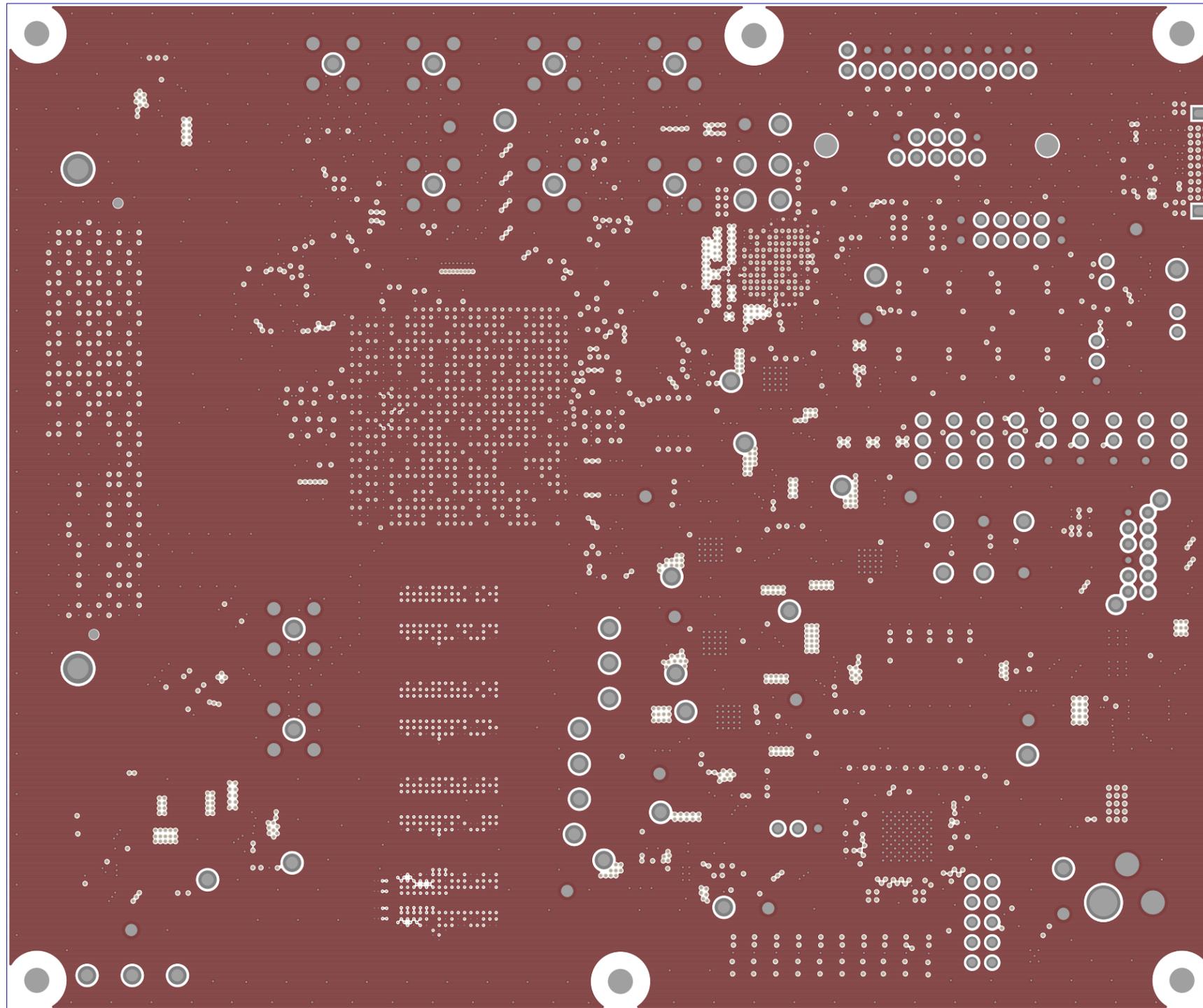
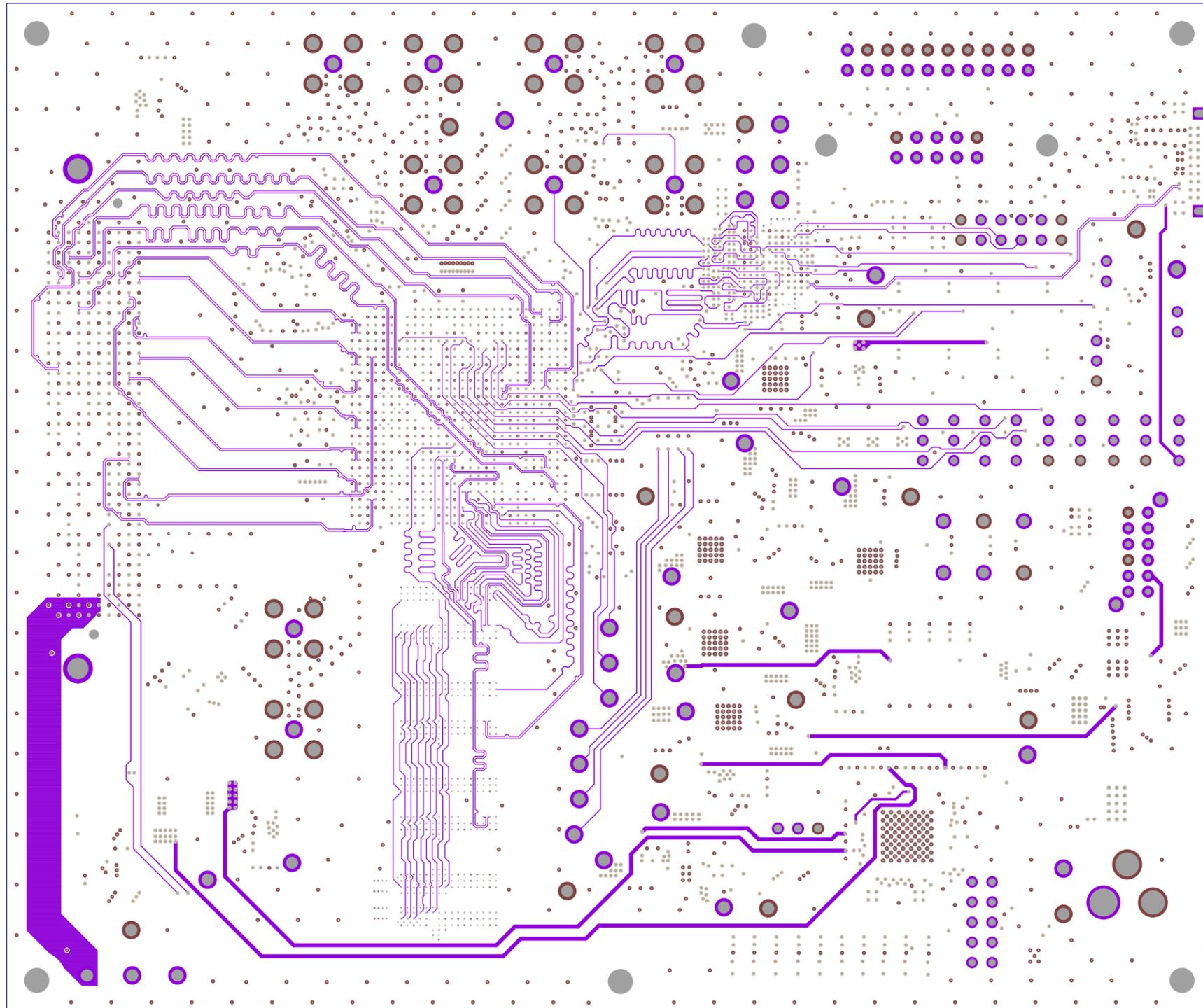


