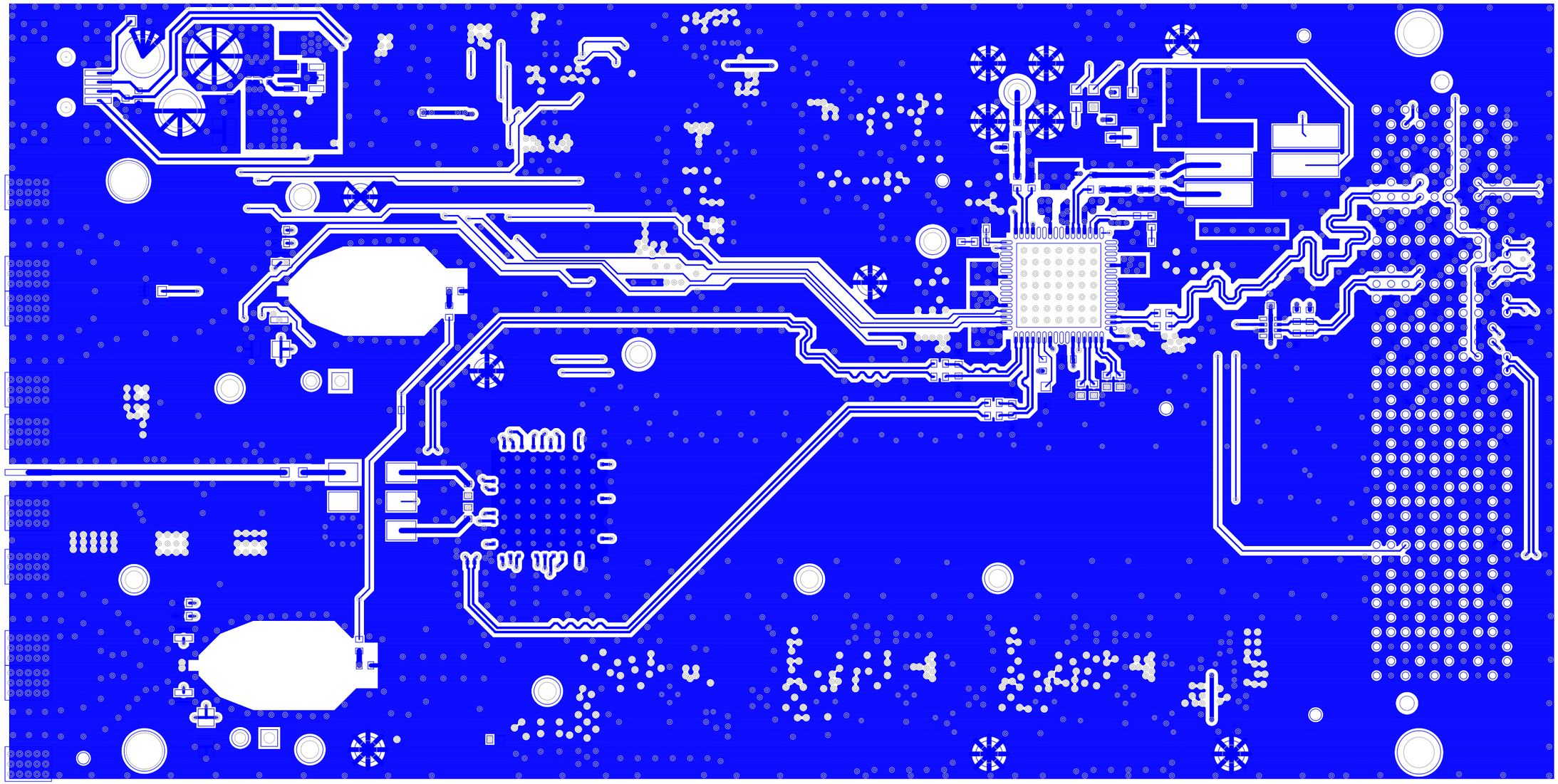
TSW54J60 REV B

LAYER 4 - POWER/SIGNAL



