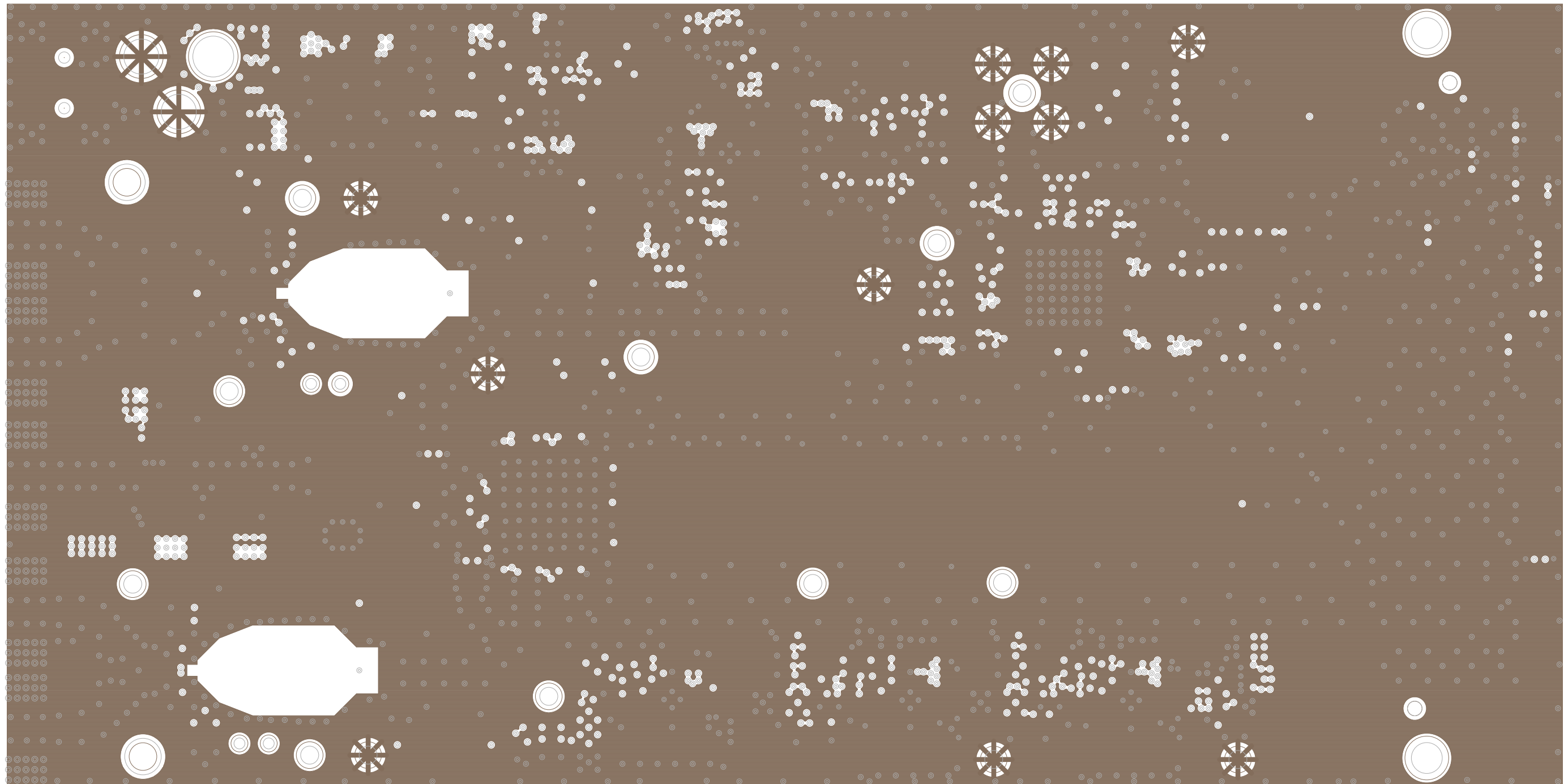


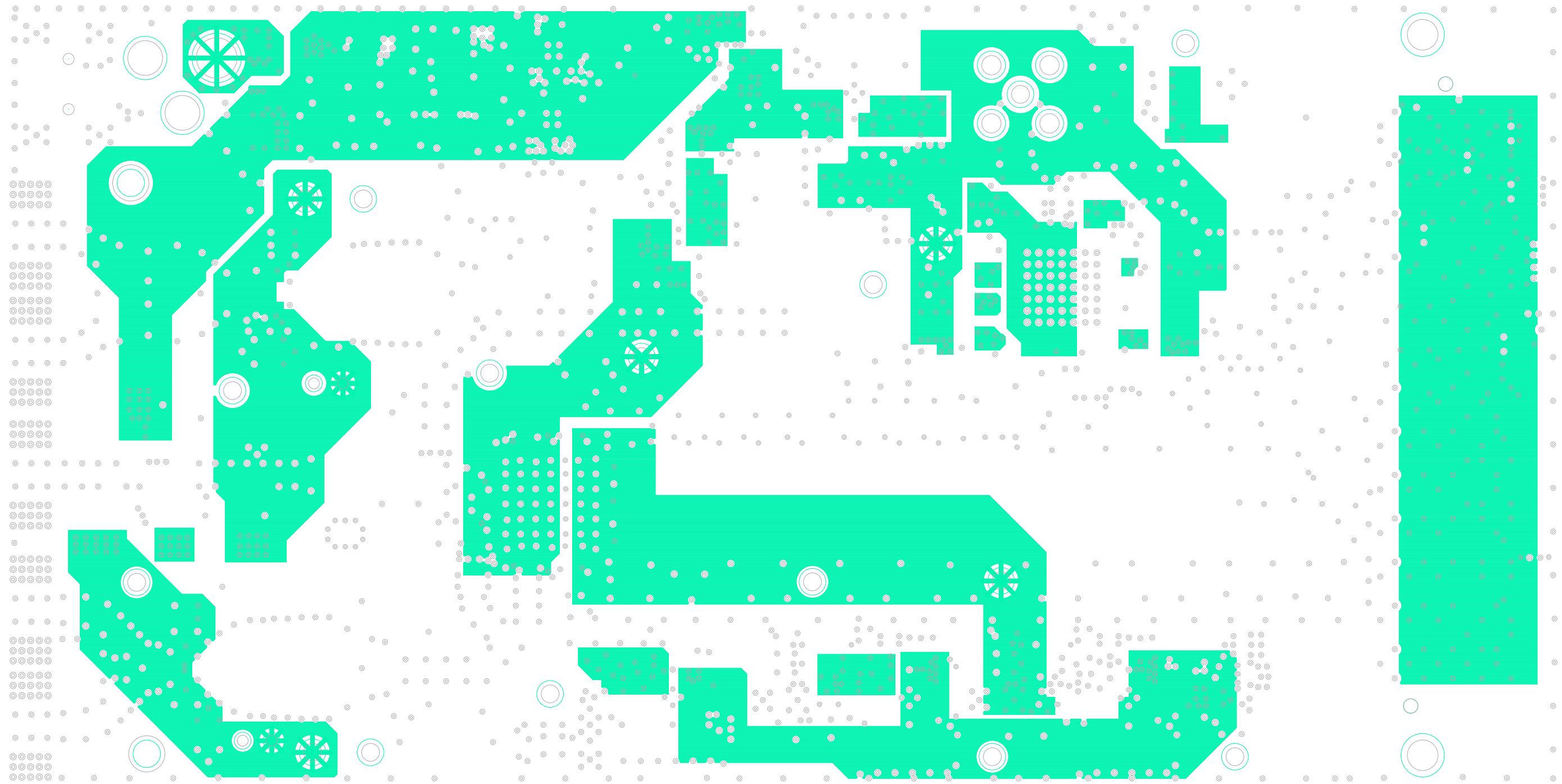
TSW54J60 REV B

LAYER 1 (TOP SIDE)