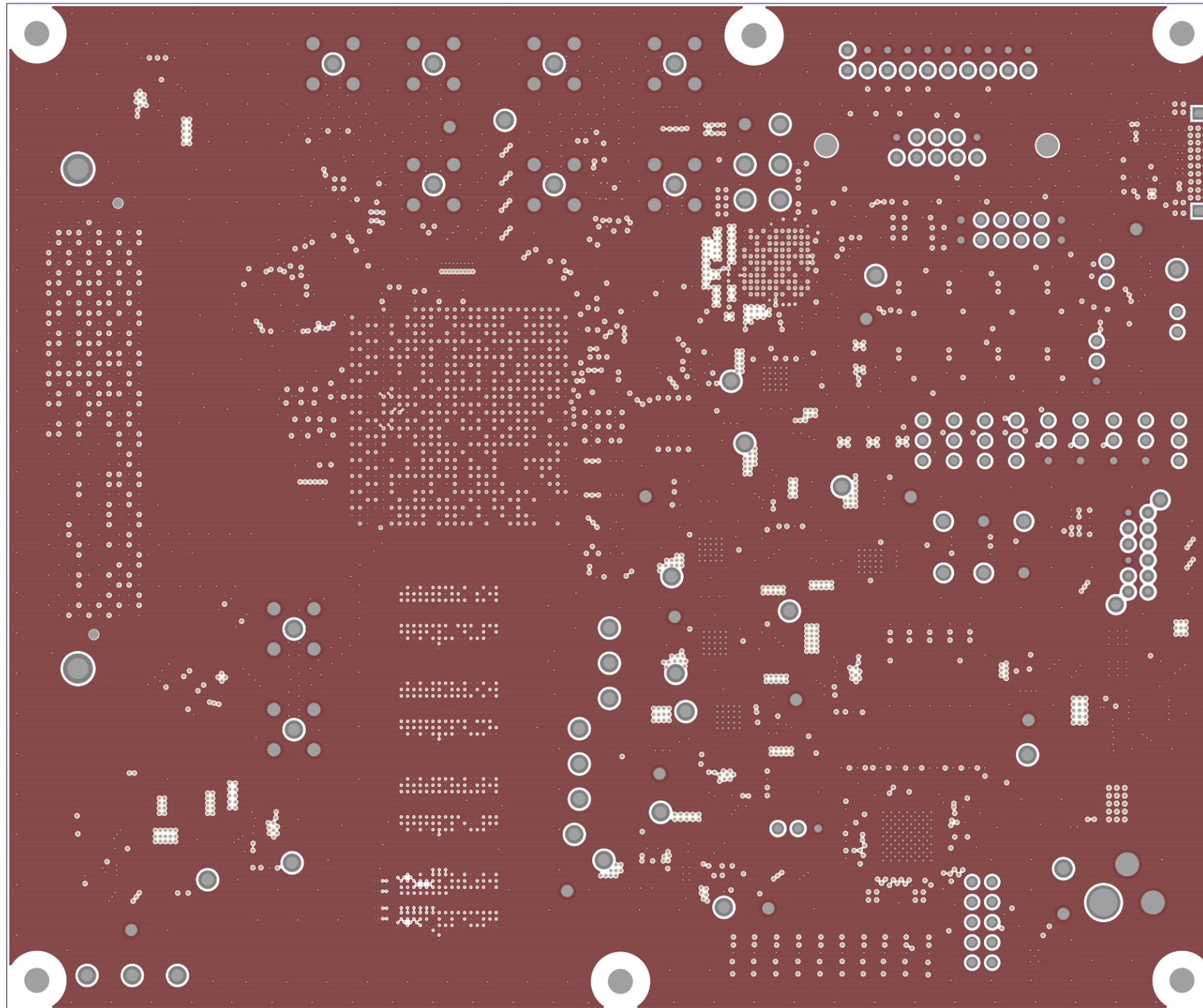
TEXAS INSTRUMENTS
 TSW14J56EVM REV E
 SILKSCREEN(TOP SIDE)



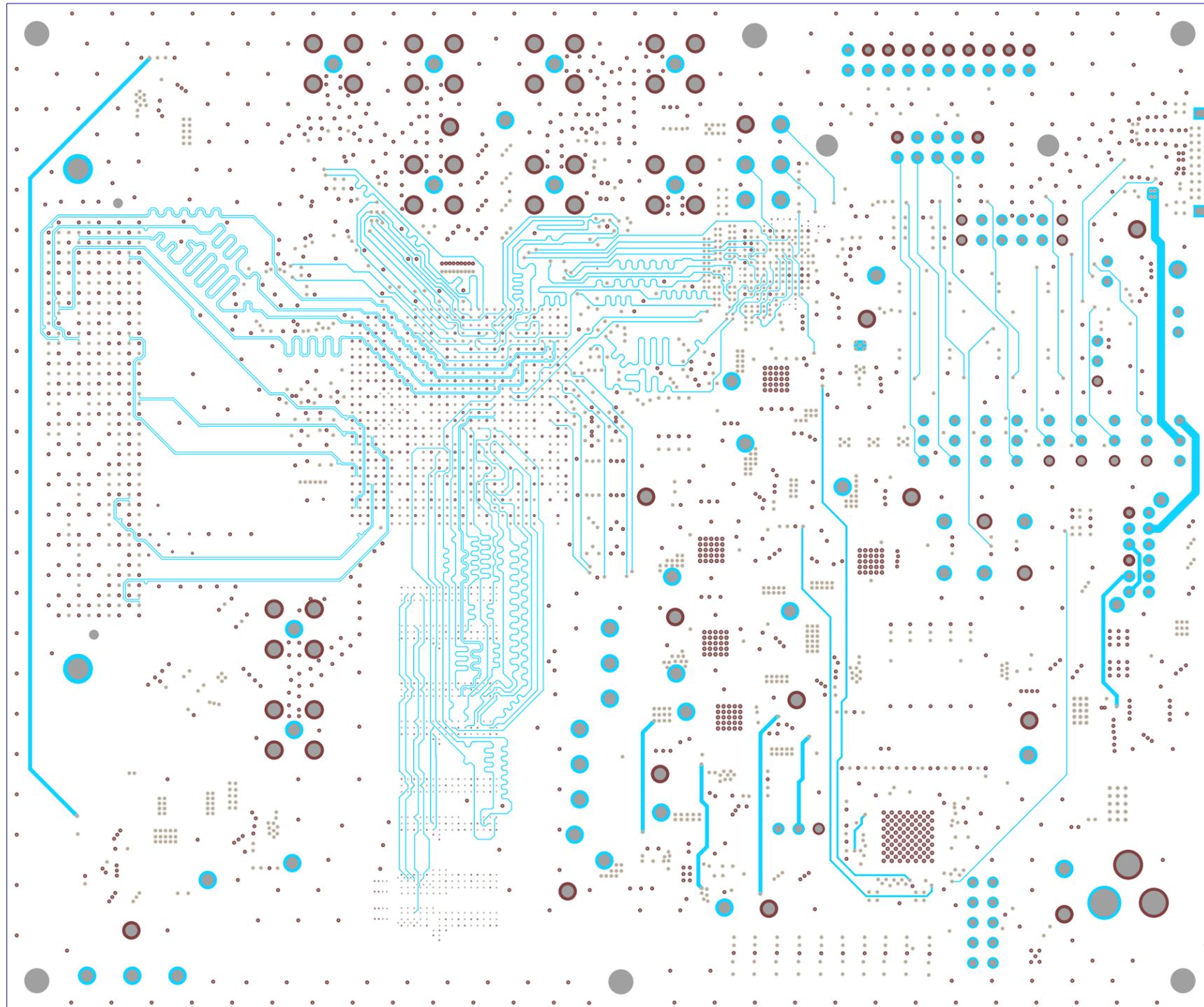
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TSW14J56EVM REV E
LAYER 2 (GND1)



