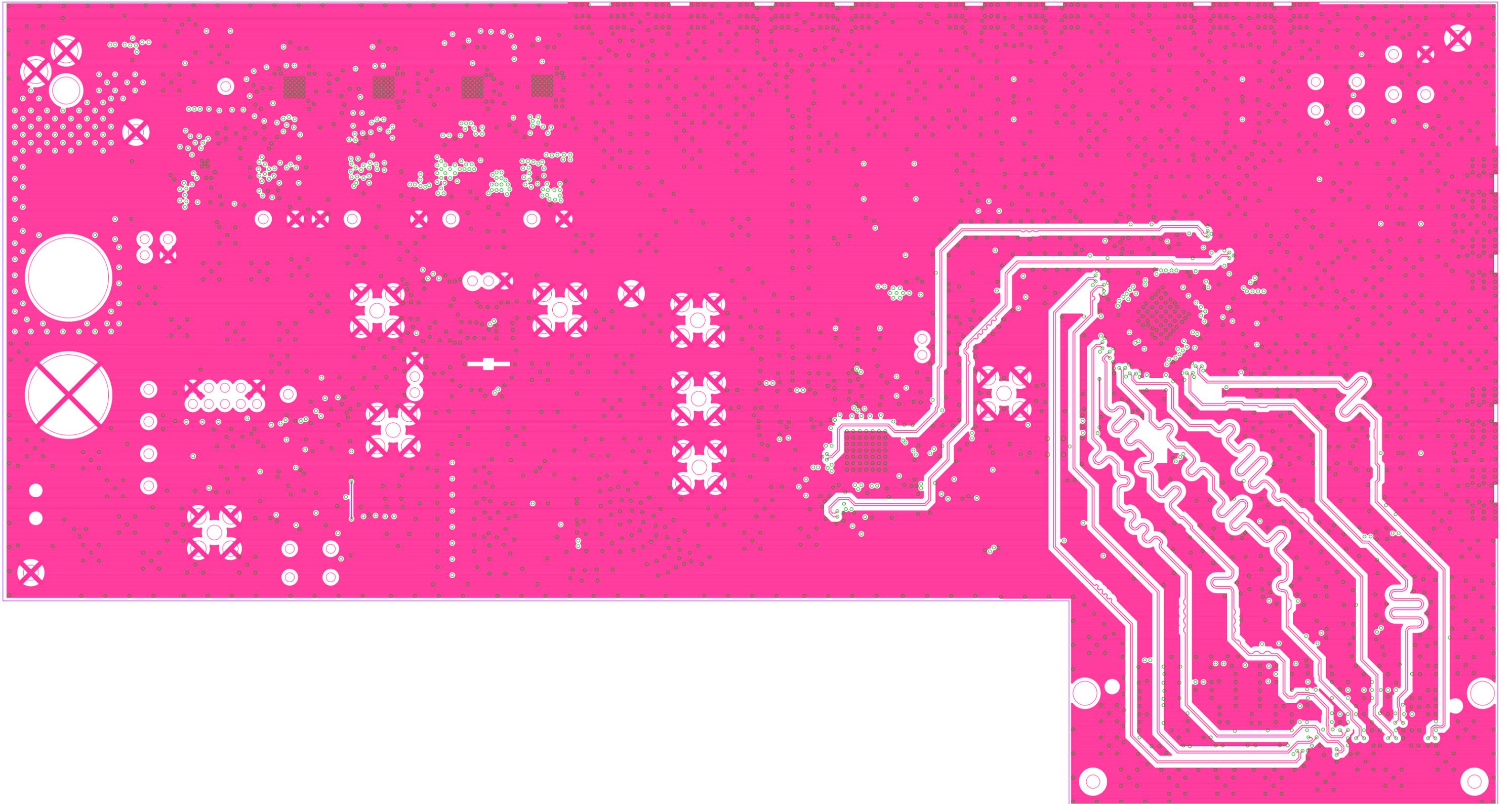
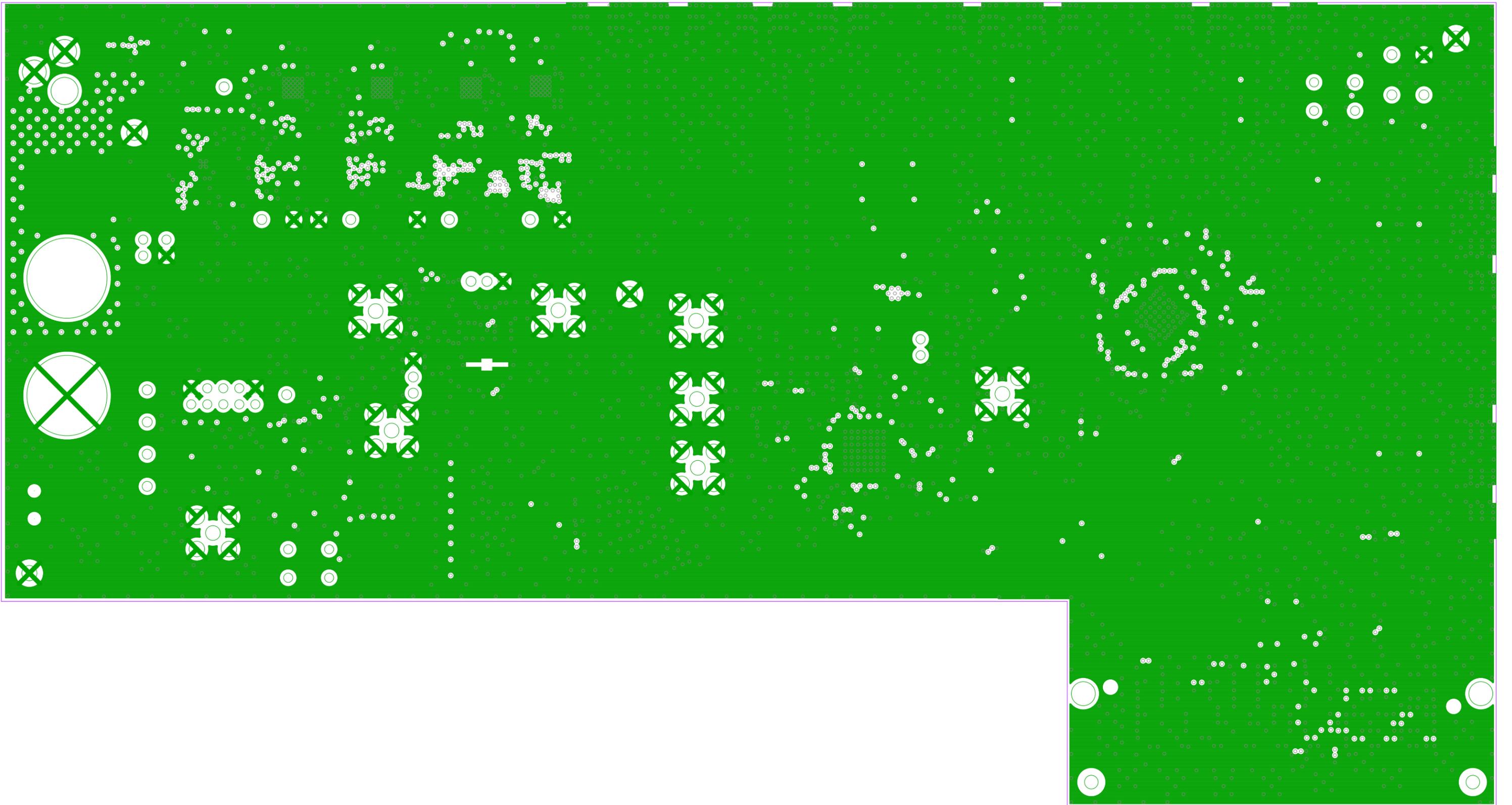