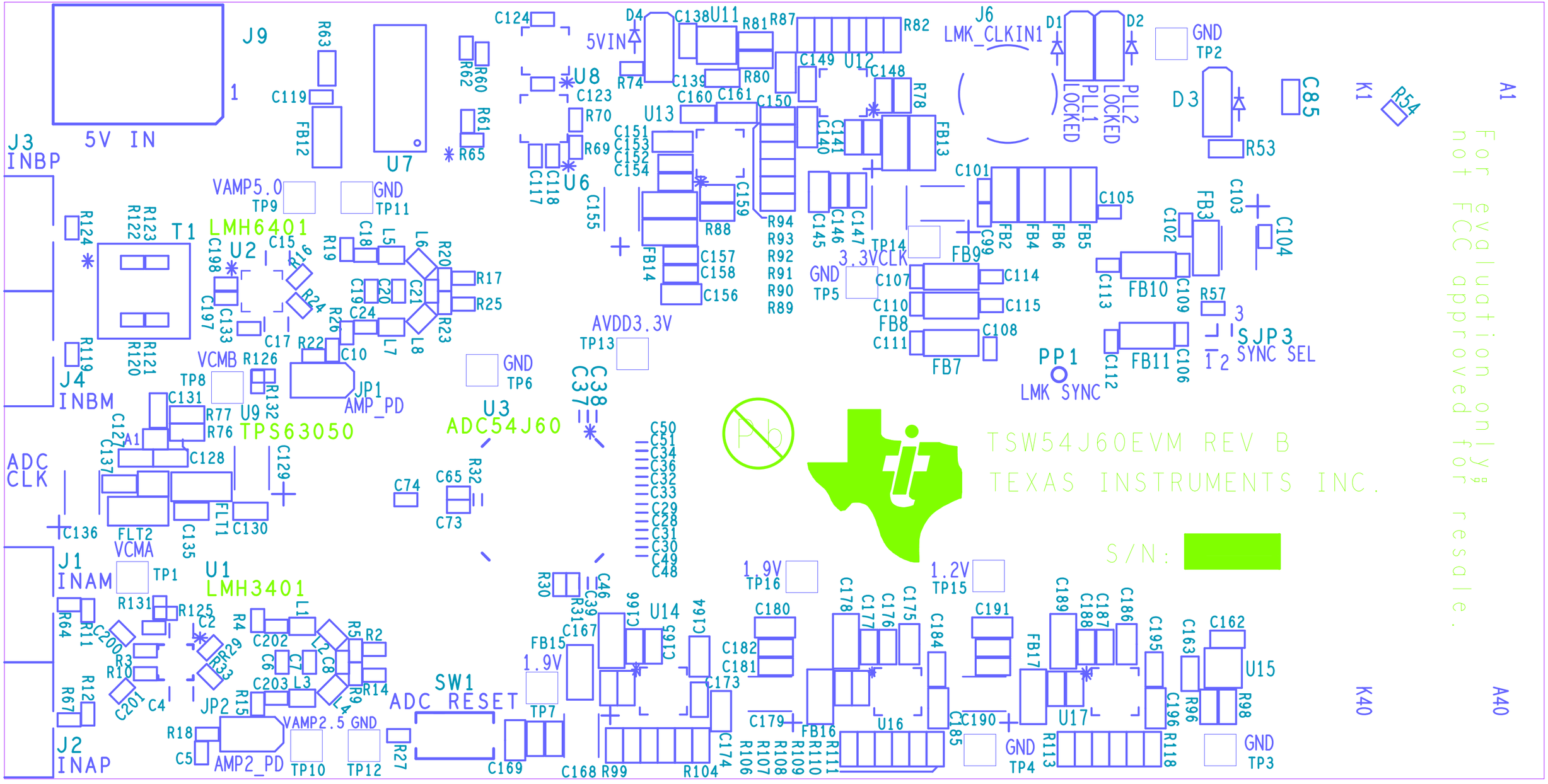
TSW54J60 REV B

LAYER 5 - GROUND