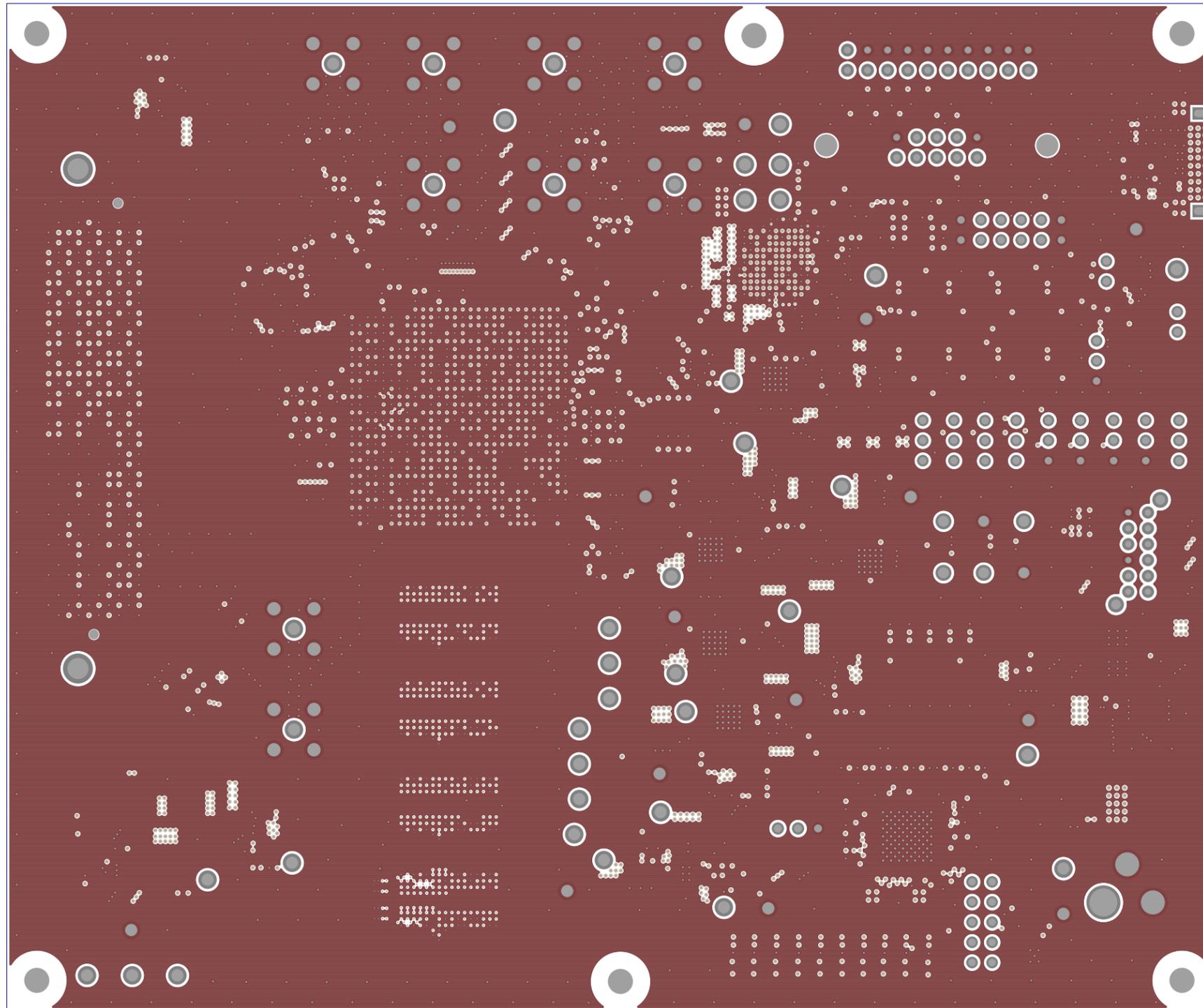
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TSW14J56EVM REV E
LAYER 3 (SIG1)



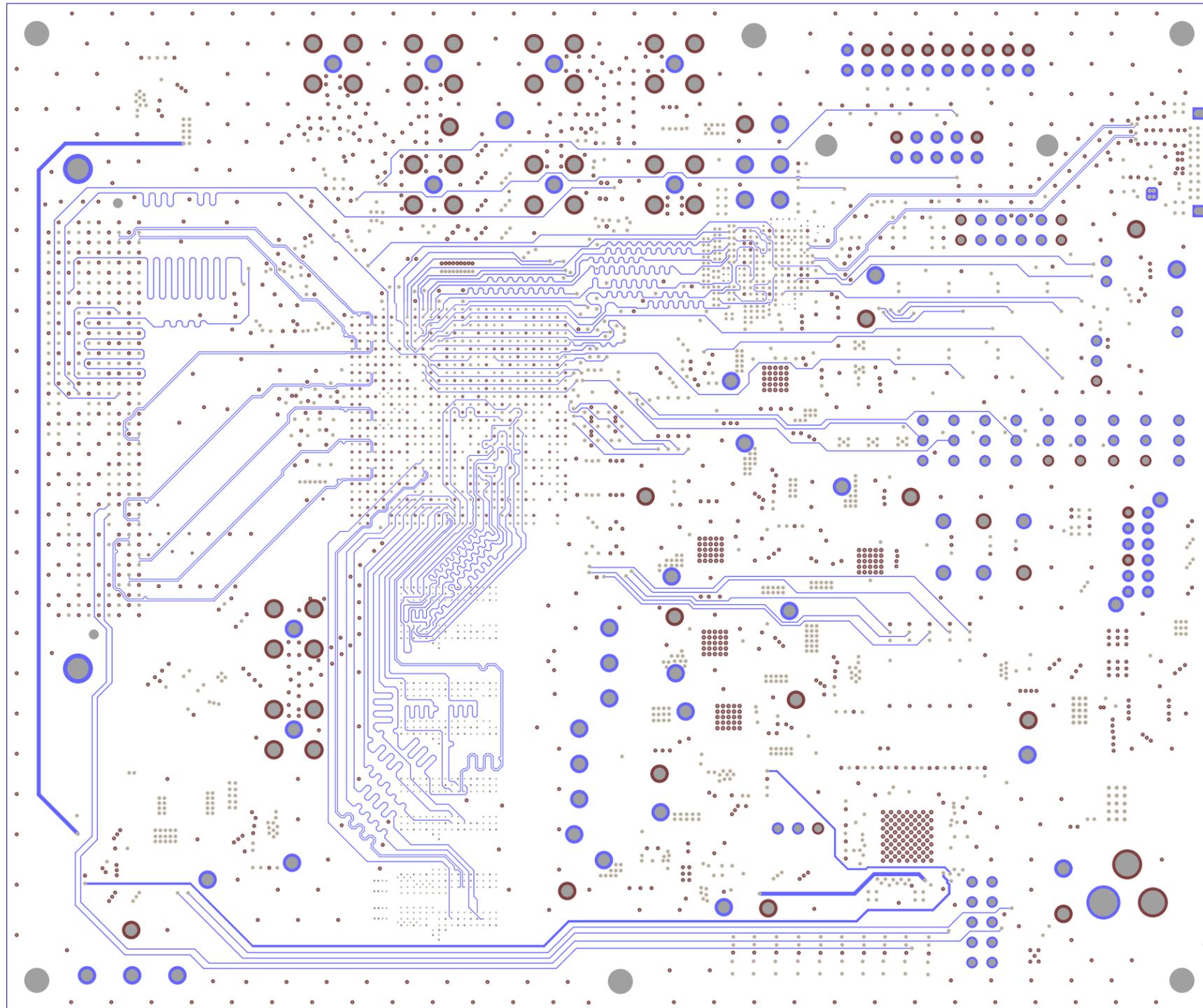
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TSW14J56EVM REV E
LAYER 4 (GND2)