ADS58J89/ADS54J54 REV C  
COMPONENT SIDE LAYER 1



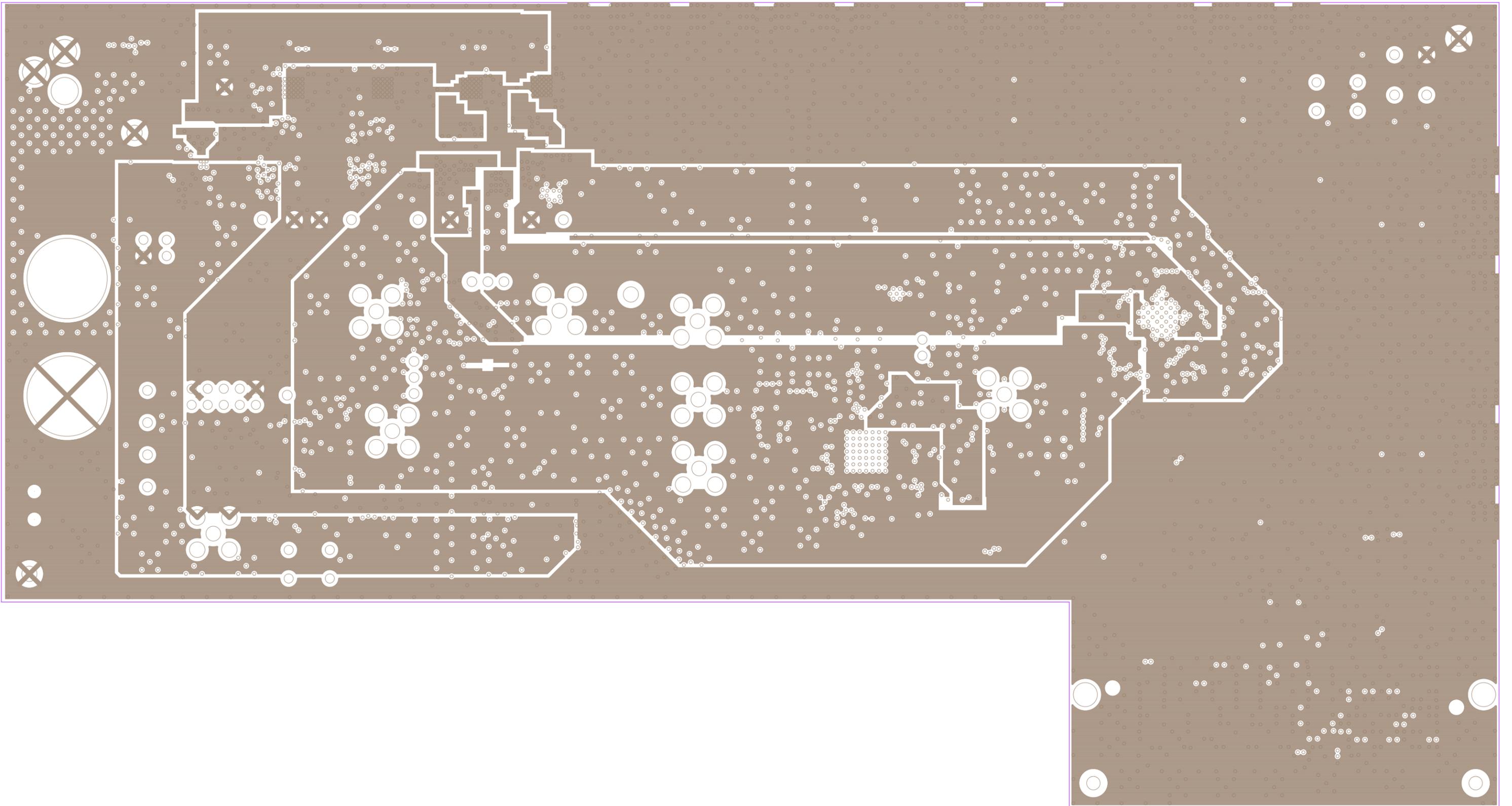


ADS58J89/ADS54J54 REV C  
LAYER 3 (HIGH SPEED)

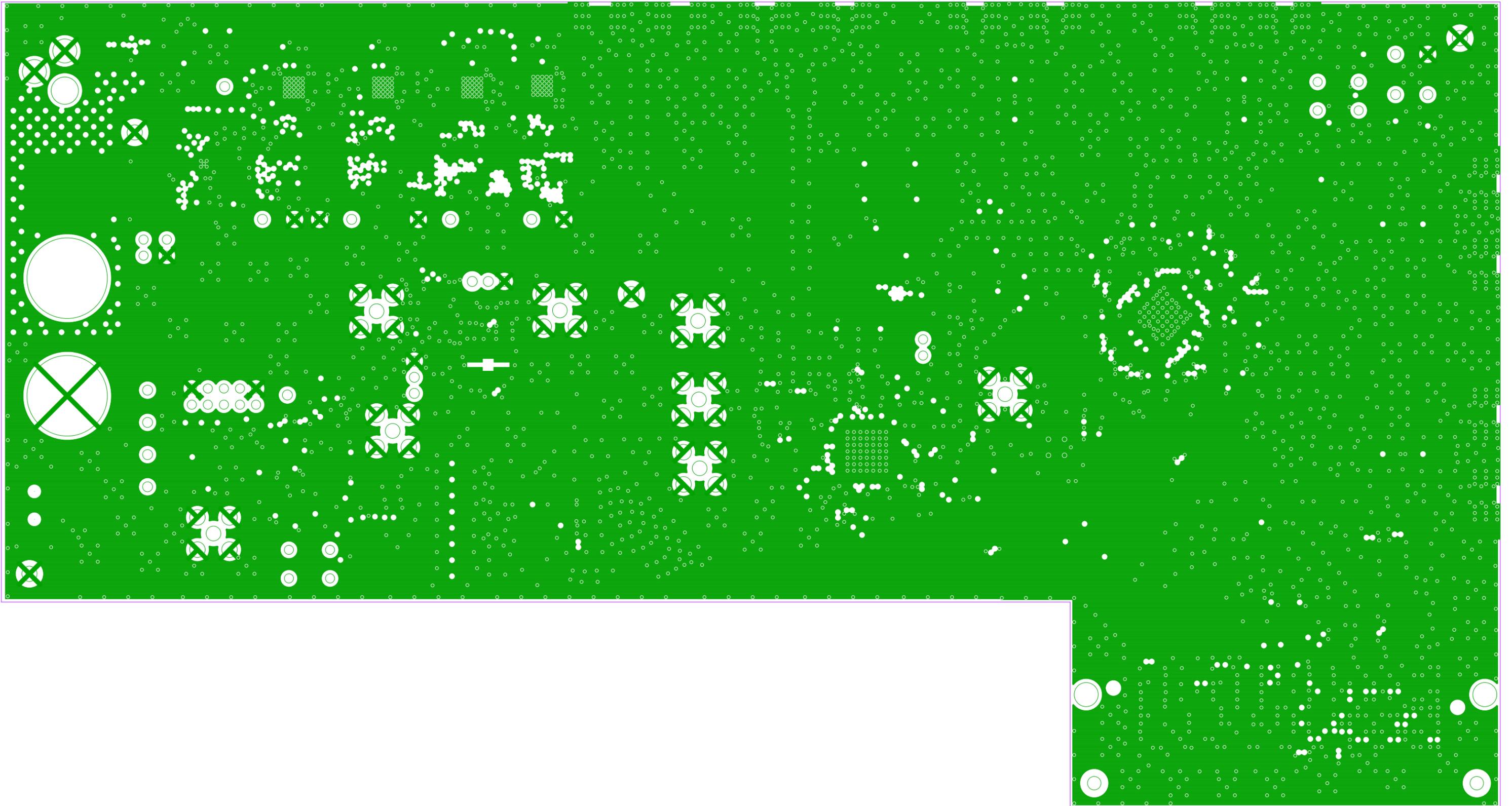


ADS58J89/ADS54J54 REV C

LAYER 4 (GND2)