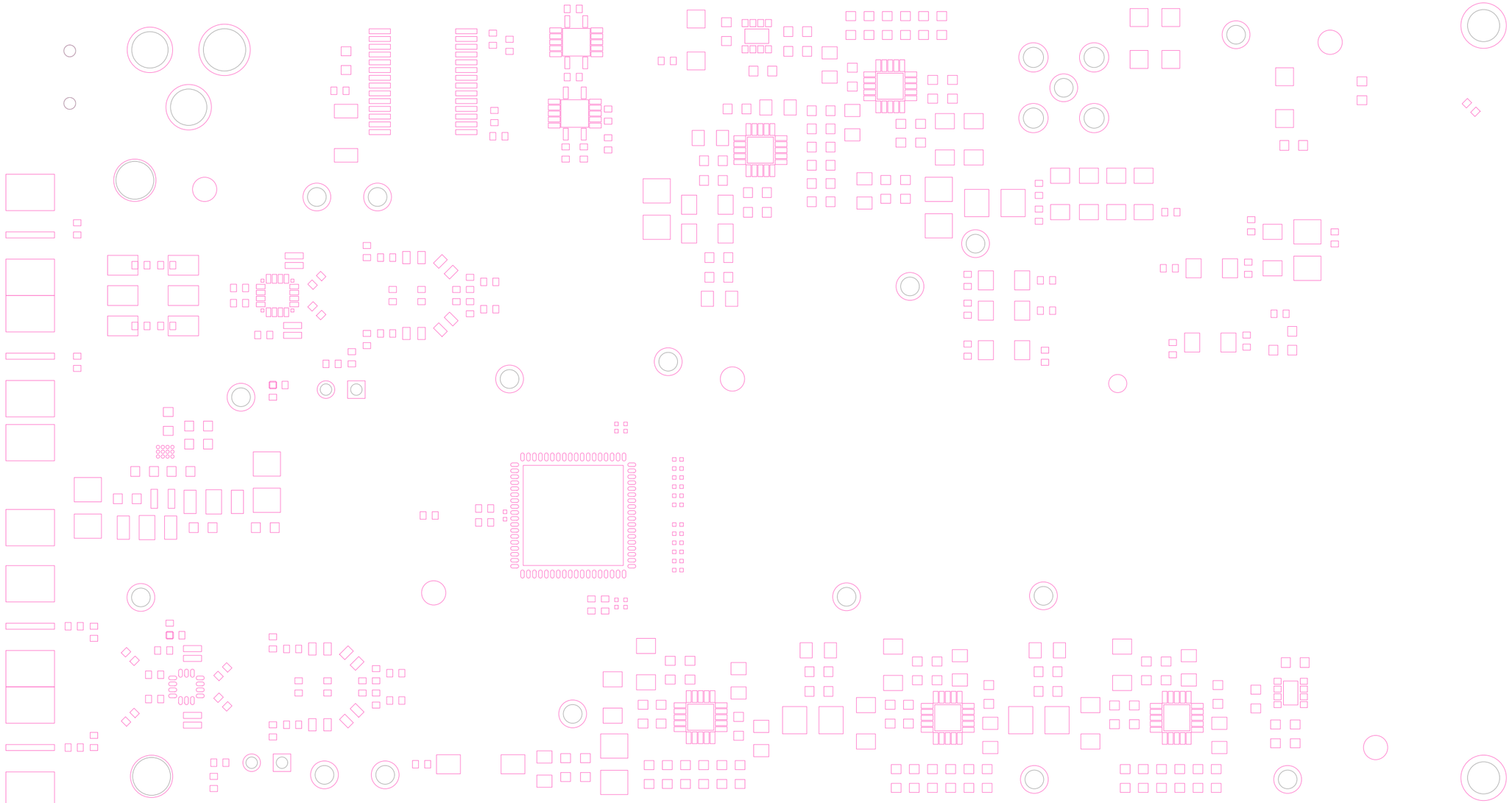
TSW54J60 REV B

LAYER 6 (BOTTOM SIDE)



