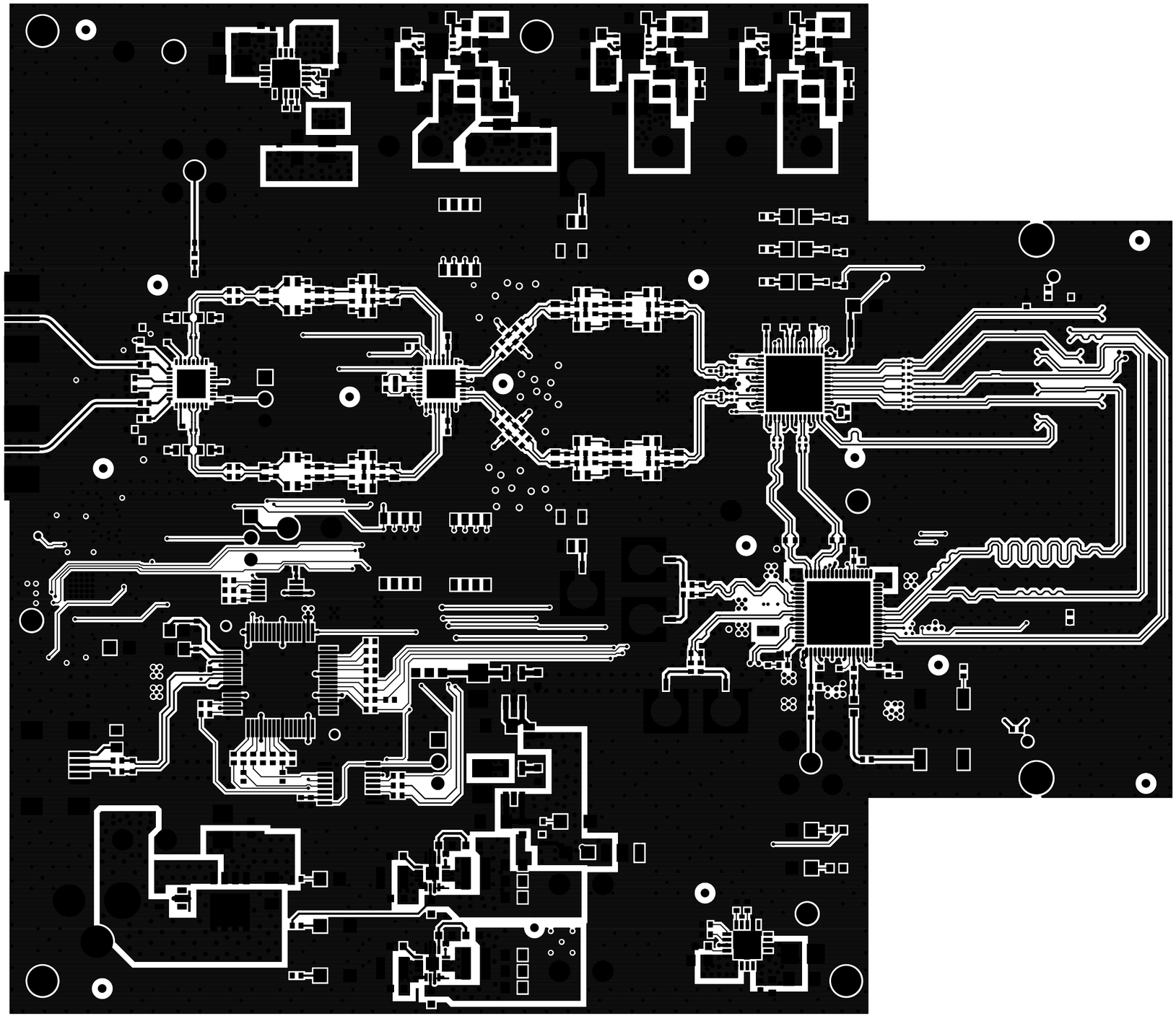
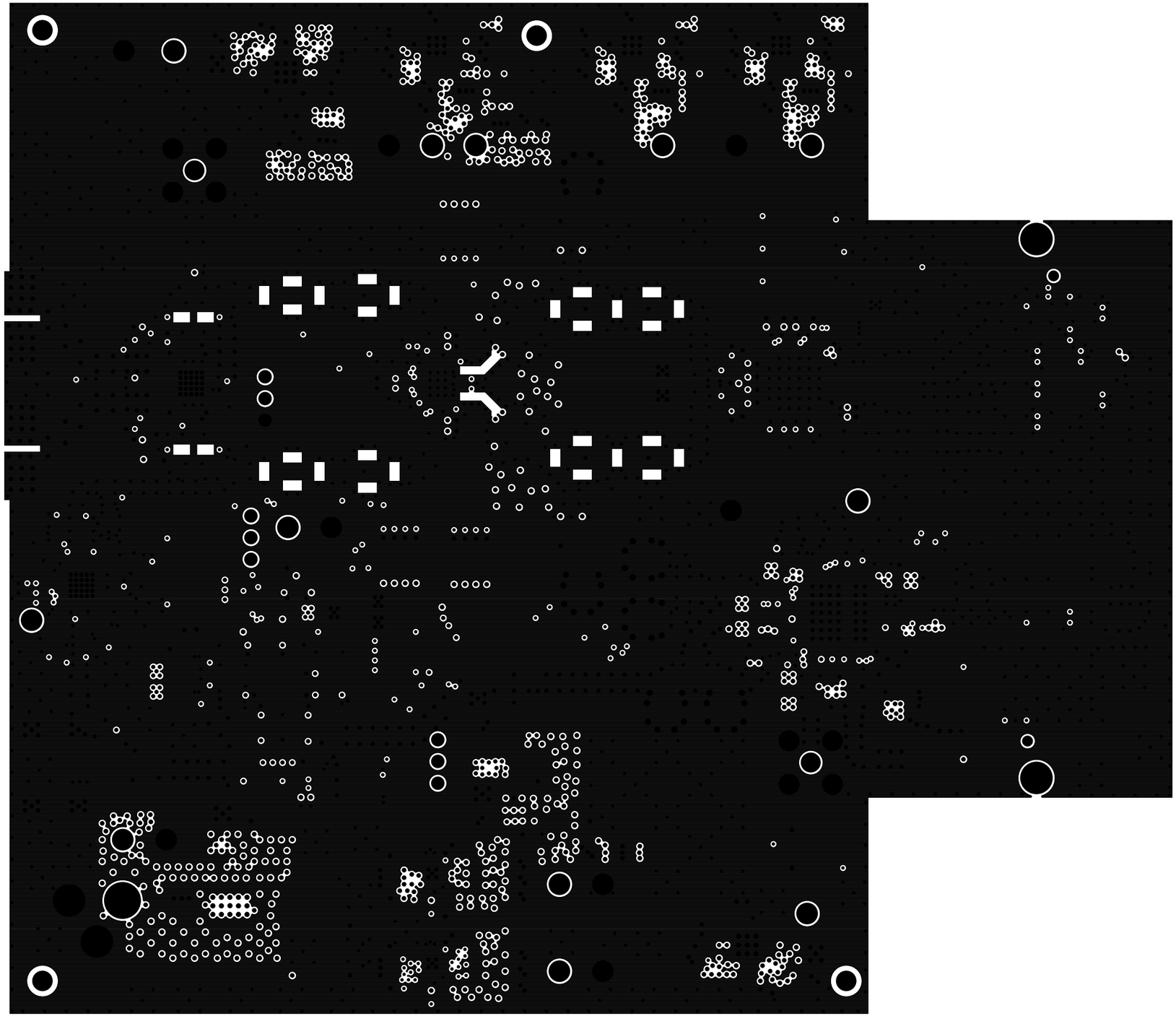