TSW54J60 REV B

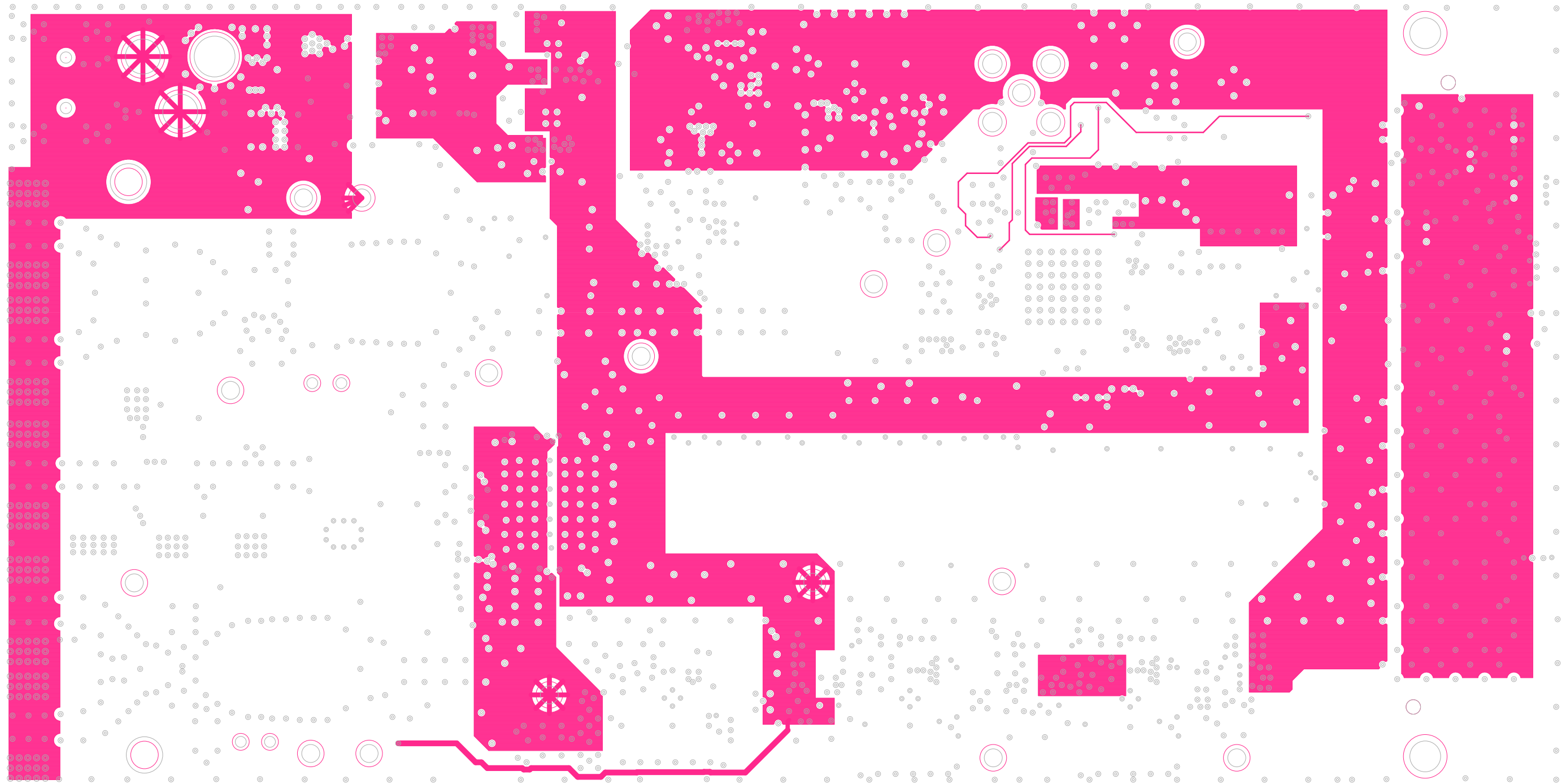
LAYER 2 - GND



TSW54J60 REV B

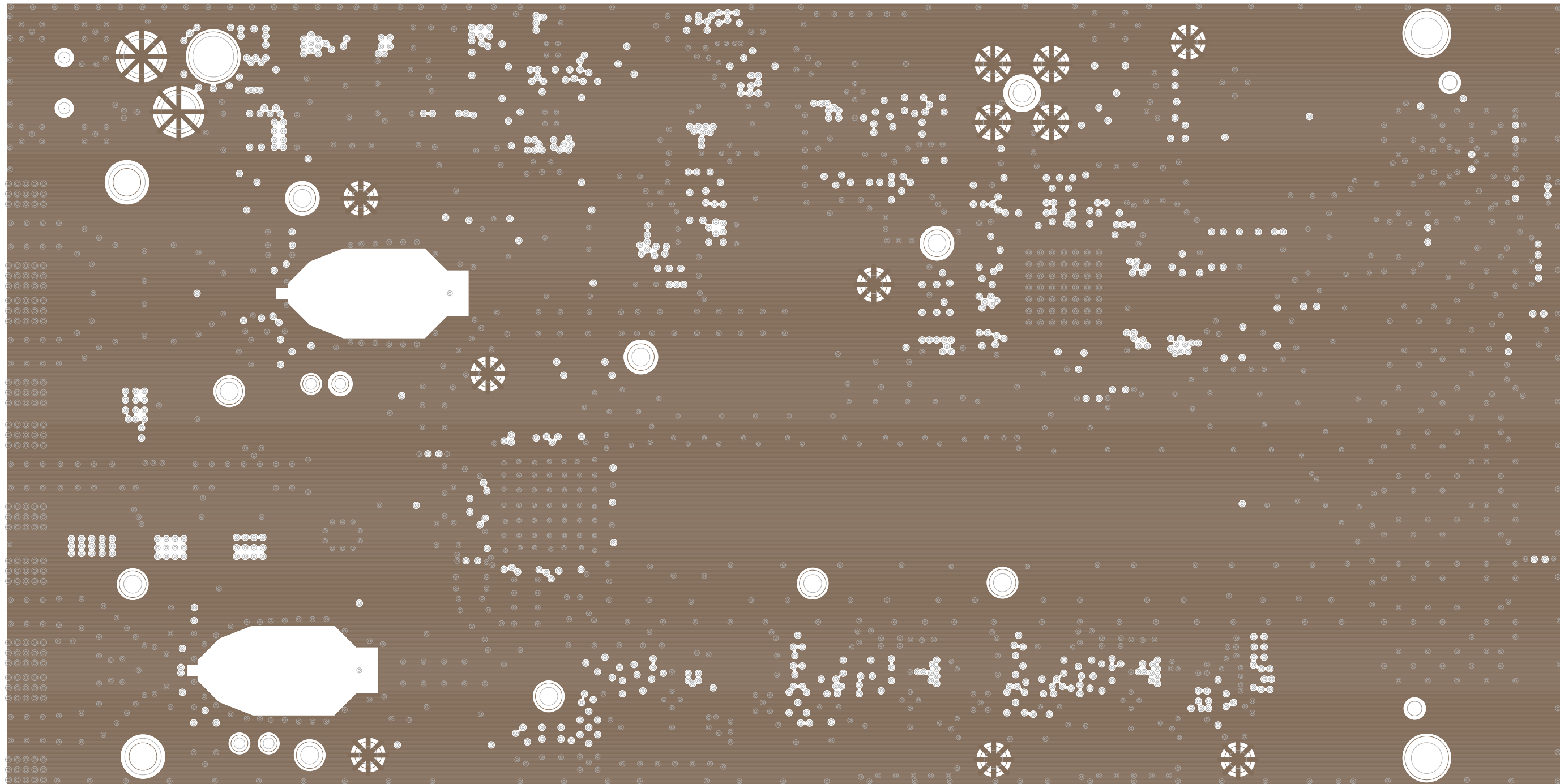
LAYER 3 - POWER