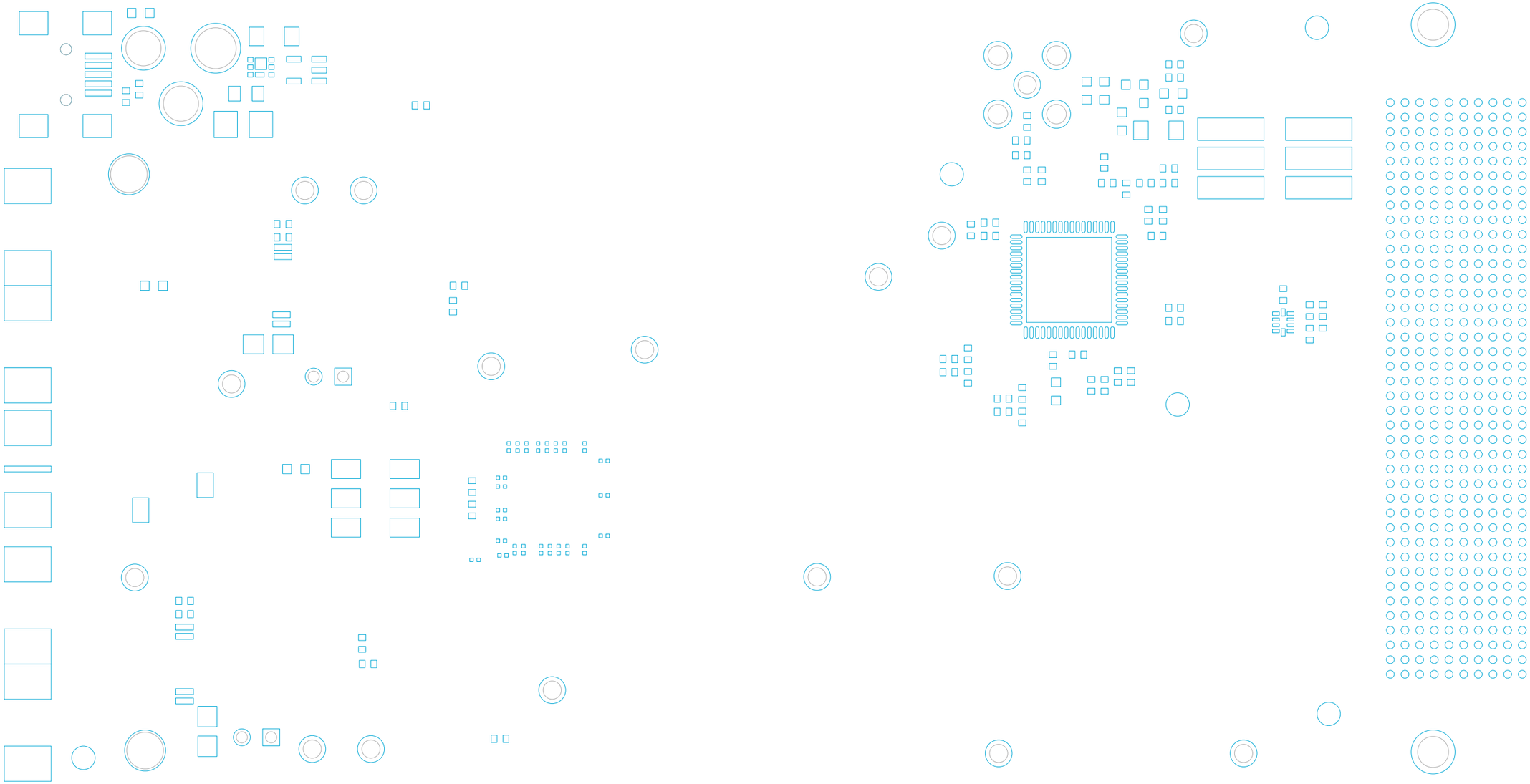
TSW54J60 REV B
SILKSCREEN TOP

TSW54J60 REV B
SILKSCREEN BOTTOM



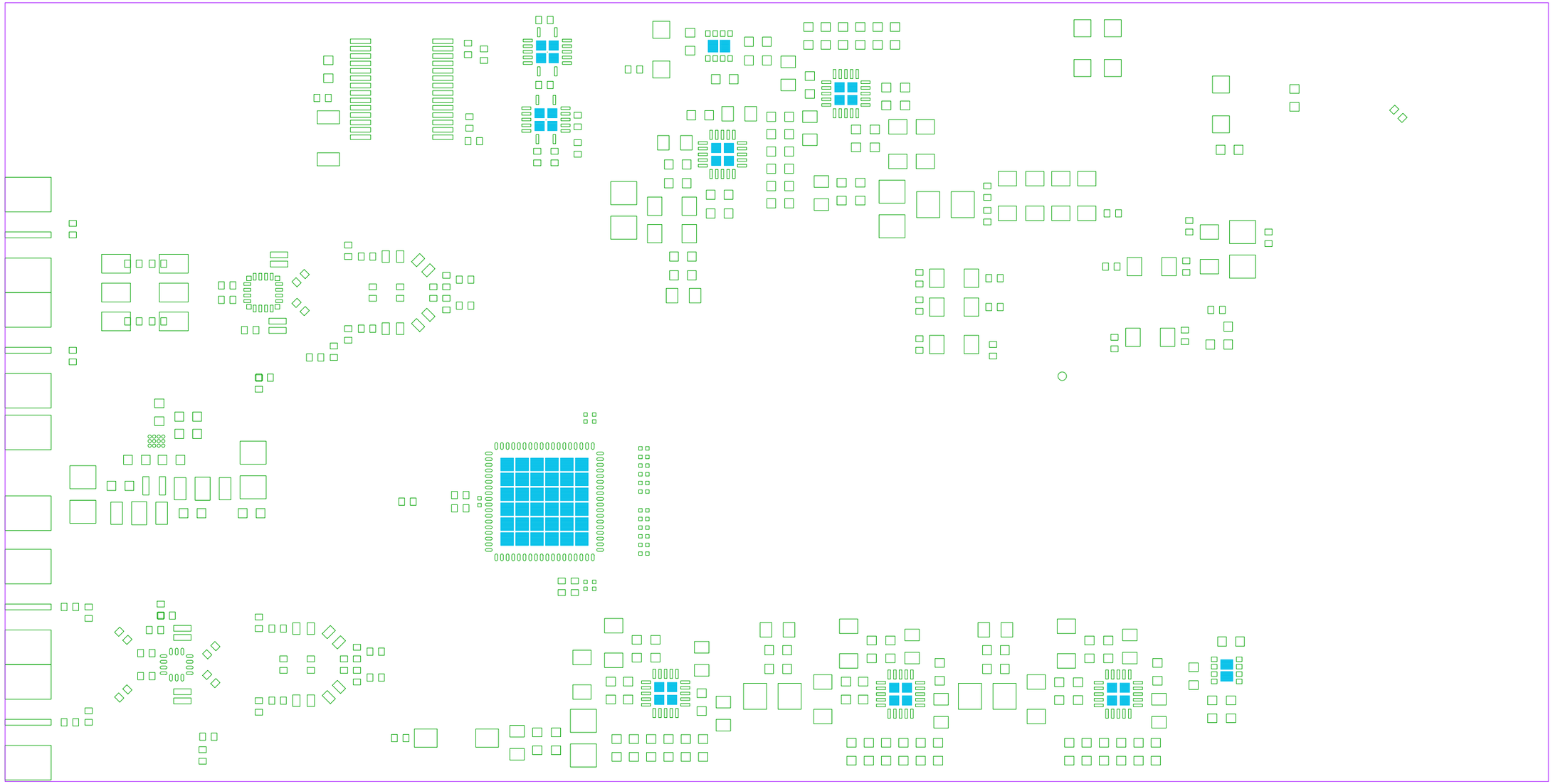
TSW54J60 REV B