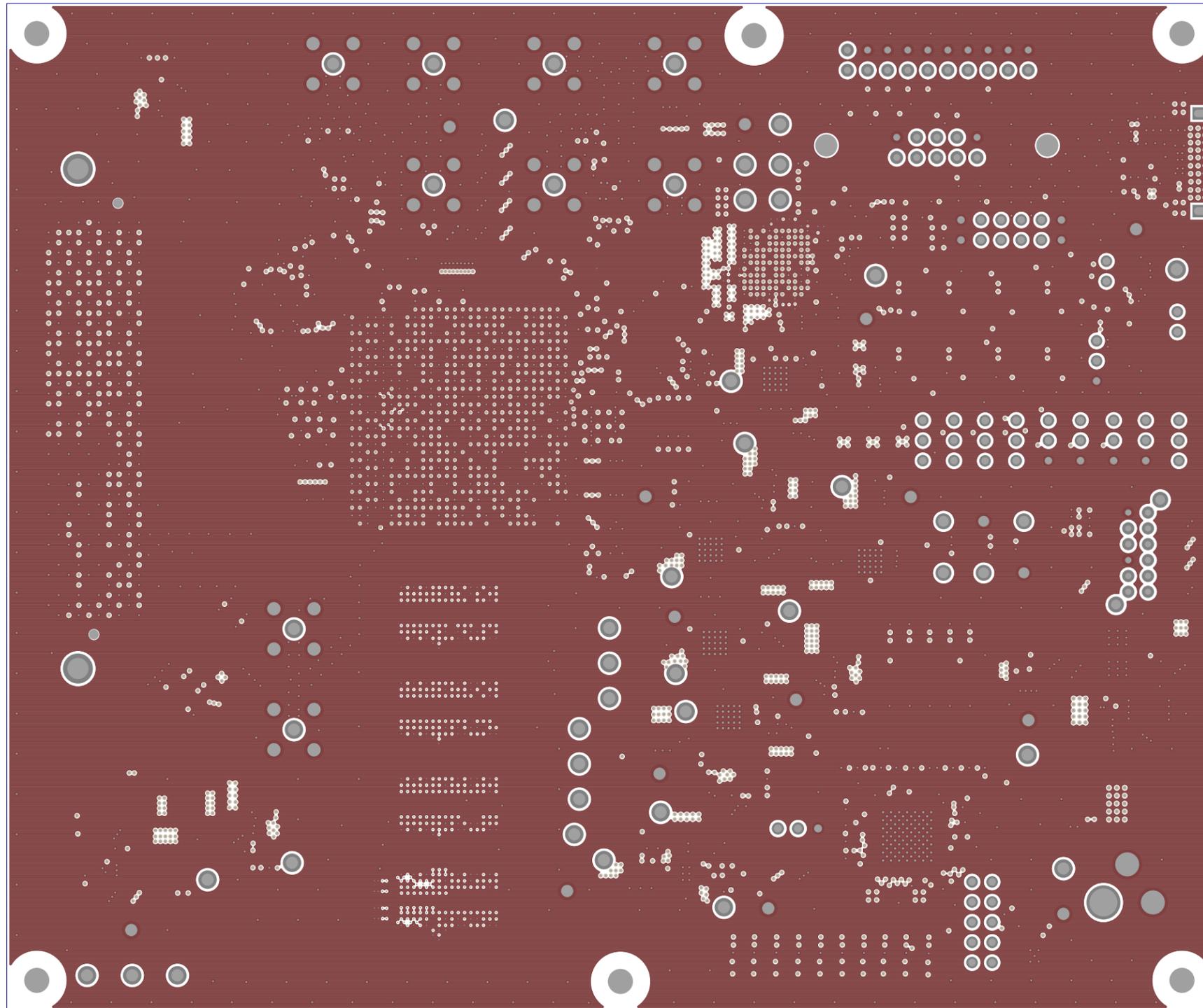
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LAYER 5 (SIG2)



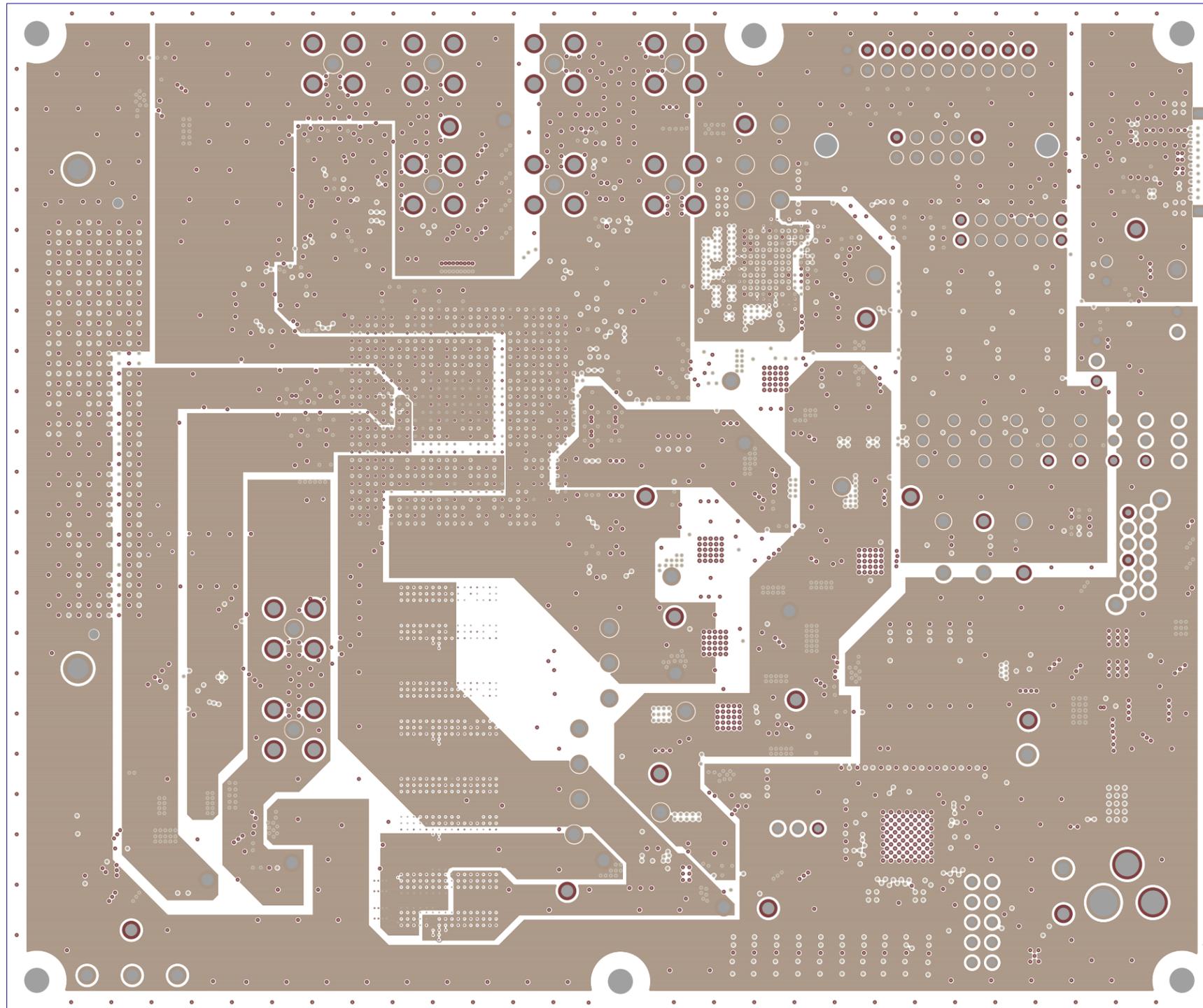
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LAYER 6 (GND3)



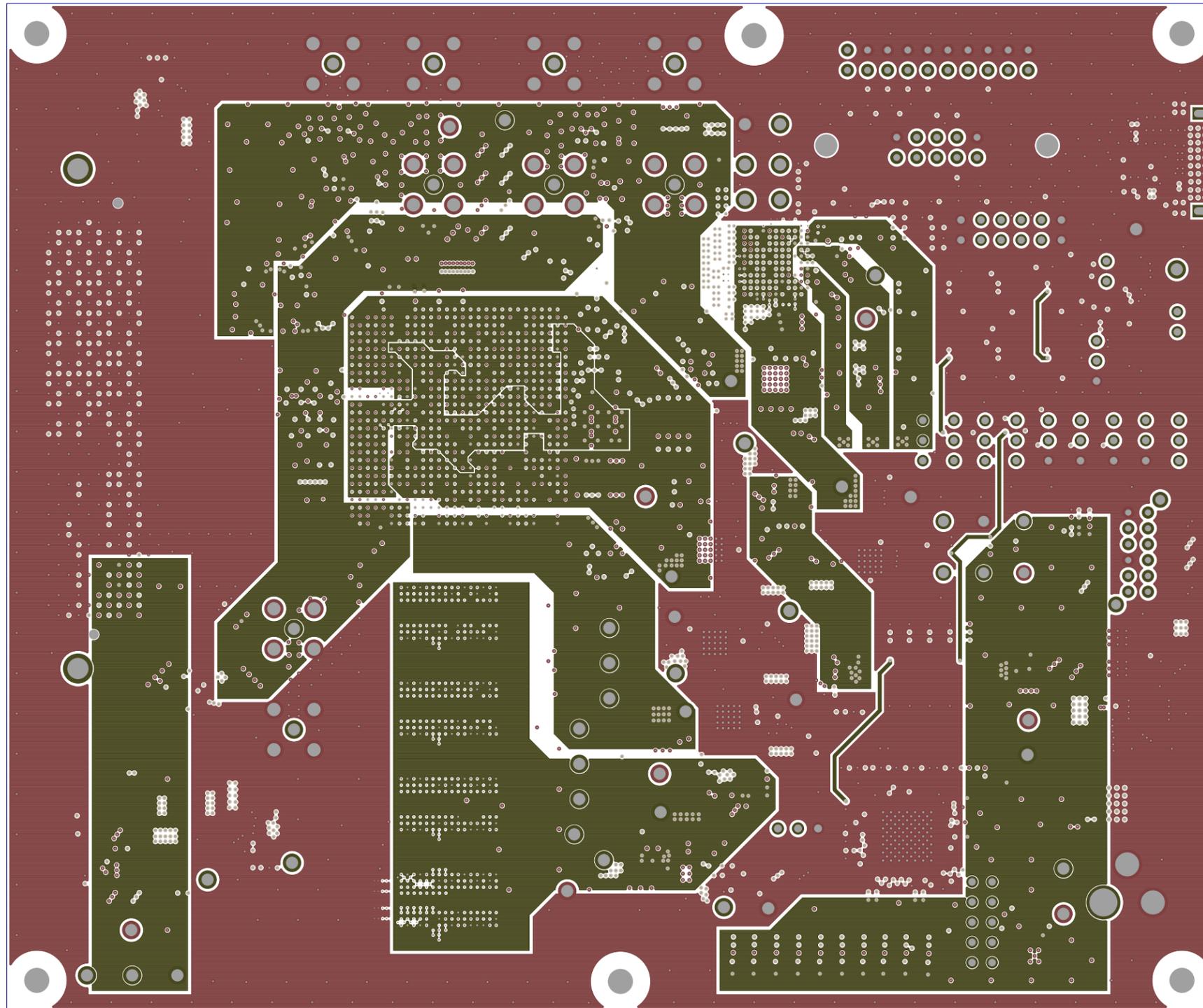
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TSW14J56EVM REV E
LAYER 7 (SIG3)