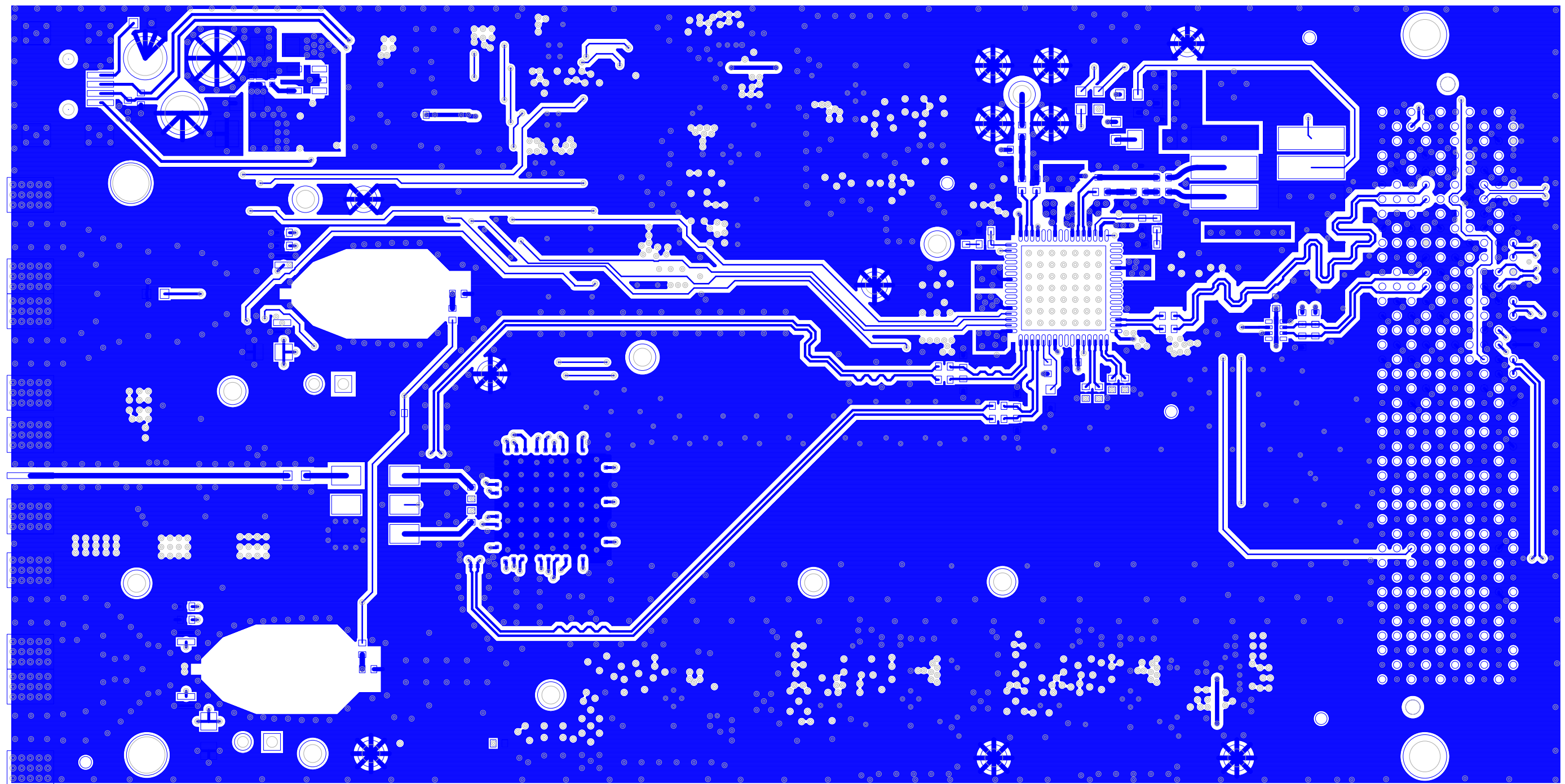
TSW54J60 REV B

LAYER 4 - POWER/SIGNAL



TSW54J60 REV B

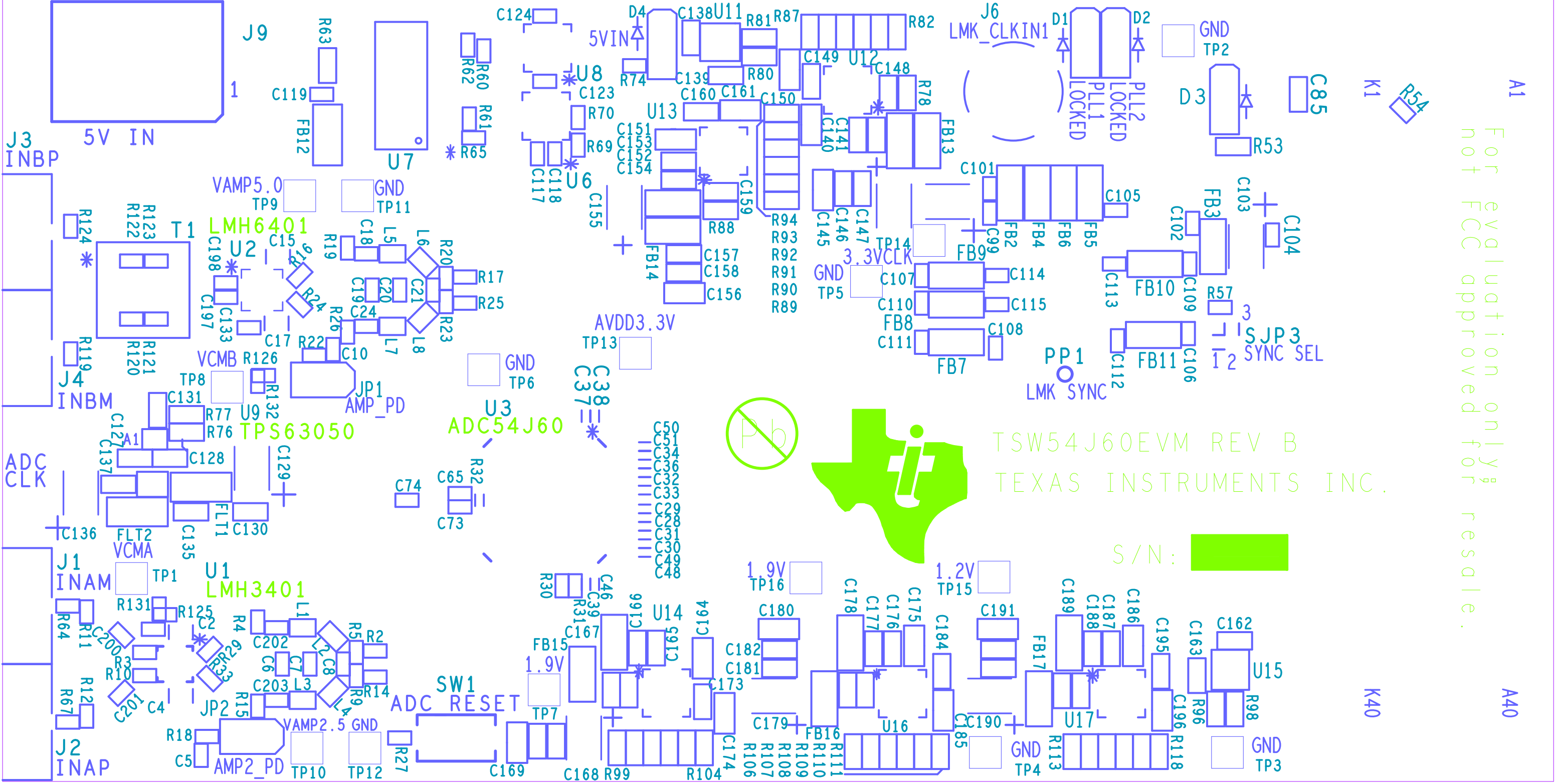
LAYER 5 - GROUND