SOLDERMASK TOP



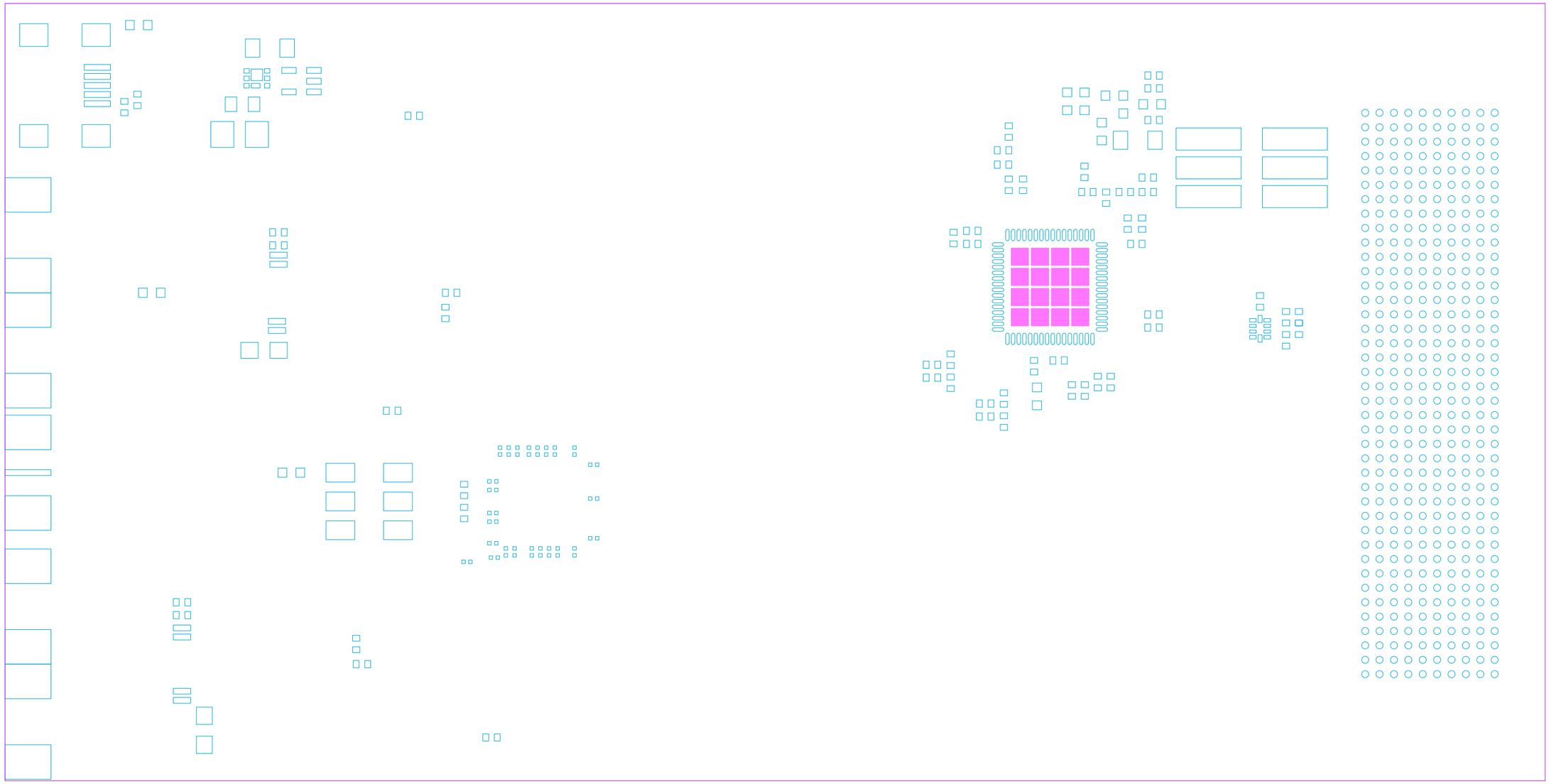
TSW54J60 REV B

SOLDERMASK BOTTOM



TSW54J60 REV B

PASTEMASK TOP



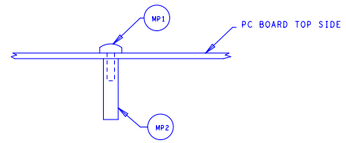