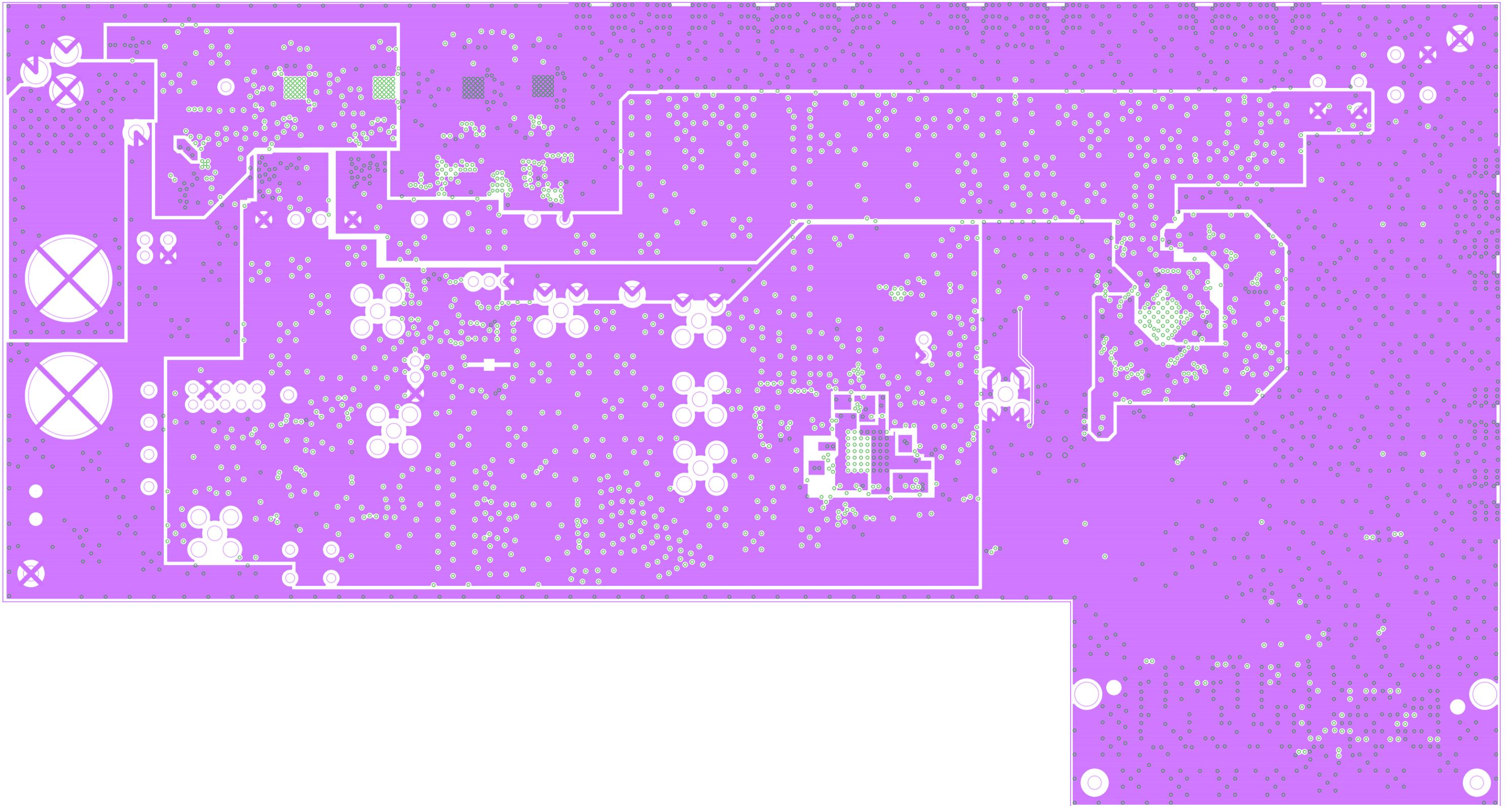


ADS58J89/ADS54J54 REV C  
LAYER 5 (PWR1.8V)



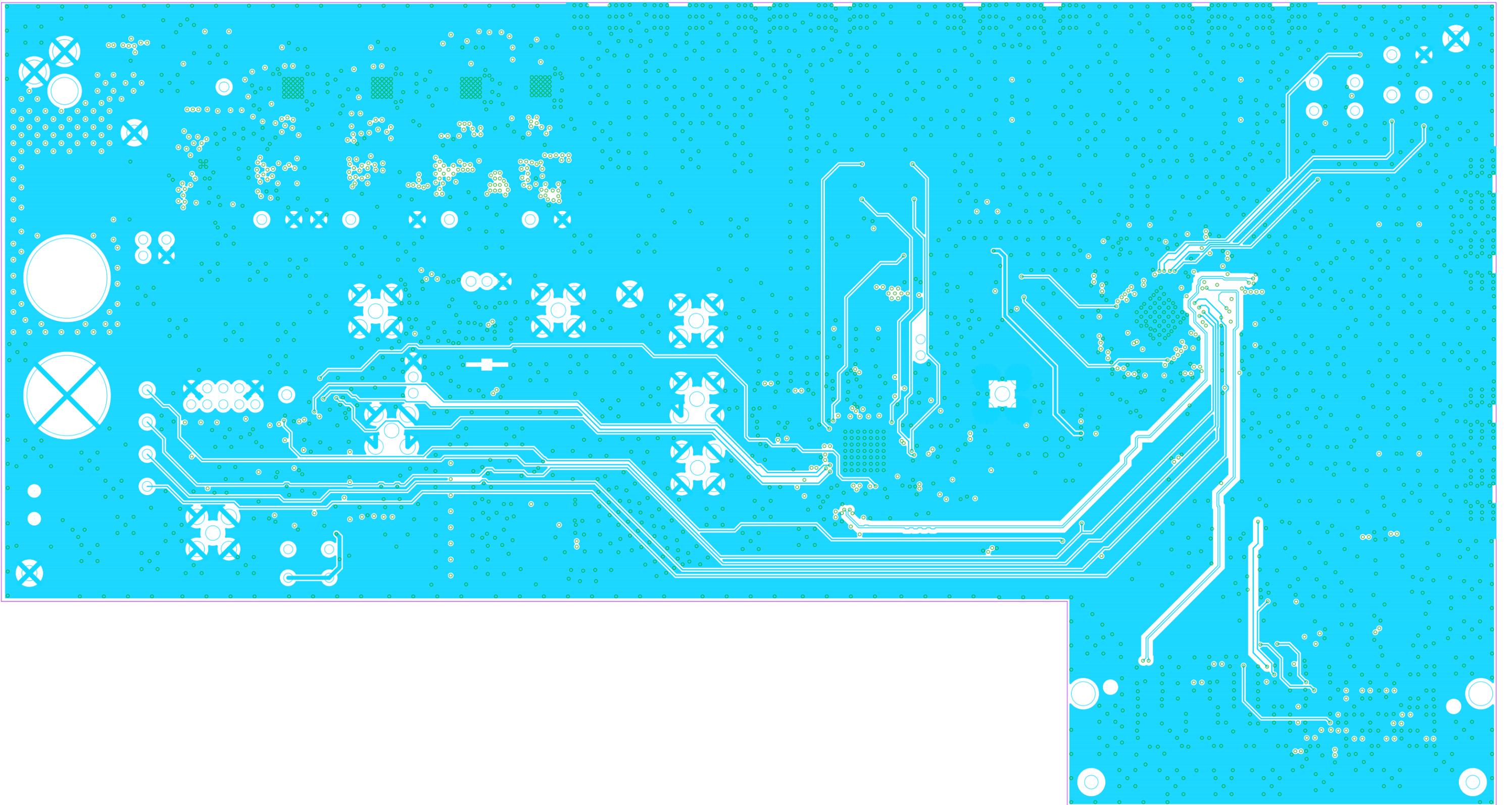
ADS58J89/ADS54J54 REV C

LAYER 6 (GND3)