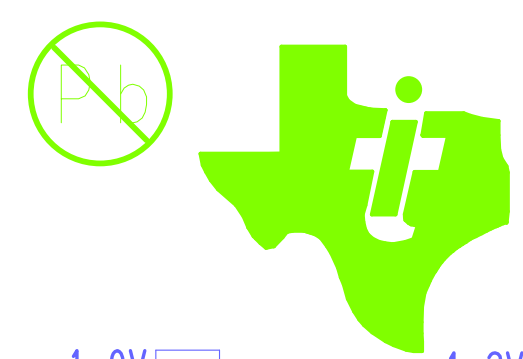
TSW54J60 REV B

LAYER 6 (BOTTOM SIDE)





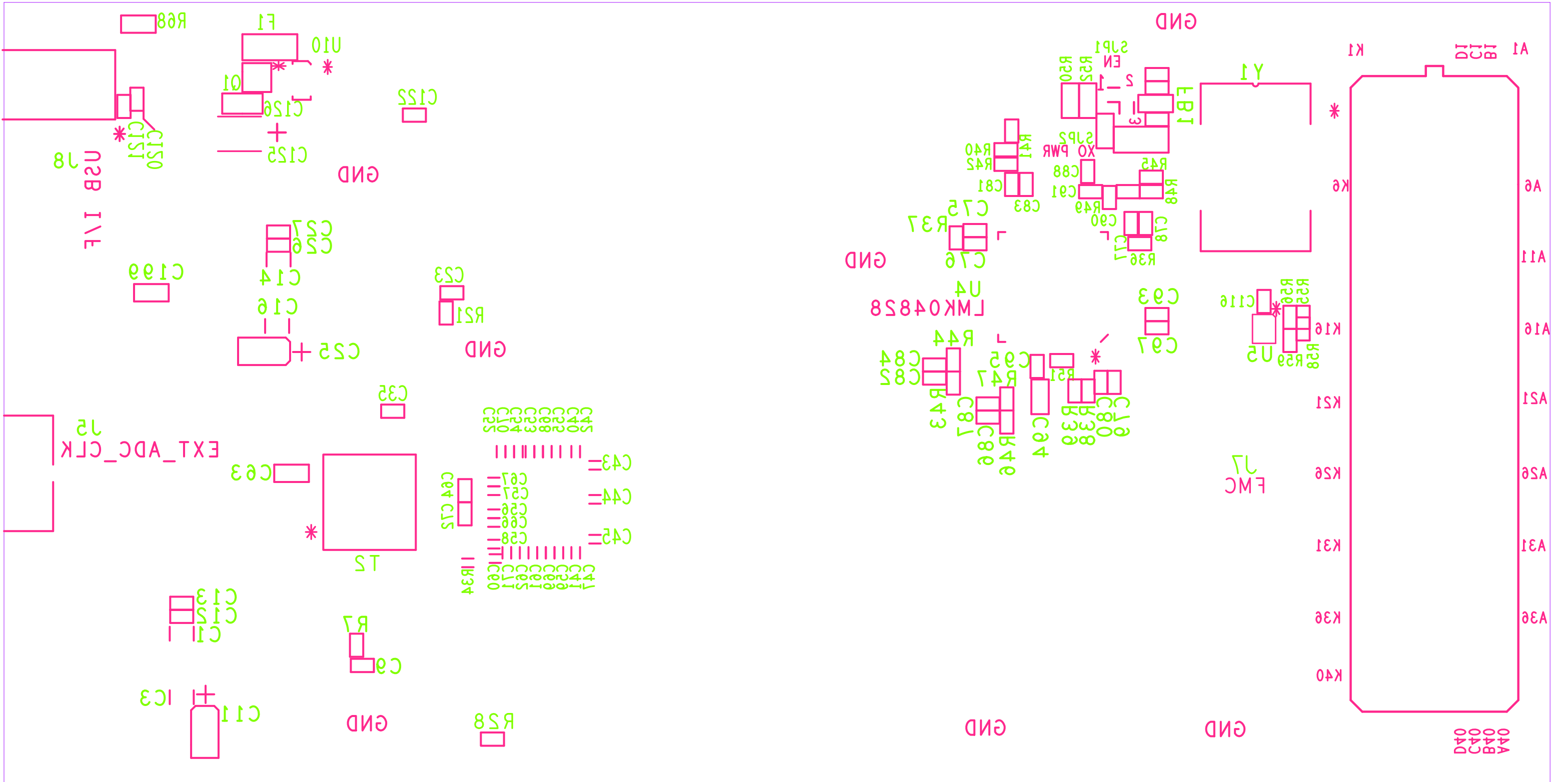
A1 For evaluation only, not FCC approved for resale. A40