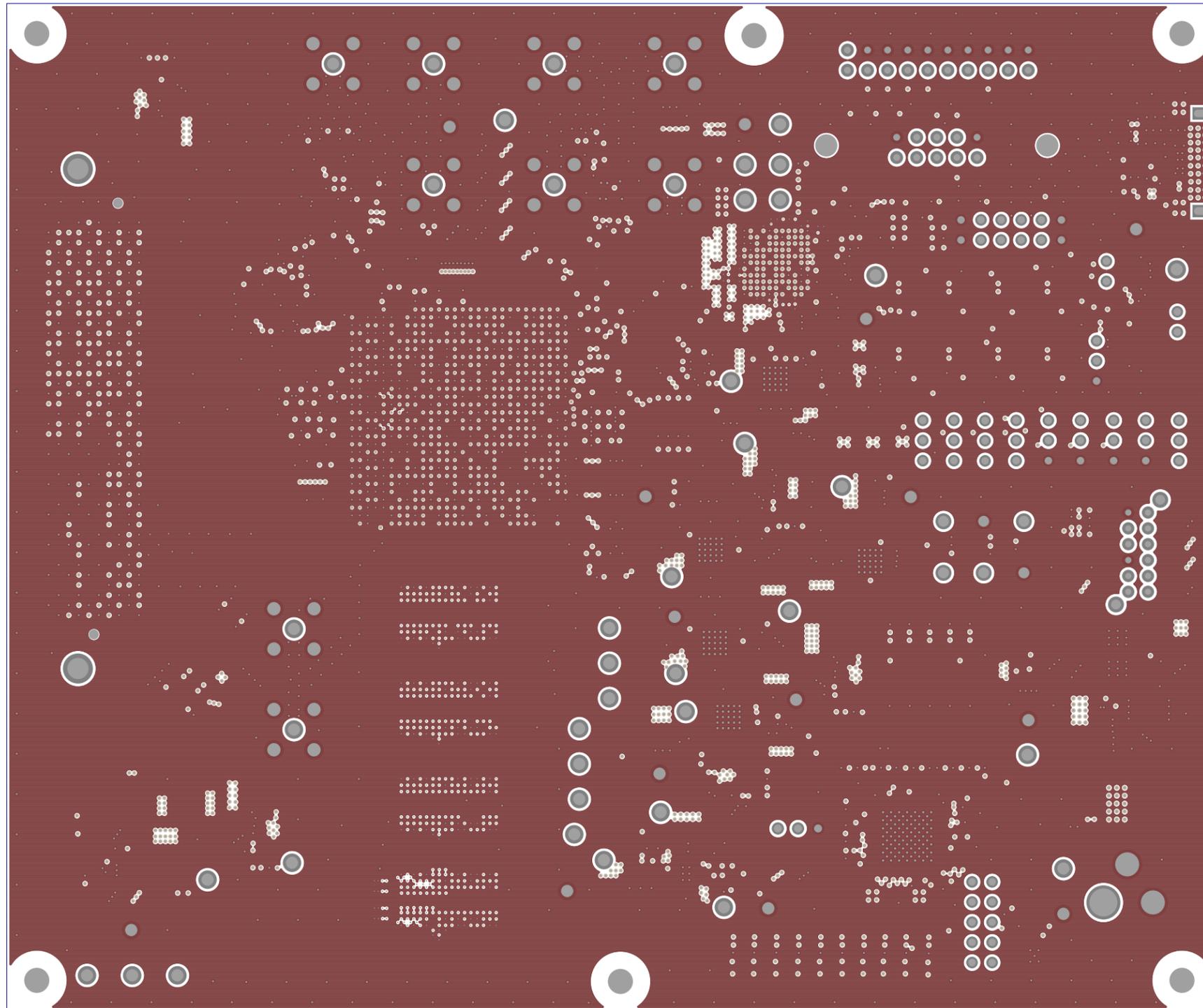
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TSW14J56EVM REV E
LAYER 8 (GND4)



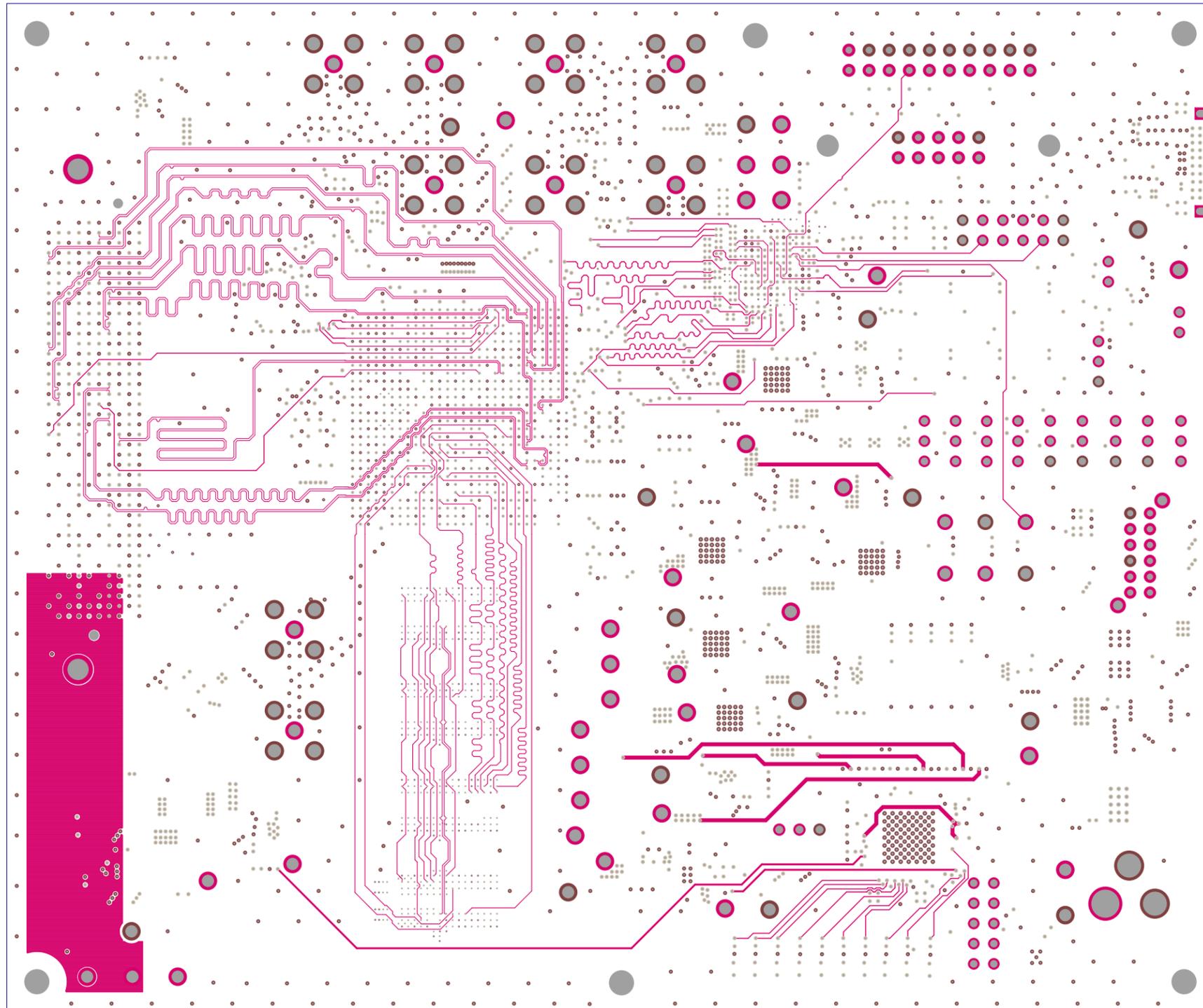
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TSW14J56EVM REV E
LAYER 9 (PWR1)