TSW54J60 REV B

PASTEMASK BOTTOM

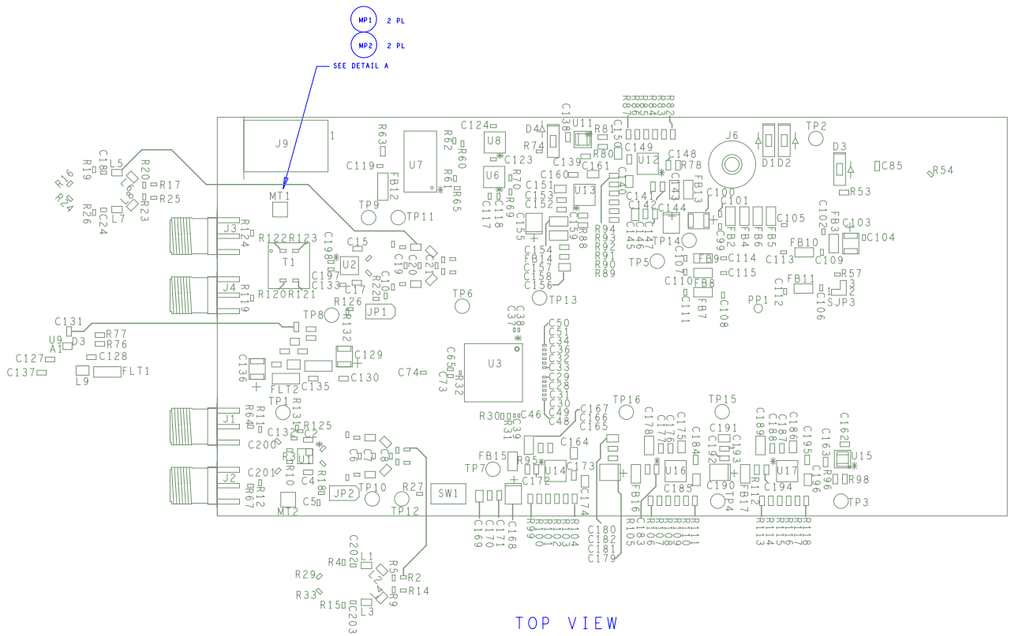
THIS DRAWING IS INTENDED TO HELP IN THE ASSEMBLY OF THE DESIGN.