TSW54J60EVM REV B  
 TEXAS INSTRUMENTS INC.

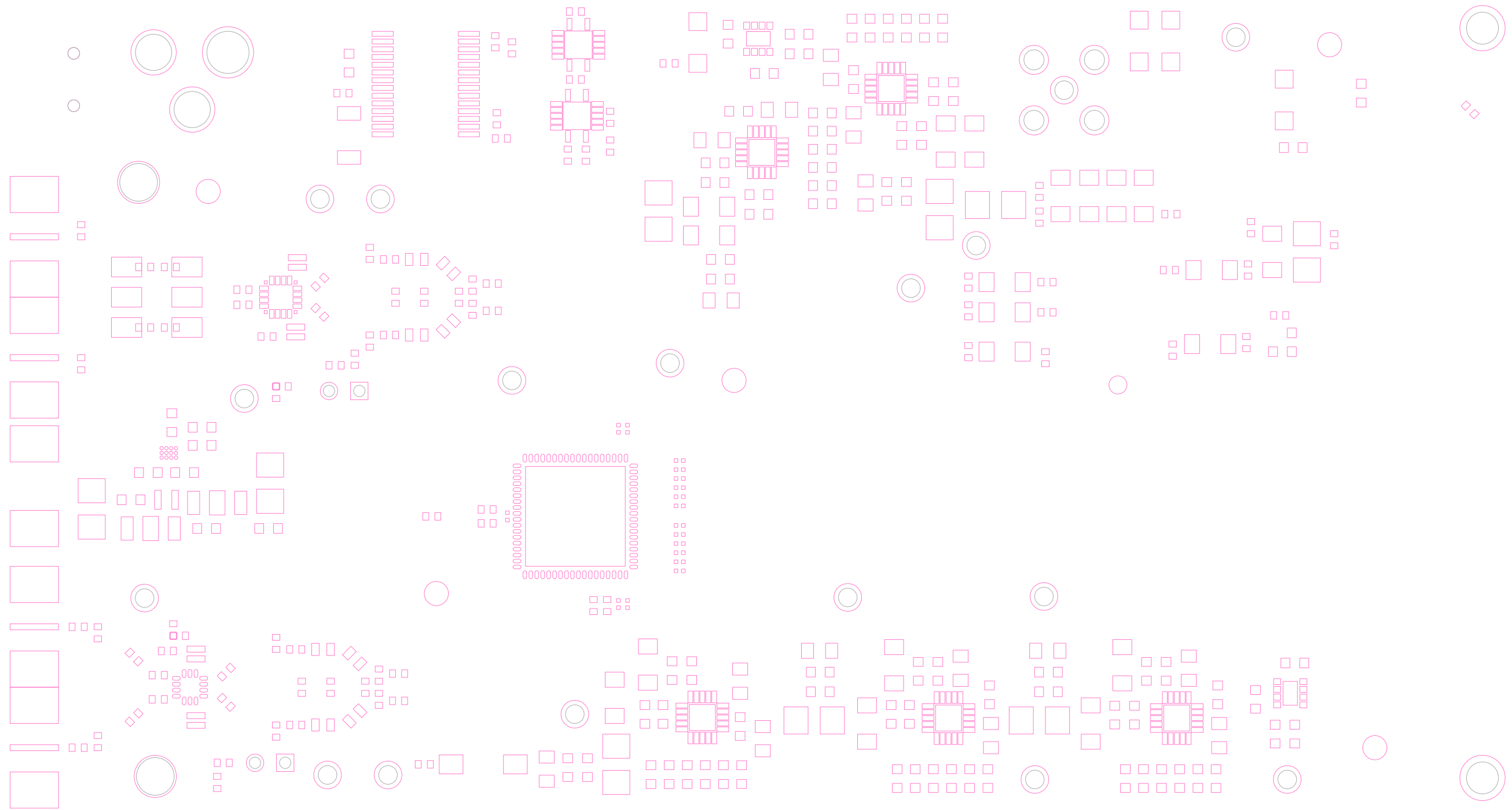
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TSW54J60 REV B  
 SILKSCREEN TOP