ADS58J89/ADS54J54 REV C

LAYER 7 (PWR2)



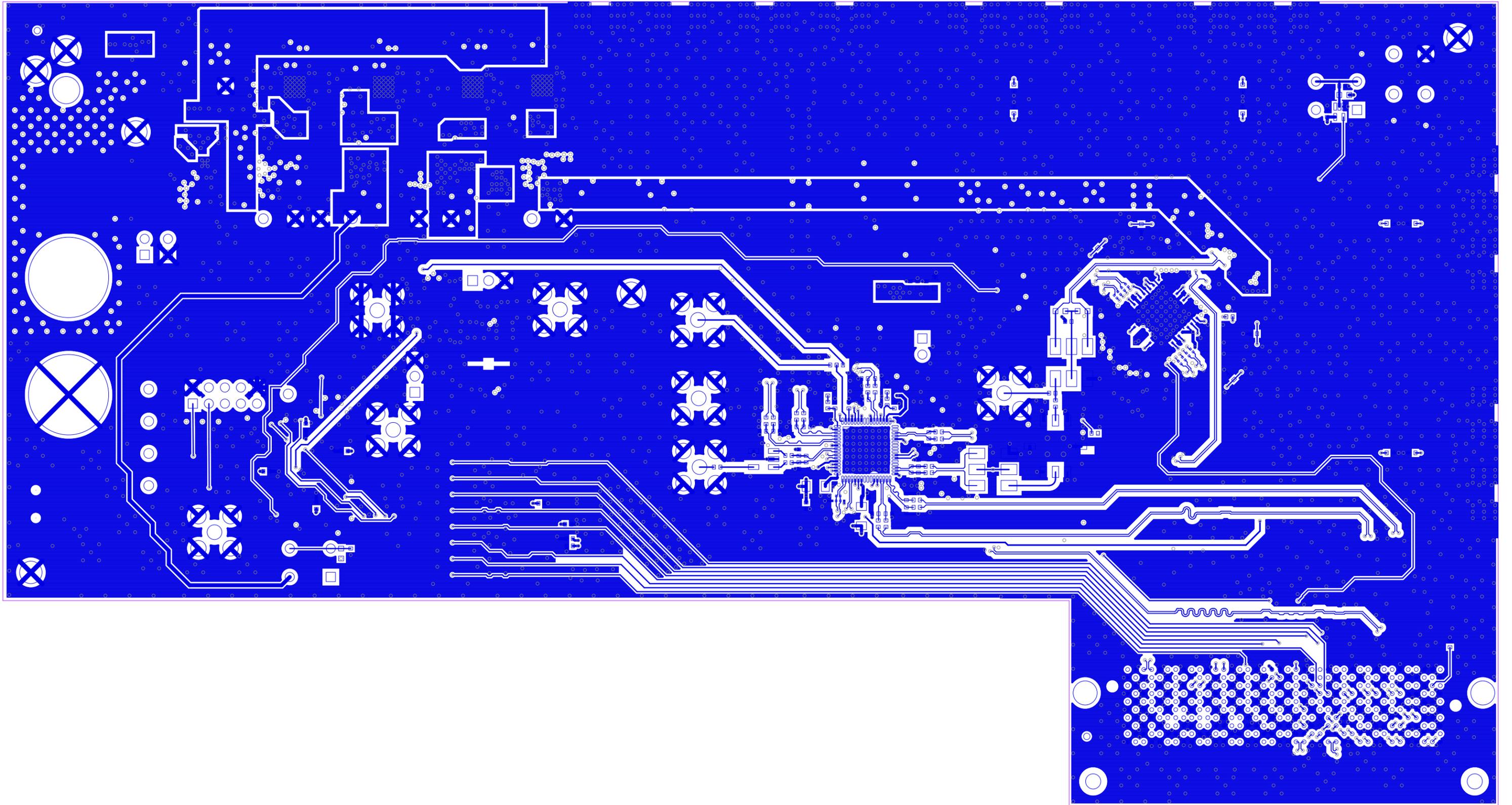
ADS58J89/ADS54J54 REV C

LAYER 8 (SIG)

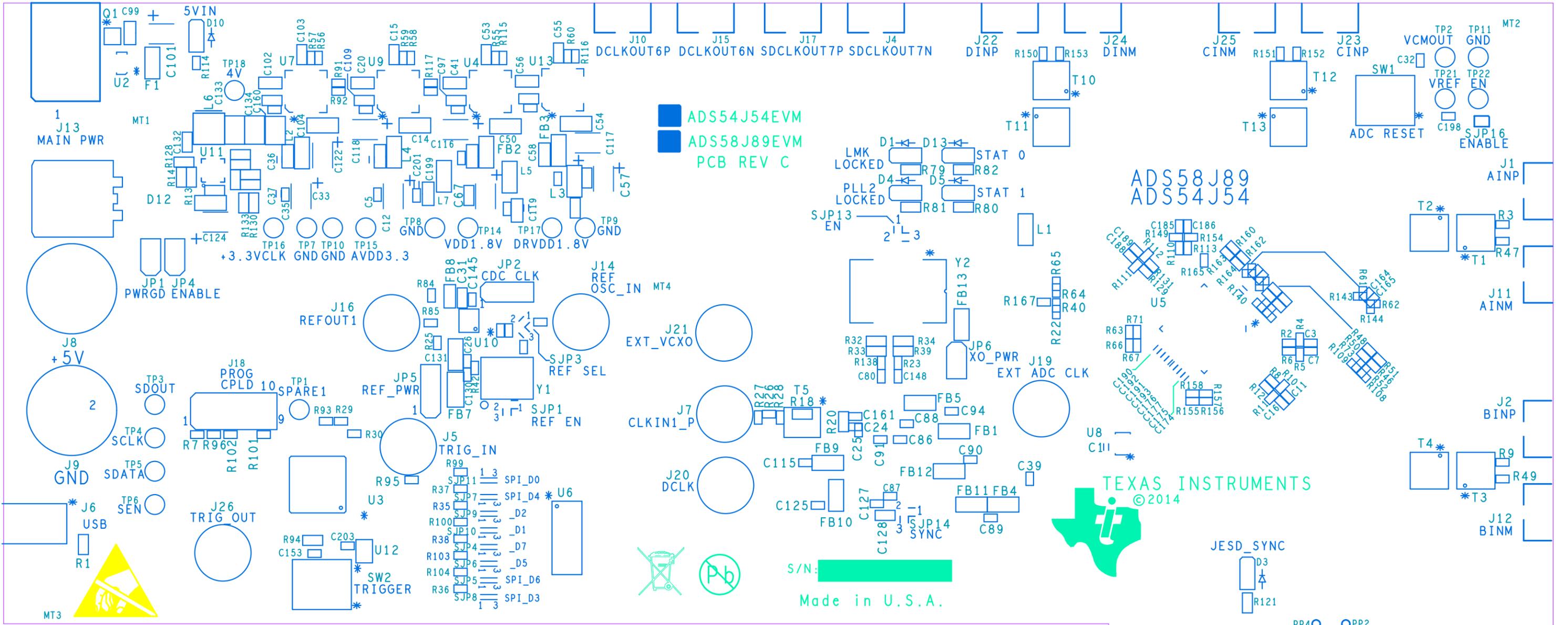


ADS58J89/ADS54J54 REV C

LAYER 9 (GND4)

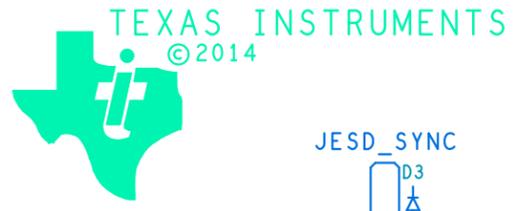
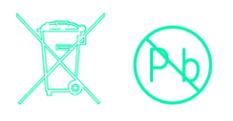


ADS58J89/ADS54J54 REV C  
BOTTOM SIDE LAYER 10



 ADS54J54EVM  
 ADS58J89EVM  
 PCB REV C

S/N: XXXXXXXXXX  
 Made in U.S.A.