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.

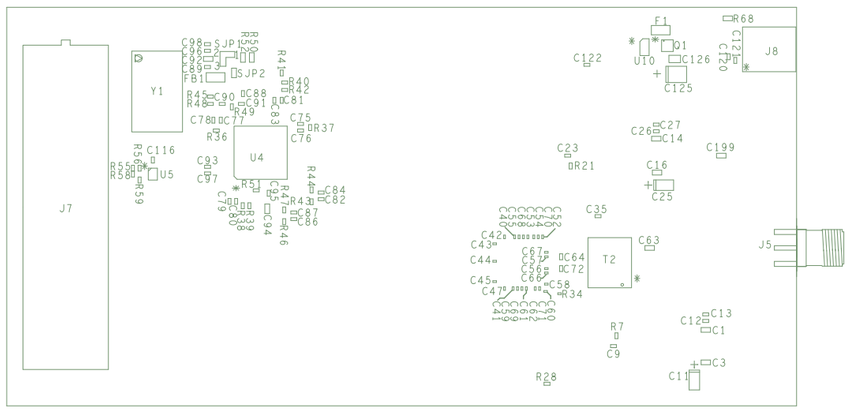
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED



DETAIL A (SIDE VIEW) - NO SCALE
INSTALL SPACERS (YY) AND SCREWS (XX) AS SHOWN.



TOP VIEW



BOTTOM VIEW

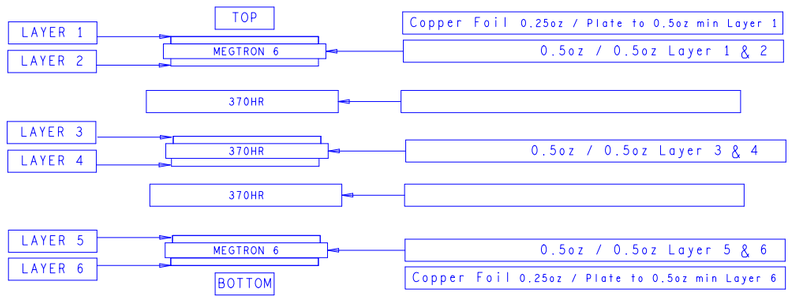
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS +/- DECIMALS .XX +/-.01 .XXX +/-.005 ANGLES +/-	CONTRACT NO.	TEXAS INSTRUMENTS INC.
	APPROVALS / DATE DRAWN JV SMITH 04-10-15 ENGR J SETON 04-10-15	ASSEMBLY DRAWING TSW54J60 EVM
MATERIAL SEE NOTE 5		
FINISH SEE NOTES 7, 8, 9		SIZE B / CODE IDENT NO. / DRAWING NO. / REV. B
DO NOT SCALE DRAWING		SCALE 2:1 / SHEET 1 OF 1

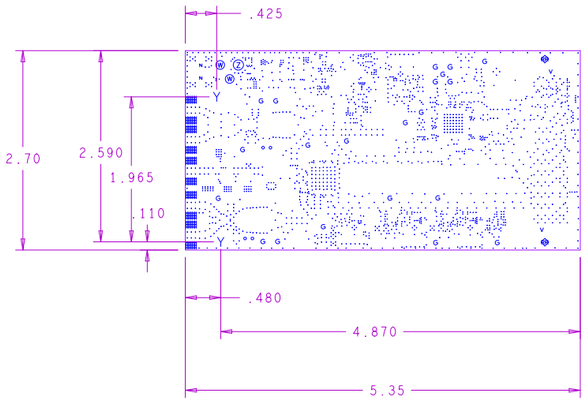
UNLESS OTHERWISE SPECIFIED, ALL NOTES ARE APPLICABLE.