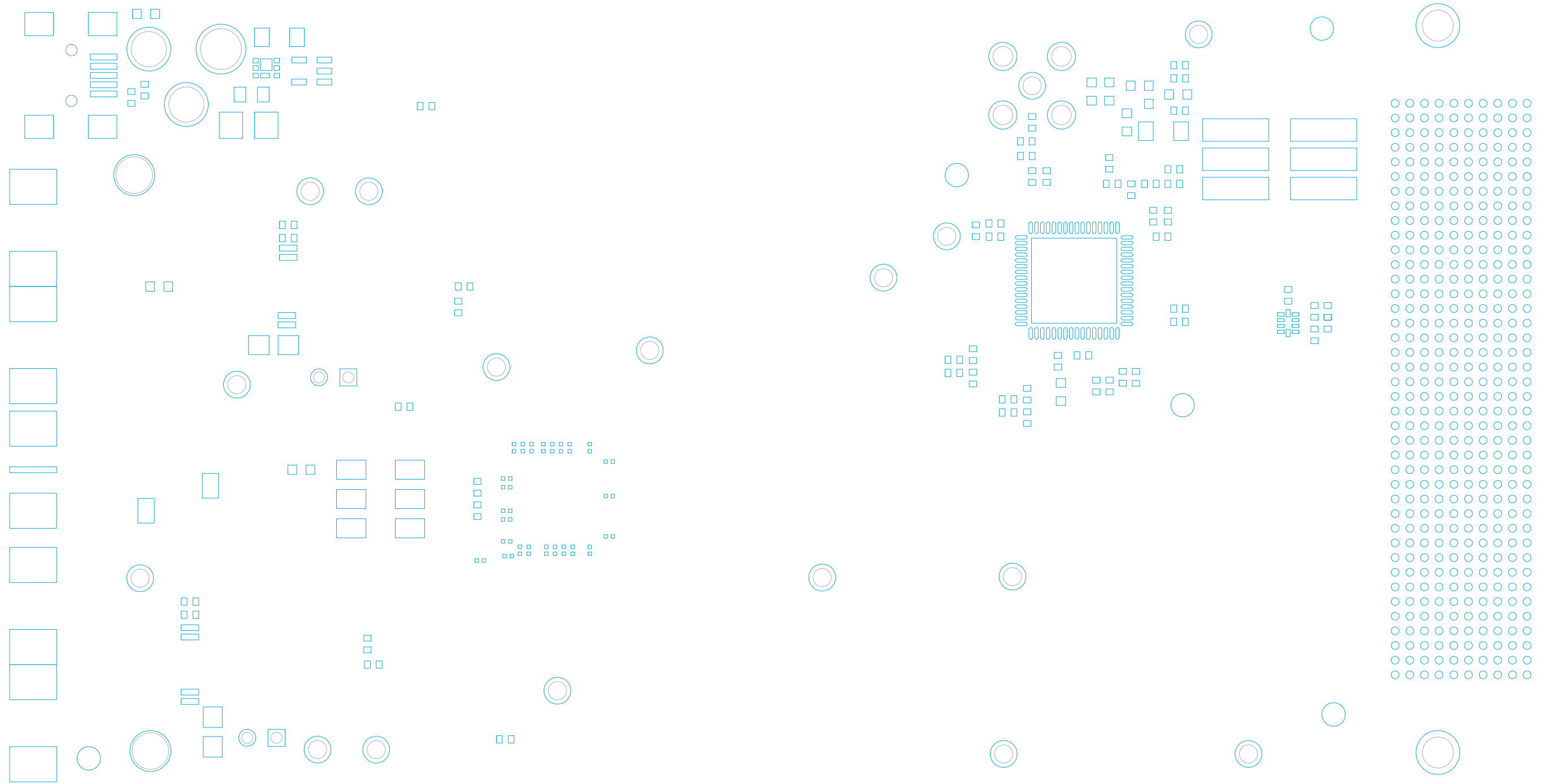
TSW54J60 REV B  
SILKSCREEN BOTTOM





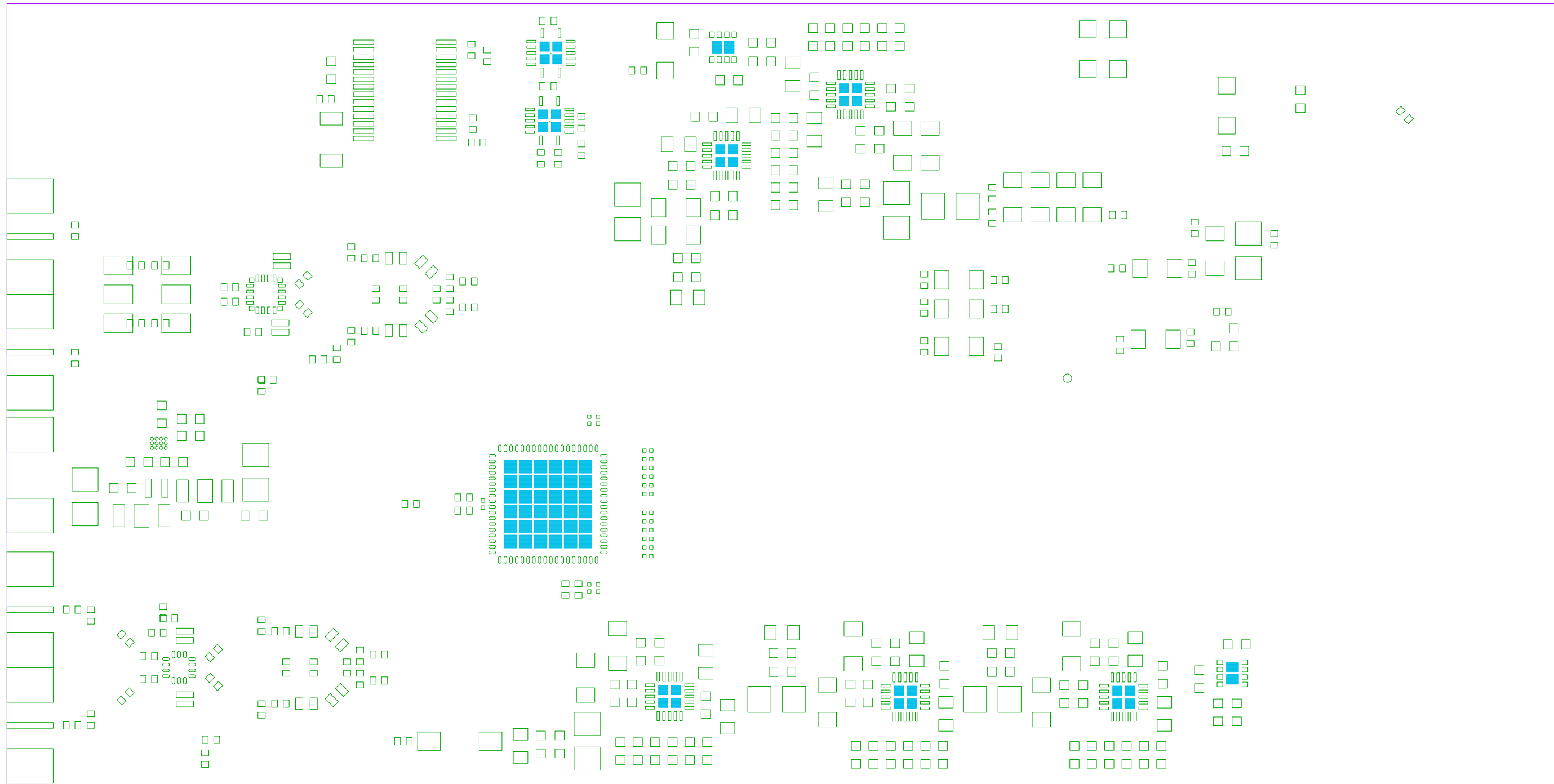
TSW54J60 REV B

SOLDERMASK TOP



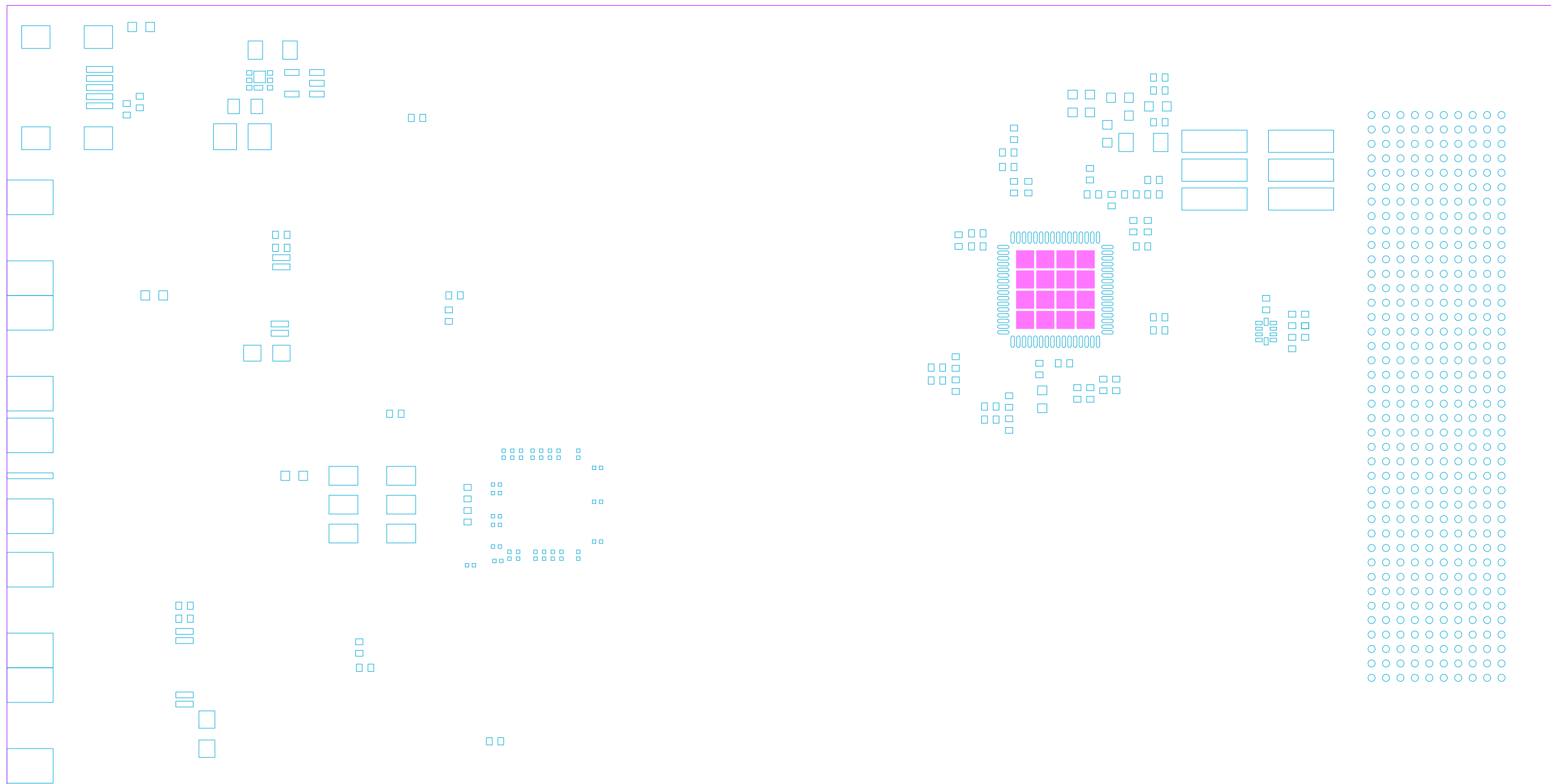
TSW54J60 REV B

SOLDERMASK BOTTOM