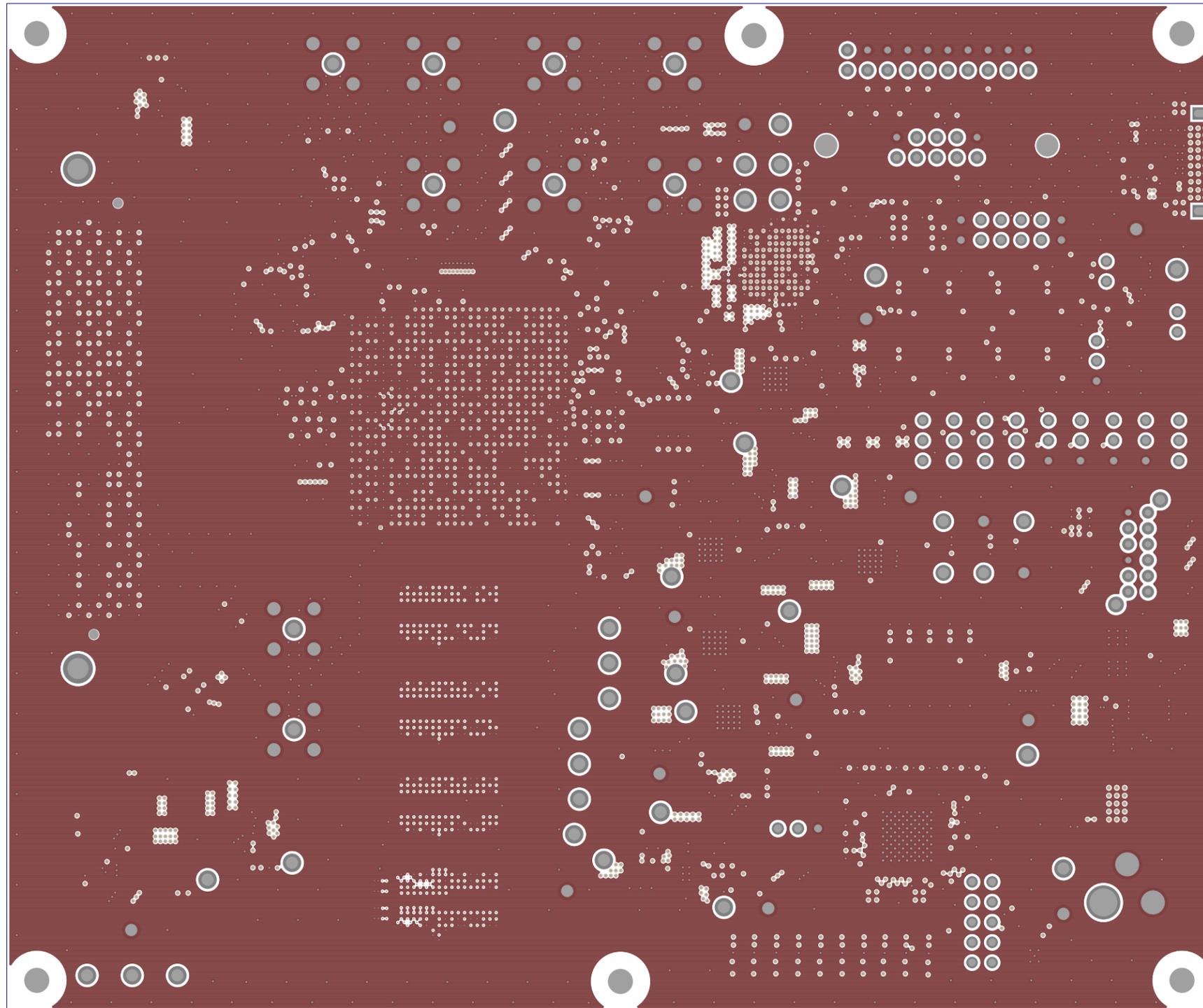
TEXAS INSTRUMENTS
TSW14J56EVM REV E
LAYER 10 (PWR2)



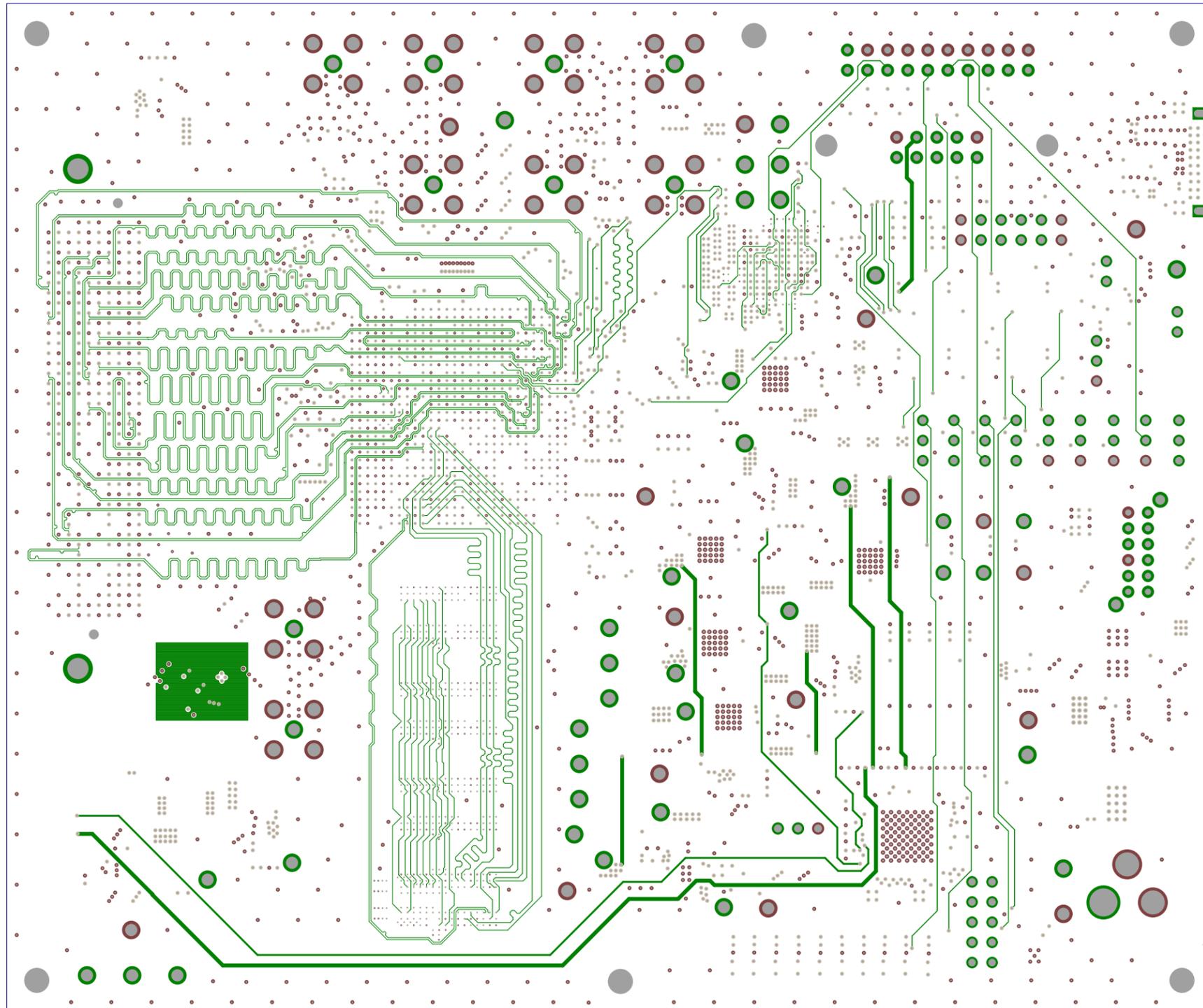
TEXAS INSTRUMENTS
TSW14J56EVM REV E
LAYER 11 (GND5)