ADS58J89  
 ADS54J54

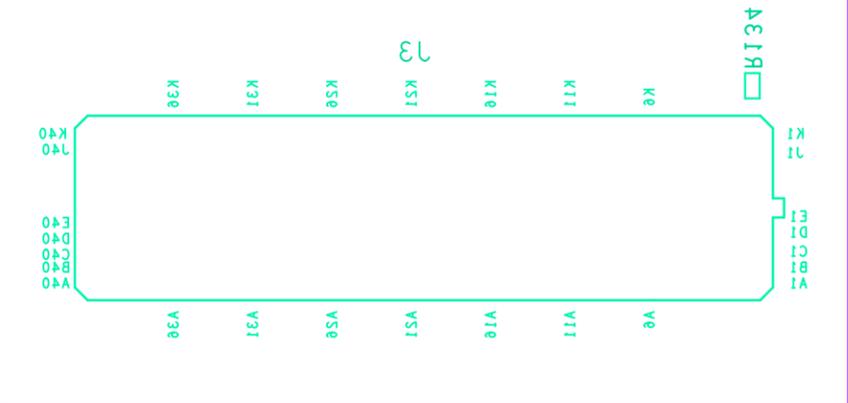
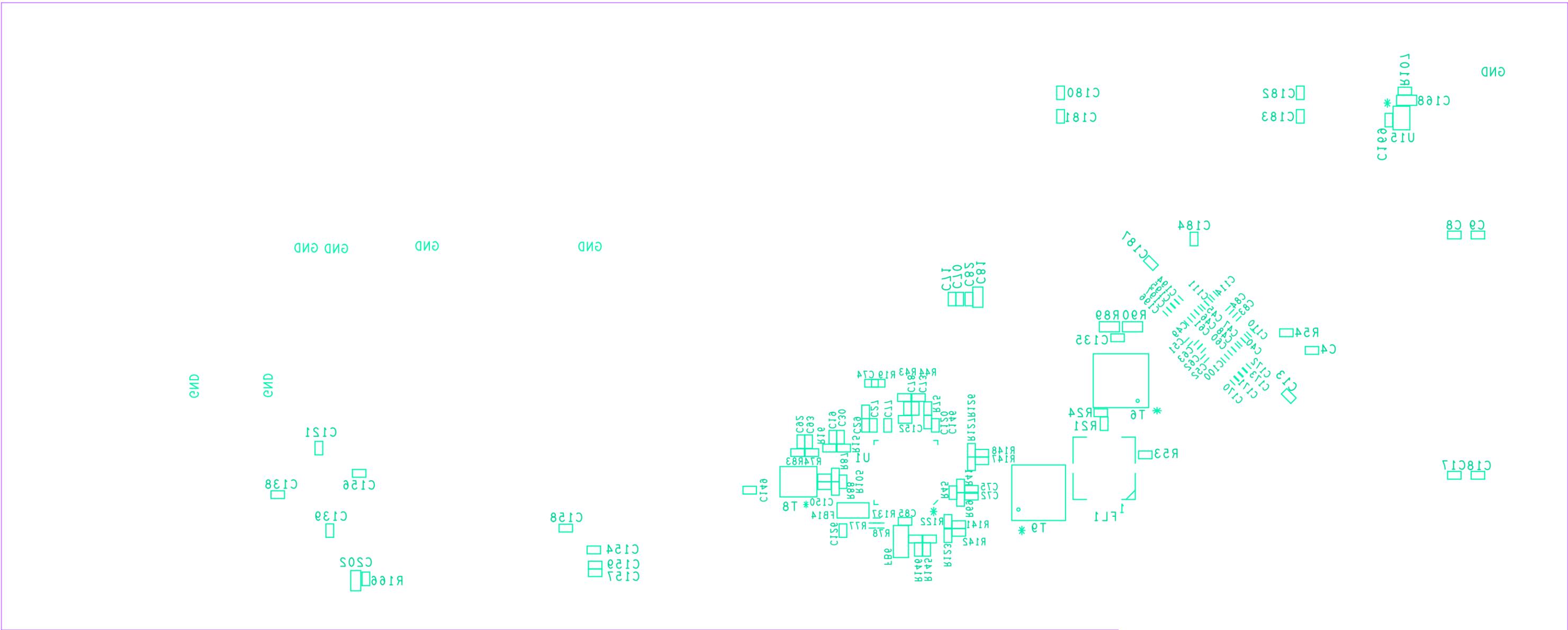
K40