TSW54J60 REV B

PASTEMASK TOP



TSW54J60 REV B

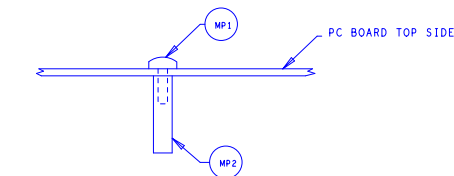
PASTEMASK BOTTOM



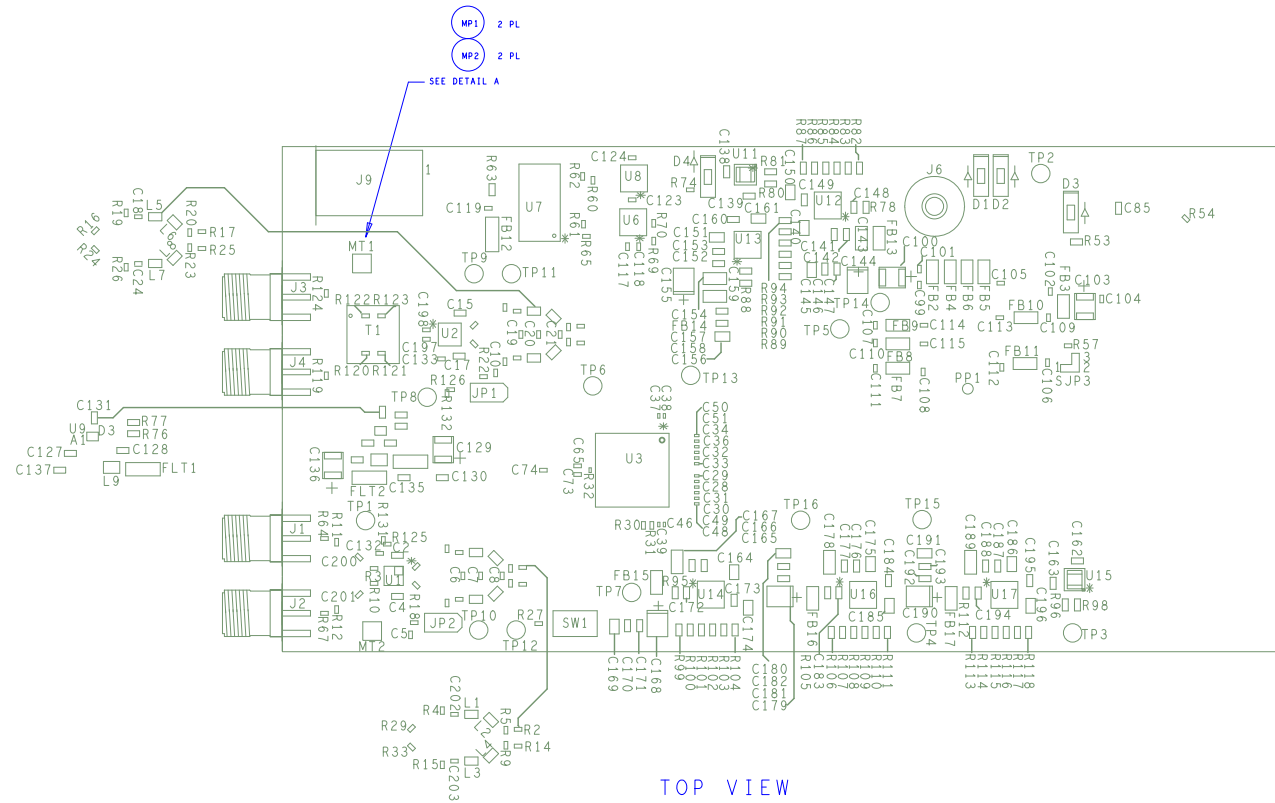
THIS DRAWING IS INTENDED TO HELP IN THE ASSEMBLY OF THE DESIGN.