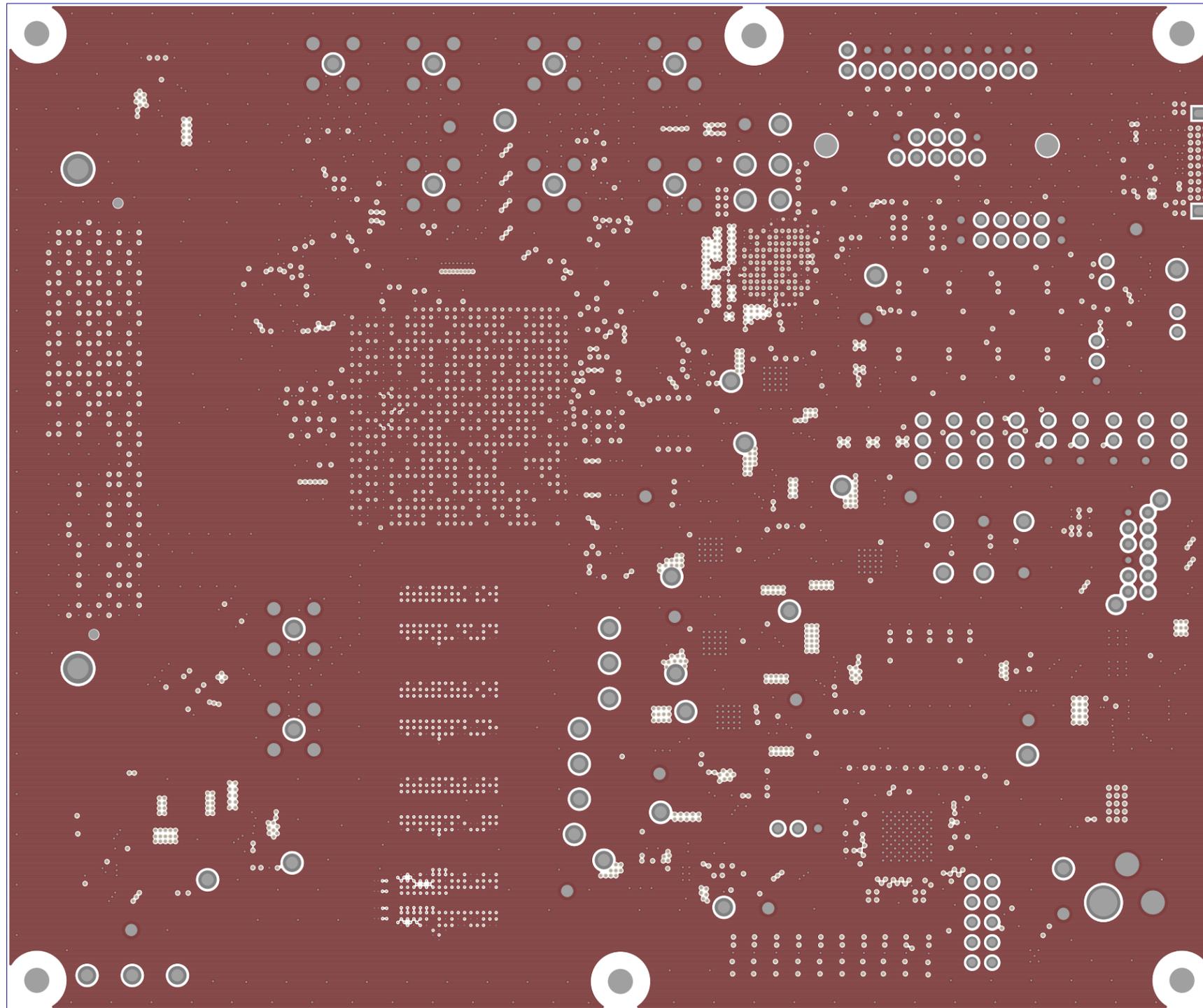
TEXAS INSTRUMENTS
TSW14J56EVM REV E
LAYER 12 (SIG4)



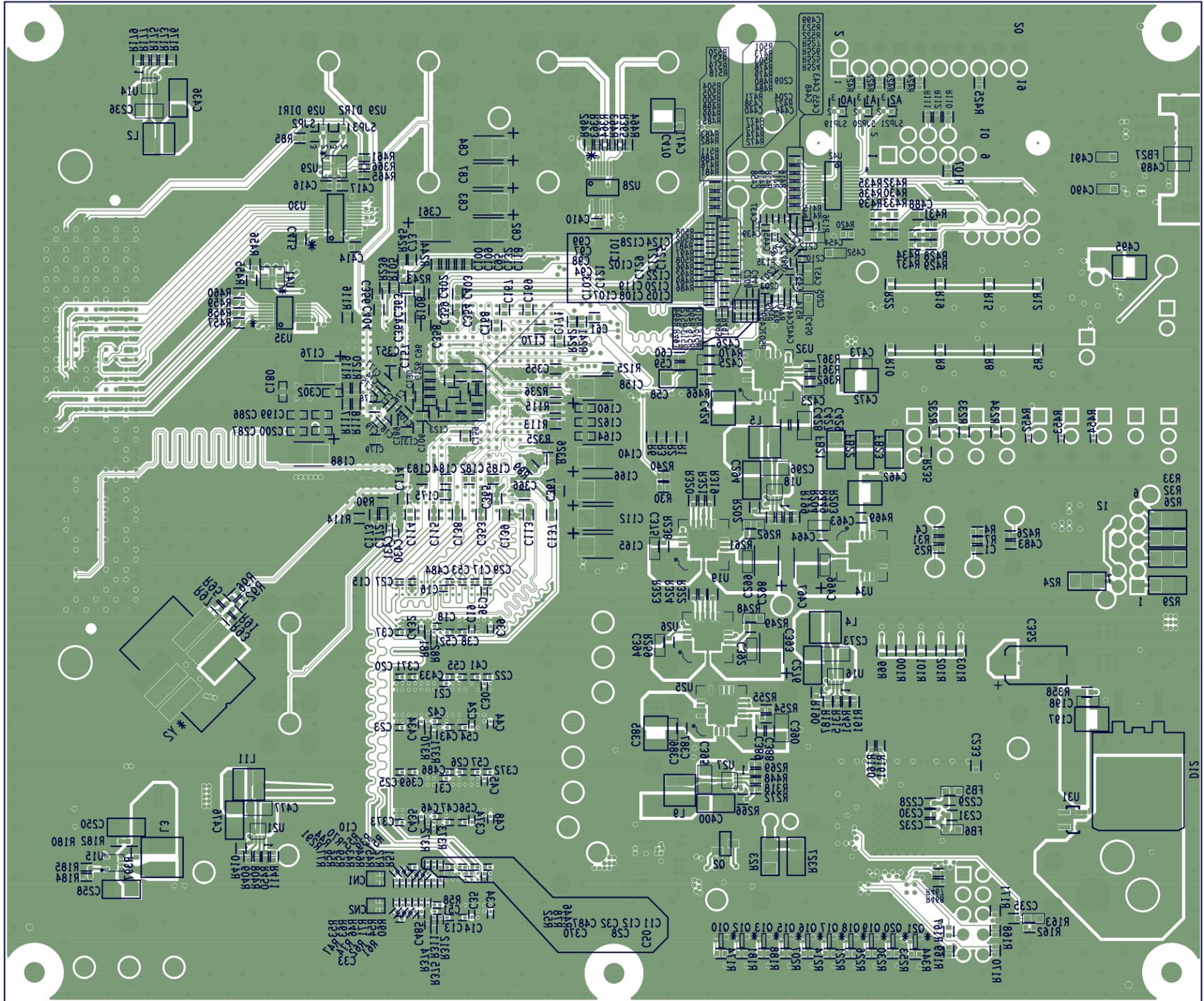
TEXAS INSTRUMENTS
TSW14J56EVM REV E
LAYER 13 (GND6)