1. APPLICATION DESIGN, MANUFACTURING AND INSPECTION DOCUMENTS.
   IPC-2221B & IPC-2222A / DESIGN STANDARD FOR RIGID PRINTED CIRCUIT BOARDS AND RIGID PRINTED BOARD ASSEMBLIES.
   IPC-6012C / QUALIFICATION AND PERFORMANCE SPECIFICATION FOR RIGID PRINTED BOARD.
   IPC-A-600H / ACCEPTABILITY OF PRINTED BOARDS.
2. VIA SIZE APPLY AFTER PLATING. TOLERANCE TO BE +.003/-.010.
   HOLE SIZE APPLY AFTER PLATING. TOLERANCE TO BE +/-.003.
3. REGISTRATION TOLERANCE: ARTWORK +/- .002.
   ALL HOLE CENTERS +/-.005 FROM DIMENSION DATUM.
4. MINIMUM COPPER WALL THICKNESS SHALL BE .001 INCH.
   FOR ALL PLATED THROUGH HOLES. BREAKOUT NOT ALLOWED.
5. 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%
6. MANUFACTURE'S UL MARKING, FLAMMABILITY RATING, LOGO AND DATE CODE TO BE PLACED IN SILKSCREEN ON BOTTOM SIDE OF THE BOARD.
7. SMOBC/IMMERSION GOLD: 2 - 5 uIN OVER 118-236 uIN NICKEL PLATING.
8. SOLDERMASK BOTH SIDES USING TAIYO (OR EQUIVALENT)
   COLOR = RED (0.001 TO 002" THICK OVER METAL.
9. SILKSCREEN BOTH SIDES USING WHITE NPI LEADFREE.
   REGISTRATION TOLERANCE TO BE +/-.005.
   INK IS NOT ALLOWED ON EXPOSED PLATED AREA.
10. P.C. BOARD TO BE FREE OF DIRT, OIL, FINGER PRINTS, ETC.
11. BOARD WARPAGE: WARP AND TWIST SHALL NOT EXCEED .007 INCH PER INCH MEASURED AT ANY LOCATION OR DIRECTION ON THE BOARD.
12. BOARD MUST BE 100% ELECTRICALLY TESTED TO ENSURE NO SHORTS OR OPEN CIRCUITS AT 20V.
13. ALL OUTER LAYERS USING A 19MIL TRACE WIDTH SHALL BE 50 OHMS SINGLE ENDED +/- 10%.
14. ALL OUTER LAYERS USING A 8.5MIL TRACE WIDTH AND 15MIL PITCH SHALL BE 100 OHMS DIFFERENTIAL +/- 10%.
15. MINIMUM COPPER CONDUCTOR WIDTH IS: 4MIL.
    MINIMUM COPPER CONDUCTOR SPACING IS: 5MIL.
16. ALL INNER LAYER UNCONNECTED PADS SHALL BE REMOVED.
17. PWB MUST BE ROHS COMPLIANT AND SURVIVE LEAD FREE ASSEMBLY, MAX REFLOW OF 260 DEGREES C (6 PASSES).
18. ALL THROUGH VIAS TO BE FILLED WITH NON-CONDUCTIVE MATERIAL. FILLED VIAS TO BE PLATED AFTER PLUGGING TO PRESENT FLAT SURFACE TO DEVICE. NO POTHOLES.

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED

SEE FABRICATION VENDORS STACKUP FOR MATERIAL AND THICKNESS





DRILL CHART: TOP to BOTTOM			
ALL UNITS ARE IN MILS			
FIGURE	SIZE	PLATED	QTY
·	8.0	PLATED	1864
·	10.0	PLATED	49
▪	12.0	PLATED	150
◦	38.0	PLATED	4
G	62.0	PLATED	17
G	67.0	PLATED	4
◈	106.0	PLATED	2
Ⓦ	120.0	PLATED	2
Y	125.0	PLATED	2
Ⓩ	140.0	PLATED	1
▫	39.0	NON-PLATED	2
v	50.0	NON-PLATED	2

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS +/- DECIMALS .XX +/-.01 .XXX +/-.005 ANGLES +/-	CONTRACT NO.	TEXAS INSTRUMENTS INC.
	APPROVALS / DATE	FABRICATION DRAWING TSW54J60 EVM
MATERIAL SEE NOTE 5	DRAWN JV SMITH 03-19-15 ENG J SETON 03-19-15	
FINISH SEE NOTE 7, 8, 9		SIZE D · CODE IDENT NO. · DRAWING NO. · REV. B
DO NOT SCALE DRAWING		SCALE NONE · SHEET 1 OF 1

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