ZONE		LTR		REVISIONS		DATE	APPROVED
				DESCRIPTION			

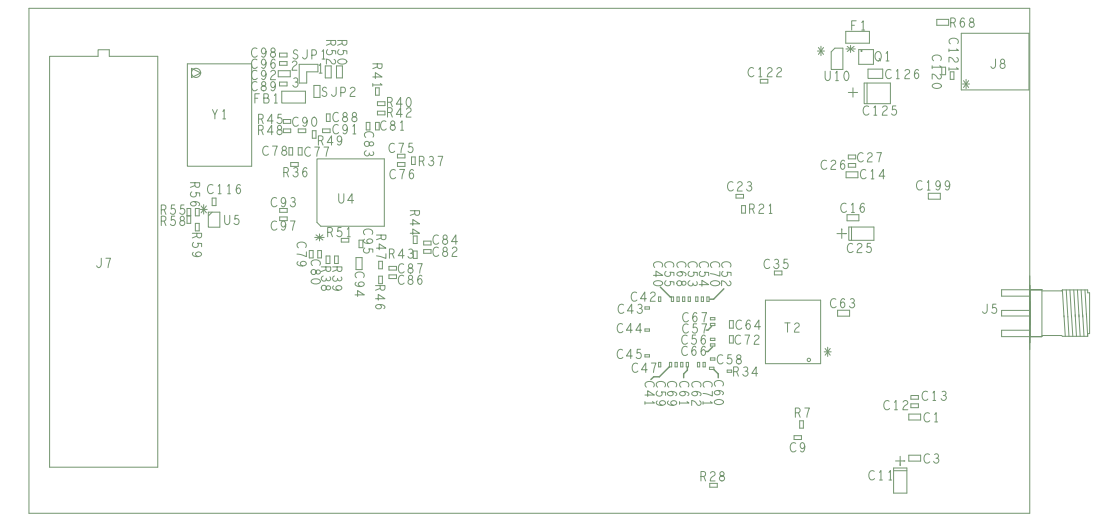
- REFER TO ODB++ FILE FOR SPECIFIC COMPONENT LOCATION INFORMATION.
- USE WATER SOLUBLE FLUX DURING BOARD ASSEMBLY.  
ASSEMBLY MUST BE RoHS COMPLIANT AND LEAD FREE.



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

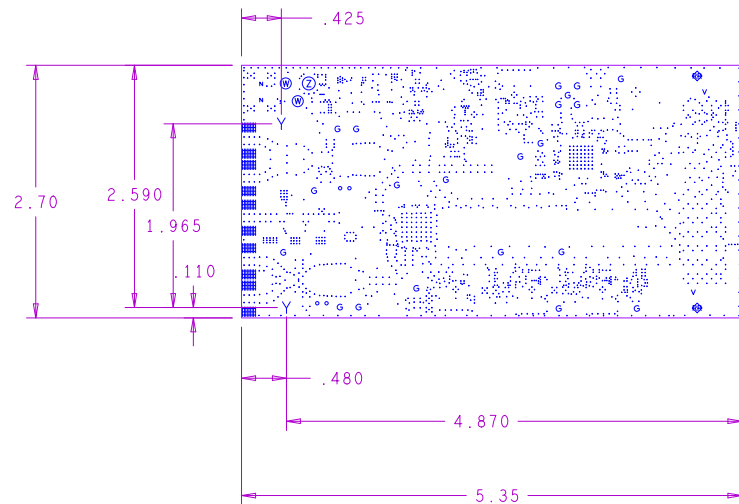
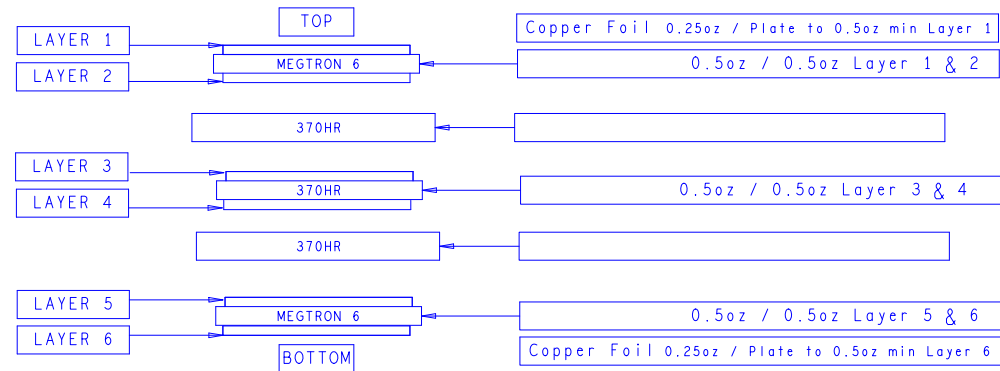
REVISIONS			
ZONE	LTR	DESCRIPTION	DATE

UNLESS OTHERWISE SPECIFIED, ALL NOTES ARE APPLICABLE.

- 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.
- 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 (0.001 TO 002" THICK OVER METAL.
- 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 19MIL TRACE WIDTH SHALL BE 50 OHMS SINGLE ENDED +/- 10%.
- ALL OUTER LAYERS USING A 8.5MIL TRACE WIDTH AND 15MIL PITCH SHALL BE 100 OHMS DIFFERENTIAL +/- 10%.
- MINIMUM COPPER CONDUCTOR WIDTH IS: 4MIL. MINIMUM COPPER CONDUCTOR SPACING IS: 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 FILLED WITH NON-CONDUCTIVE MATERIAL. FILLED 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
-	8.0	PLATED	1864
-	10.0	PLATED	49
*	12.0	PLATED	150
o	38.0	PLATED	4
o	62.0	PLATED	17
o	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 ANGLES +/- .XX +/- .01 +/- +/- .XXX +/- .005 +/-	CONTRACT NO.		TEXAS INSTRUMENTS INC.	
	APPROVALS	DATE	FABRICATION DRAWING TSW54J60 EVM	
DRAWN JV SMITH	03-19-15	SCALE		
MATERIAL SEE NOTE 5	ENG J SETON	03-19-15	SIZE	D
FINISH SEE NOTE 7, 8, 9			CODE IDENT NO.	
DO NOT SCALE DRAWING			DRAWING NO.	
			REV.	B
			SHEET 1 OF 1	

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