K1

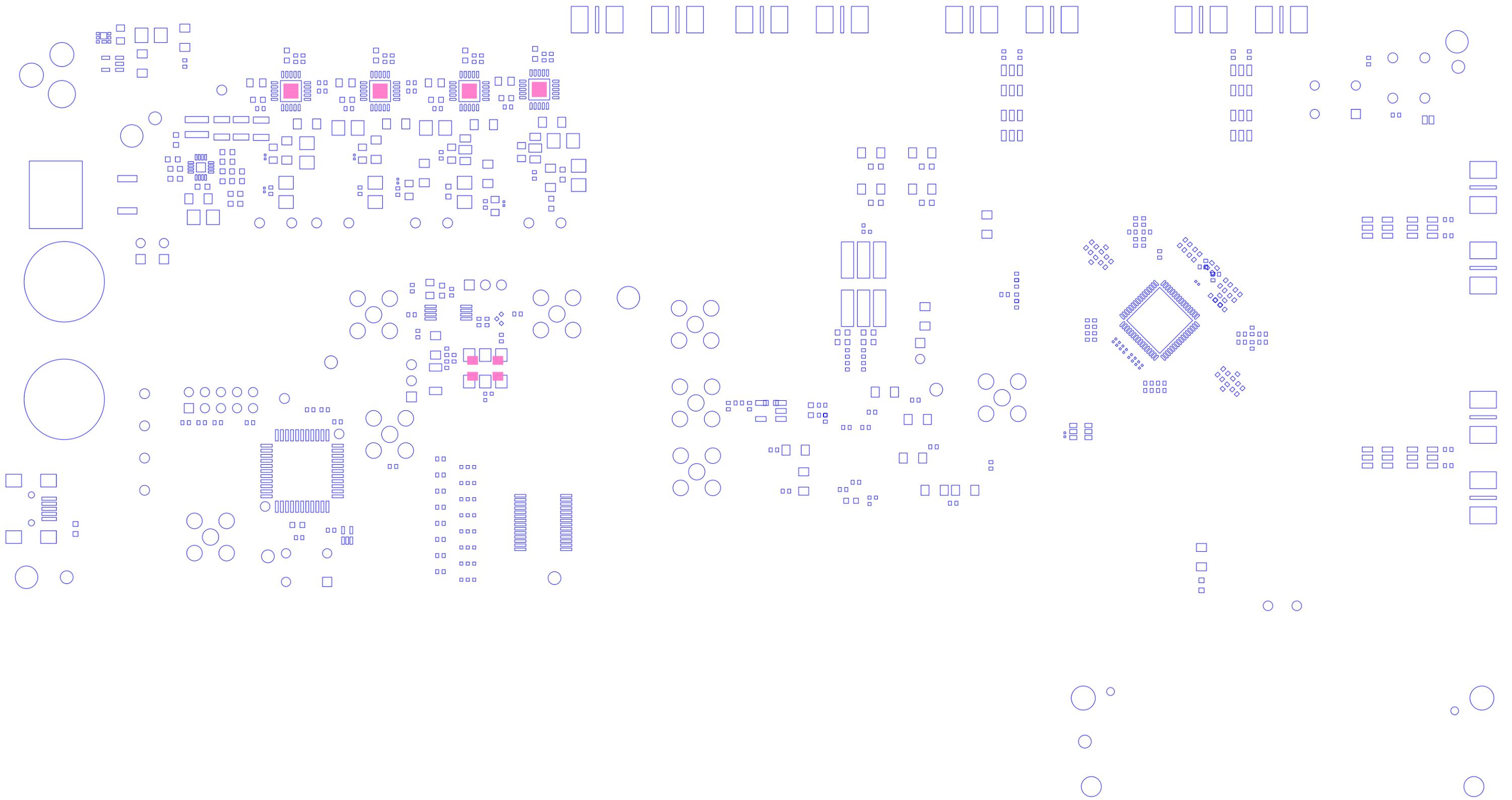
A40

A1

ADS58J89/ADS54J54 REV C  
 SILKSCREEN TOP

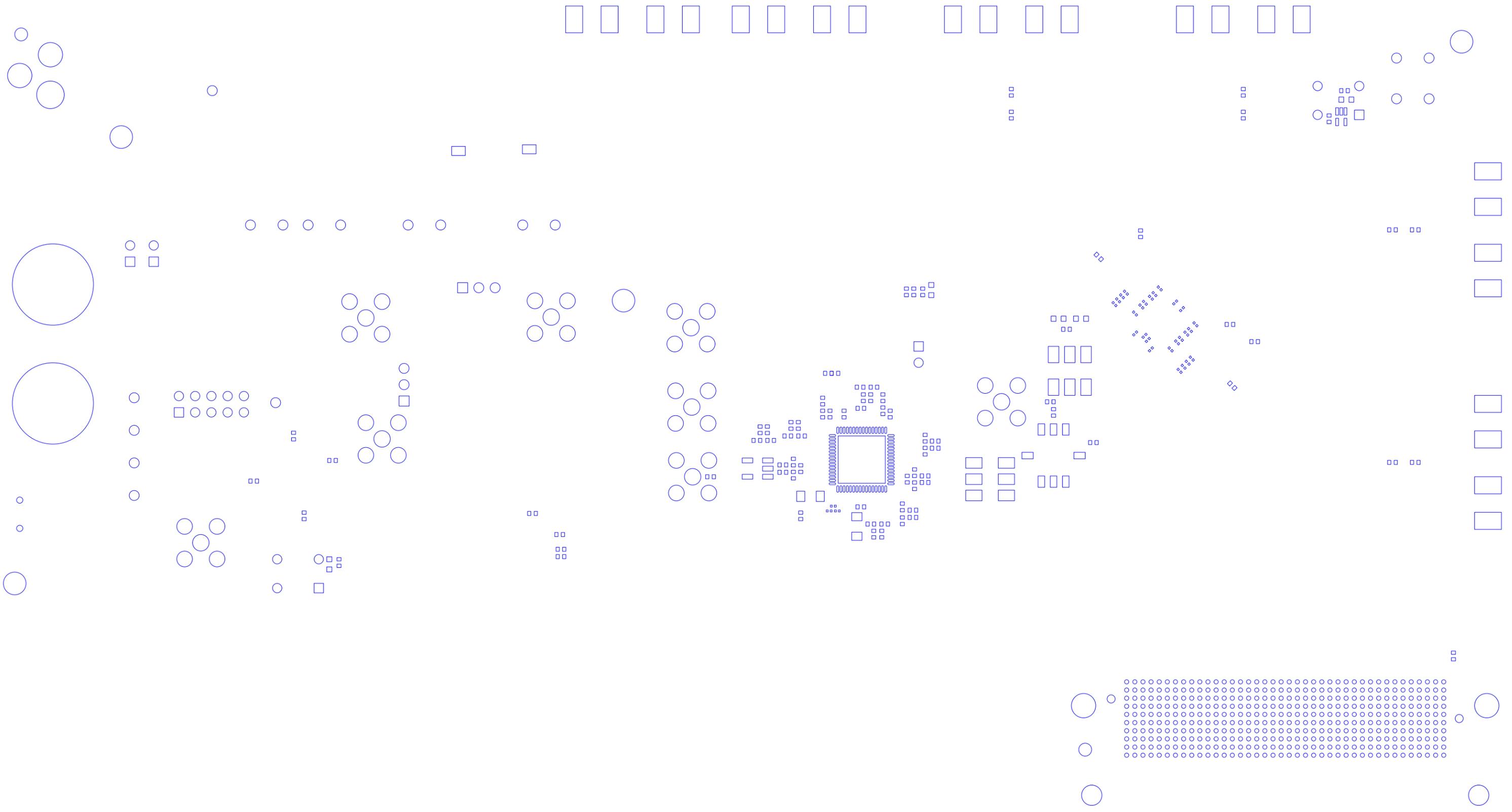


ADS58J89/ADS54J54 REV C  
 SILKSCREEN BOTTOM



ADS58J89/ADS54J54 REV C

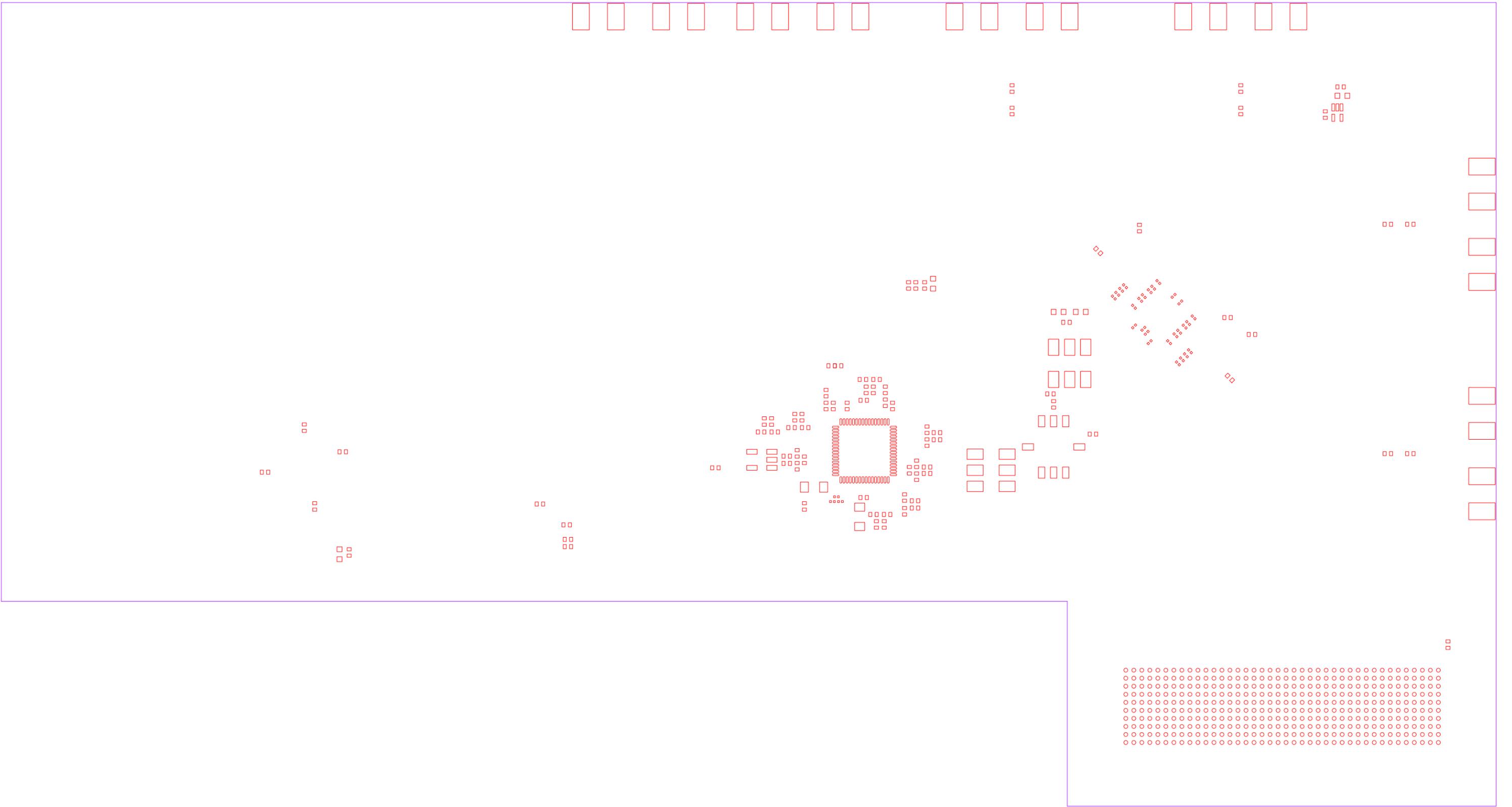
SOLDERMASK TOP



ADS58J89/ADS54J54 REV C

SOLDERMASK BOTTOM



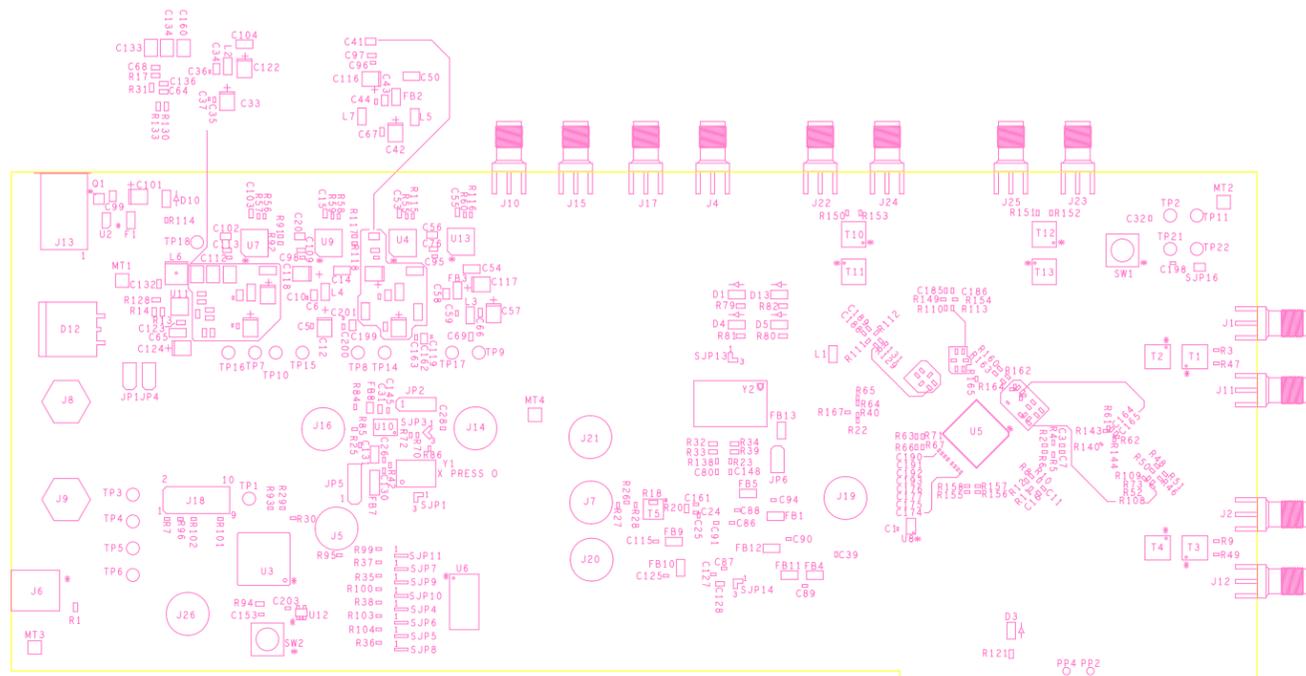


ADS58J89/ADS54J54 REV C

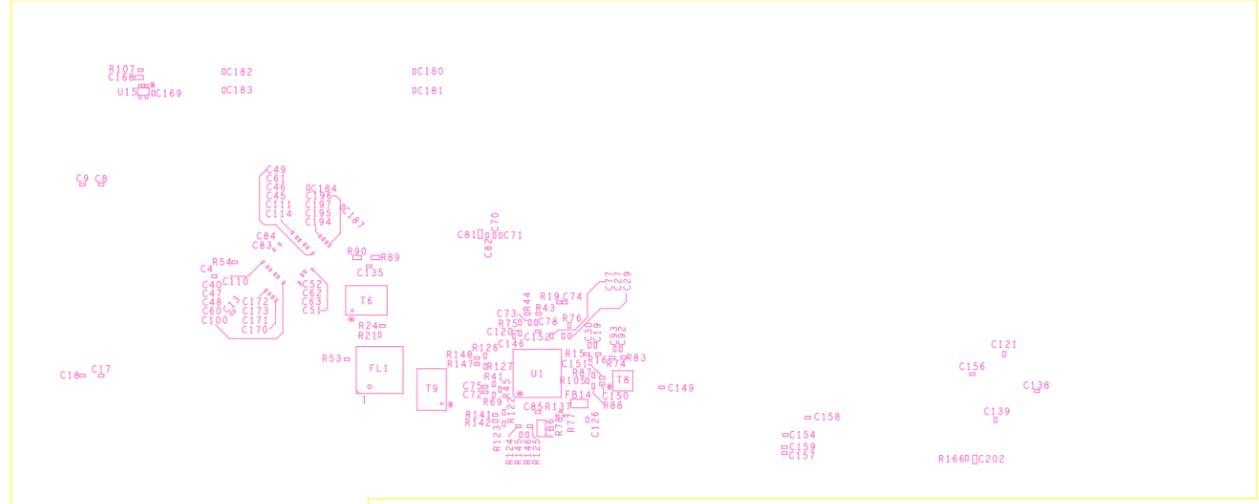
PASTEMASK BOTTOM

| REVISIONS |     |             |      |
|-----------|-----|-------------|------|
| ZONE      | LTR | DESCRIPTION | DATE |
|           |     |             |      |

- NOTES:
- REFER TO ODB++ FILE FOR SPECIFIC COMPONENT LOCATION INFORMATION.
  - USE WATER SOLUBLE FLUX DURING BOARD ASSEMBLY. RoHS COMPLIANT AND LEAD FREE.
  - REMOVE THE METAL TAB ON THE BANANA JACKS BEFORE MOUNTING THEM ON THE BOARD. USE LOCTITE THREADLOCKER BLUE 242 (OR EQUIVALENT) WHEN INSTALLING THE BANANA JACKS.