TEXAS INSTRUMENTS
TSW14J56EVM REV E
LAYER 14 (SIG5)



TEXAS INSTRUMENTS
TSW14J56EVM REV E
LAYER 15 (GND7)



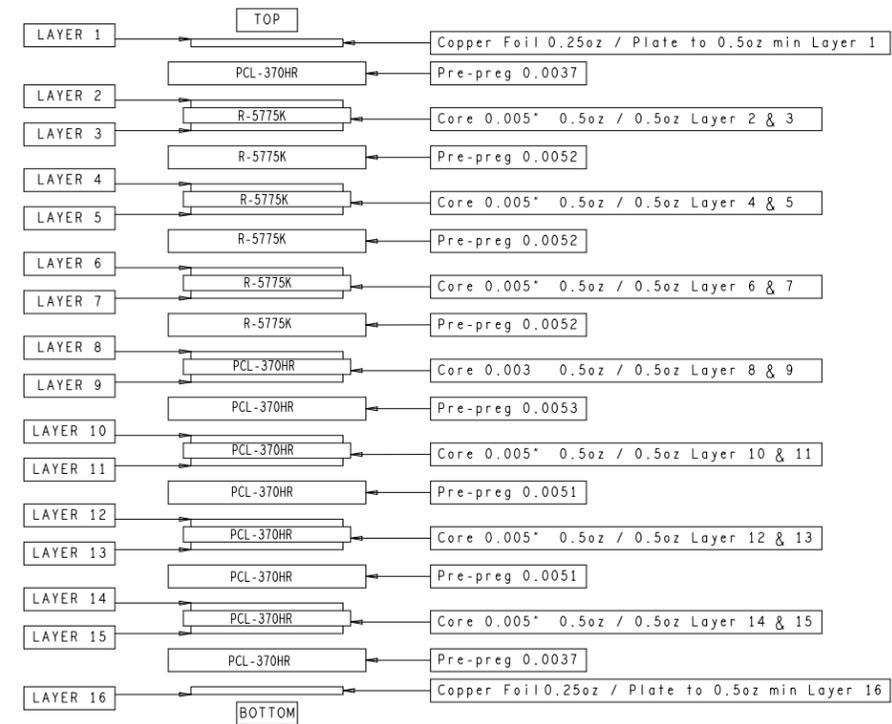
TEXAS INSTRUMENTS
TSW14J56EVM REV E
SILKSCREEN(BOTTOM SIDE)

UNLESS OTHERWISE SPECIFIED, ALL NOTES ARE APPLICABLE.
 NOTES PRECEDED BY AN UNMARKED "□" ARE NOT APPLICABLE.

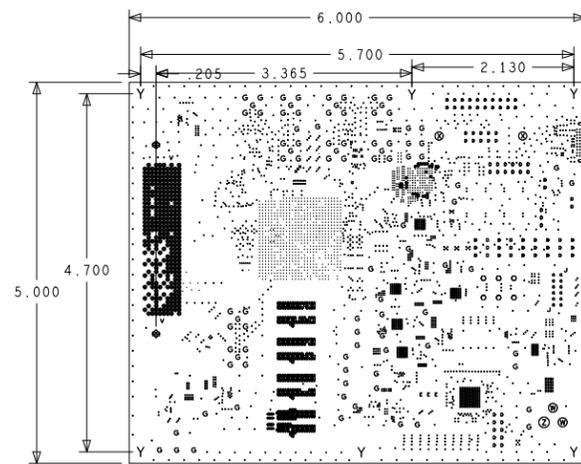
- APPLICATION DESIGN MANUFACTURING AND INSPECTION DOCUMENTS, IPC-2221A & IPC-2222 / DESIGN STANDARD FOR RIGID PRINTED CIRCUIT BOARDS AND RIGID PRINTED BOARD ASSEMBLIES. IPC-6012B / QUALIFICATION AND PERFORMANCE SPECIFICATION FOR RIGID PRINTED BOARD. IPC-A-600G / ACCEPTABILITY OF PRINTED BOARDS.
- HOLE SIZE APPLIES 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: SINGLE SIDED, DOUBLE SIDED, MULTI-LAYER (SEE DETAIL "A")
SEE LAYER STACKUP FOR ALL PRE-PREG & CORE THICKNESSES, COPPER OZ AND MATERIAL. FINISHED BOARD THICKNESS: 0.085 +/- 10%
- MANUFACTURE'S UL MARKING, FLAMMABILITY RATING, LOGO AND DATE CODE TO BE PLACED IN SILKSCREEN ON BOTTOM SIDE OF THE BOARD.
- SOLDERMASK BOTH SIDES USING TAIYO (OR EQUIVALENT). COLOR=RED (0.001 TO 0.002" THICK OVER METAL).
- SILKSCREEN TOP SIDE BOTH SIDES, USING YELLOW 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 INNER LAYER UNCONNECTED PADS SHALL BE REMOVED.

- OUTER LAYERS USING A 5.7 mil TRACE WIDTH SHALL BE 50ohms SINGLE ENDED, +/- 10% TOLERANCE.
INNER LAYERS 3, 5, & 7 USING A 4.7 mil TRACE WIDTH SHALL BE 50ohms SINGLE ENDED, +/- 10% TOLERANCE.
INNER LAYERS 12, 14 USING A 4.2 mil TRACE WIDTH SHALL BE 50ohms SINGLE ENDED, +/- 10% TOLERANCE.
OUTER LAYERS USING A 4.0 mil TRACE WIDTH AND 6.0 mil SPACING SHALL BE 100 ohms DIFFERENTIAL, +/- 10% TOLERANCE.
INNER LAYERS 3, 5, 7 USING A 4.0 mil TRACE WIDTH AND 6.0 mil SPACING SHALL BE 100 ohms DIFFERENTIAL, +/- 10% TOLERANCE.
INNER LAYERS 12, 14 USING A 3.6 mil TRACE WIDTH AND 6.4 mil SPACING SHALL BE 100 ohms DIFFERENTIAL, +/- 10% TOLERANCE.
- MINIMUM COPPER CONDUCTOR WIDTH IS: 3.5 MIL.
MINIMUM COPPER SPACING IS: 4 MIL.
- SMOBC/IMMERSION GOLD: 3-8 uIN OVER 100-200 uIN NICKEL PLATING.
- GROUND ETCH TO BOARD EDGE IS INTENTIONAL. DO NOT PULL BACK.
- NO CHANGES TO ANY ARTWORK ARE PERMITTED WITHOUT WRITTEN AUTHORIZATION.
- FINISHED BOARD MUST BE RoHS COMPLIANT AND SURVIVE A LEAD FREE ASSEMBLY. MAXIMUM REFLOW OF 260 DEGREES C (6 PASSES).
- FILL ALL VIAS USING CONDUCTIVE MATERIAL.

DETAIL "A"



DRILL CHART: TOP to BOTTOM			
ALL UNITS ARE IN MILS			
FIGURE	SIZE	PLATED	QTY
-	6.0	PLATED	6
-	6.0	PLATED	457
-	8.0	PLATED	865
•	10.0	PLATED	315
-	10.0	PLATED	24
-	10.0	PLATED	1950
-	12.0	PLATED	126
-	12.008	PLATED	125
•	32.0	PLATED	12
•	35.0	PLATED	30
•	38.0	PLATED	56
•	40.0	PLATED	3
∩	50.0	PLATED	2
○	55.0	PLATED	6
○	62.0	PLATED	55
○	67.0	PLATED	36
⊙	106.0	PLATED	2
⊙	120.0	PLATED	2
⊙	140.0	PLATED	1
∩	50.0	NON-PLATED	2
⊙	110.0	NON-PLATED	2
Y	125.0	NON-PLATED	6
⊖	60.0x34.0	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		
MATERIAL SEE NOTE 5	DRAWN	L. NGUYEN	FABRICATION DRAWING	
	ENGR	E. DWOBENG/J. SETON	TSW14J56EVM	
FINISH SEE NOTES 7, 8, 9	SIZE	CODE IDENT NO.	DRAWING NO.	REV.
	B			E
DO NOT SCALE DRAWING	SCALE	NONE	SHEET 1 OF 1	