ASSEMBLY TOP



ASSEMBLY BOTTOM

|   |                |          |  |                |             |
|---|----------------|----------|--|----------------|-------------|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES<br>TOLERANCES ARE:<br>FRACTIONS DECIMALS ANGLES<br>+/- .XX +/- .01 +/-<br>+/- .XXX +/- .005 +/- | CONTRACT NO.   |          | TEXAS INSTRUMENTS INC.                     |                |             |
|   | APPROVALS      | DATE     | ASSEMBLY DRAWING,<br>ADS58J89/ADS54J54 EVM |                |             |
|   | DRAWN JV SMITH | 10-22-13 |  |                |             |
| MATERIAL  | ENG R PRENTICE | 10-22-13 | SIZE D                                     | CODE IDENT NO. | DRAWING NO. |
| FINISH  |                |          | SCALE 1.5                                  |                | REV. C      |
| DO NOT SCALE DRAWING  |                |          |  |                |             |

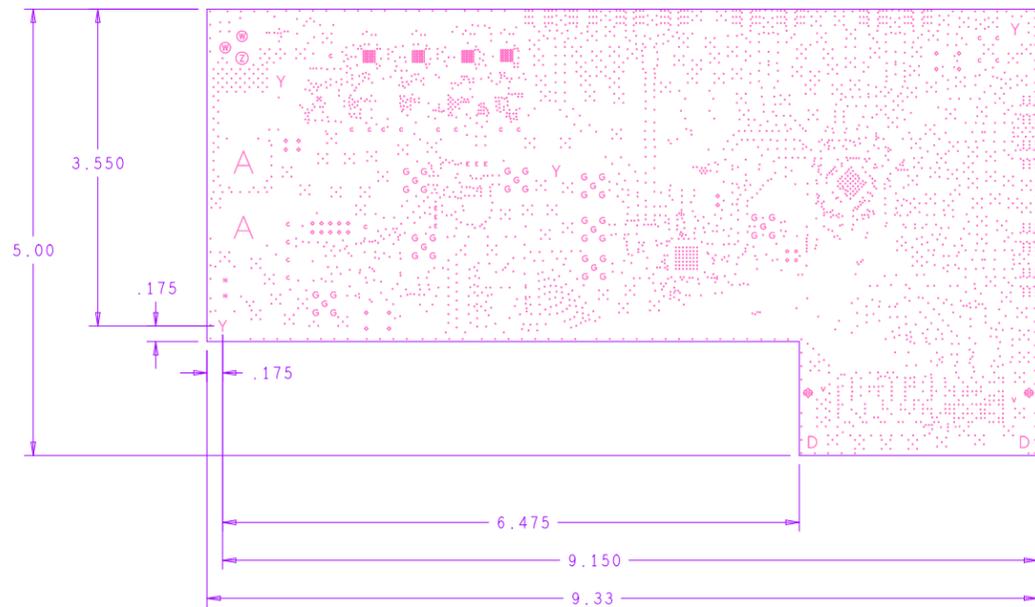
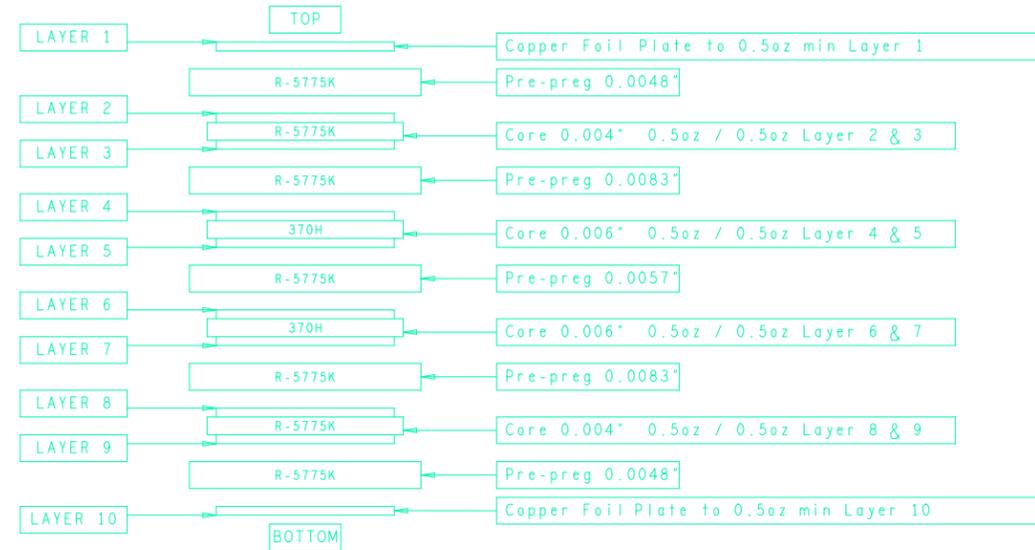
| REVISIONS |     |             |      |
|-----------|-----|-------------|------|
| ZONE      | LTR | DESCRIPTION | DATE |
|           |     |             |      |

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-6012B / QUALIFICATION AND PERFORMANCE SPECIFICATION FOR RIGID PRINTED BOARD.  
IPC-A-600G / ACCEPTABILITY OF PRINTED BOARDS.
- VIAS, 10 & 12mil HOLES. 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 - 8 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 8.7MIL TRACE WIDTH SHALL BE 50 OHMS SINGLE ENDED +/- 10%.
- ALL OUTER LAYERS USING A 5.6MIL TRACE WIDTH AND 6.4MIL SPACING SHALL BE 100 OHMS DIFFERENTIAL +/- 10%. ALL INNER LAYERS USING 5MIL TRACE WIDTH AND 7MIL SPACING SHALL BE 100 OHMS DIFFERENTIAL +/- 10%.
- MINIMUM COPPER CONDUCTOR WIDTH IS: 4.5MIL. 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).
- COPPER TO THE BOARD EDGE IS INTENTIONAL. DO NOT CUT IT BACK.

USE VIASYSTEMS STACKUP PART NUMBER AD58J8X-10



| DRILL CHART: TOP to BOTTOM |       |            |      |
|----------------------------|-------|------------|------|
| ALL UNITS ARE IN MILS      |       |            |      |
| FIGURE                     | SIZE  | PLATED     | QTY  |
| .                          | 10.0  | PLATED     | 3477 |
| .                          | 12.0  | PLATED     | 100  |
| .                          | 20.0  | PLATED     | 4    |
| .                          | 38.0  | PLATED     | 18   |
| .                          | 38.0  | PLATED     | 24   |
| .                          | 40.0  | PLATED     | 6    |
| o                          | 62.0  | PLATED     | 8    |
| o                          | 67.0  | PLATED     | 32   |
| ◆                          | 106.0 | PLATED     | 2    |
| ⊙                          | 120.0 | PLATED     | 2    |
| Y                          | 125.0 | PLATED     | 4    |
| ⊙                          | 140.0 | PLATED     | 1    |
| A                          | 250.0 | PLATED     | 2    |
| .                          | 39.0  | NON-PLATED | 2    |
| v                          | 50.0  | NON-PLATED | 2    |
| D                          | 125.0 | NON-PLATED | 2    |

|  |                |                |  |                |
|--|----------------|----------------|--|----------------|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:<br>FRACTIONS DECIMALS ANGLES<br>+/- .XX +/- .01 +/-<br>+/- .XXX +/- .005 +/- | CONTRACT NO.   |                | TEXAS INSTRUMENTS INC.                       |                |
|  | APPROVALS      | DATE           | FABRICATION DRAWING<br>ADS58J89/ADS54J54 EVM |                |
| DRAWN JV SMITH   | 10-22-13       | SCALE 1:1 NONE |  |                |
| MATERIAL SEE NOTE 5  | ENG R PRENTICE | 10-22-13       | SIZE D                                       | CODE IDENT NO. |
| FINISH SEE NOTE 7, 8, 9  |                |                | DRAWING NO.                                  | REV. C         |
| DO NOT SCALE DRAWING   |                |                |  |                |