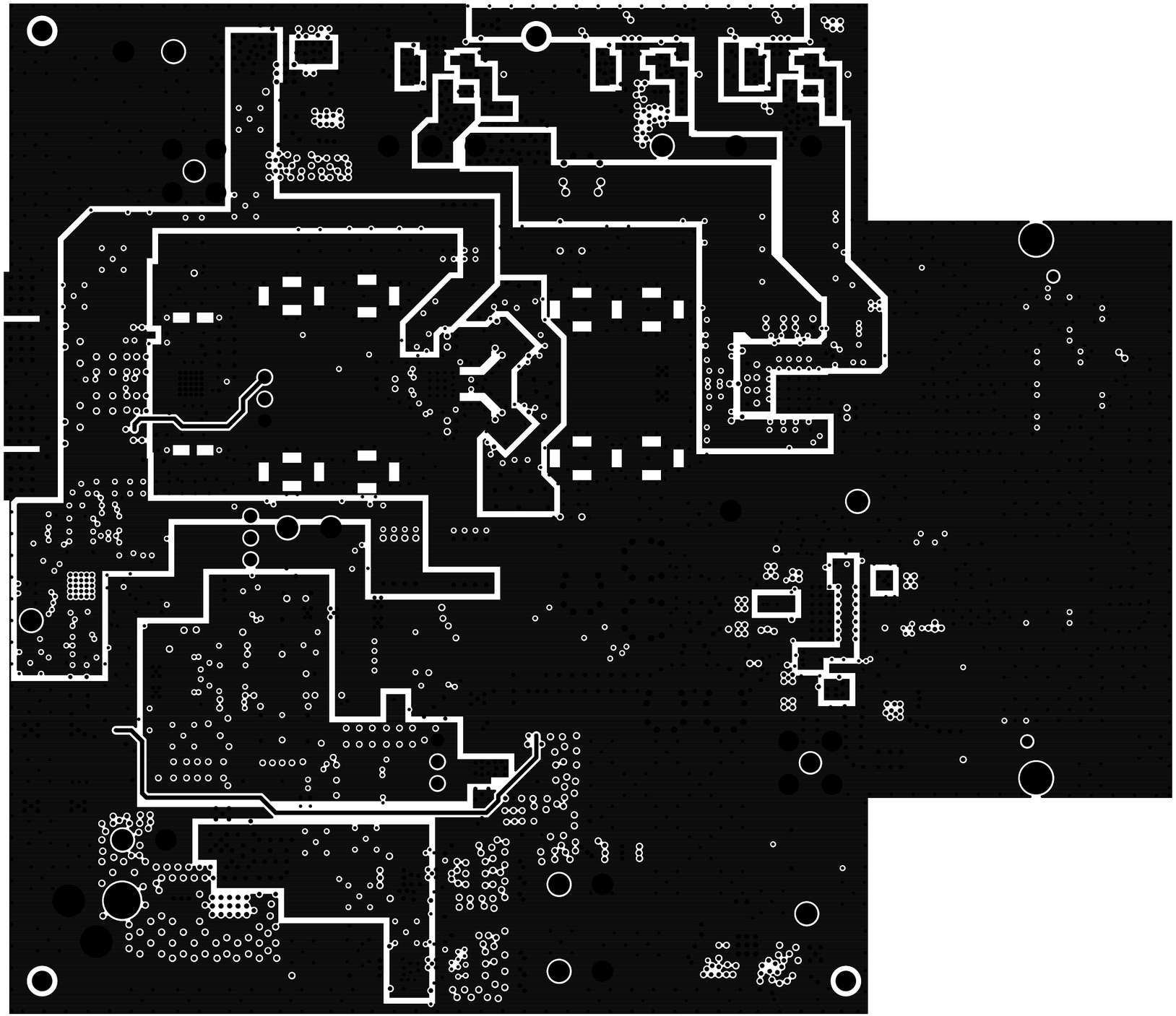
TEXAS INSTRUMENTS, INC.
TSW16DX370EVM REV B

LAYER 1- TOP SIDE



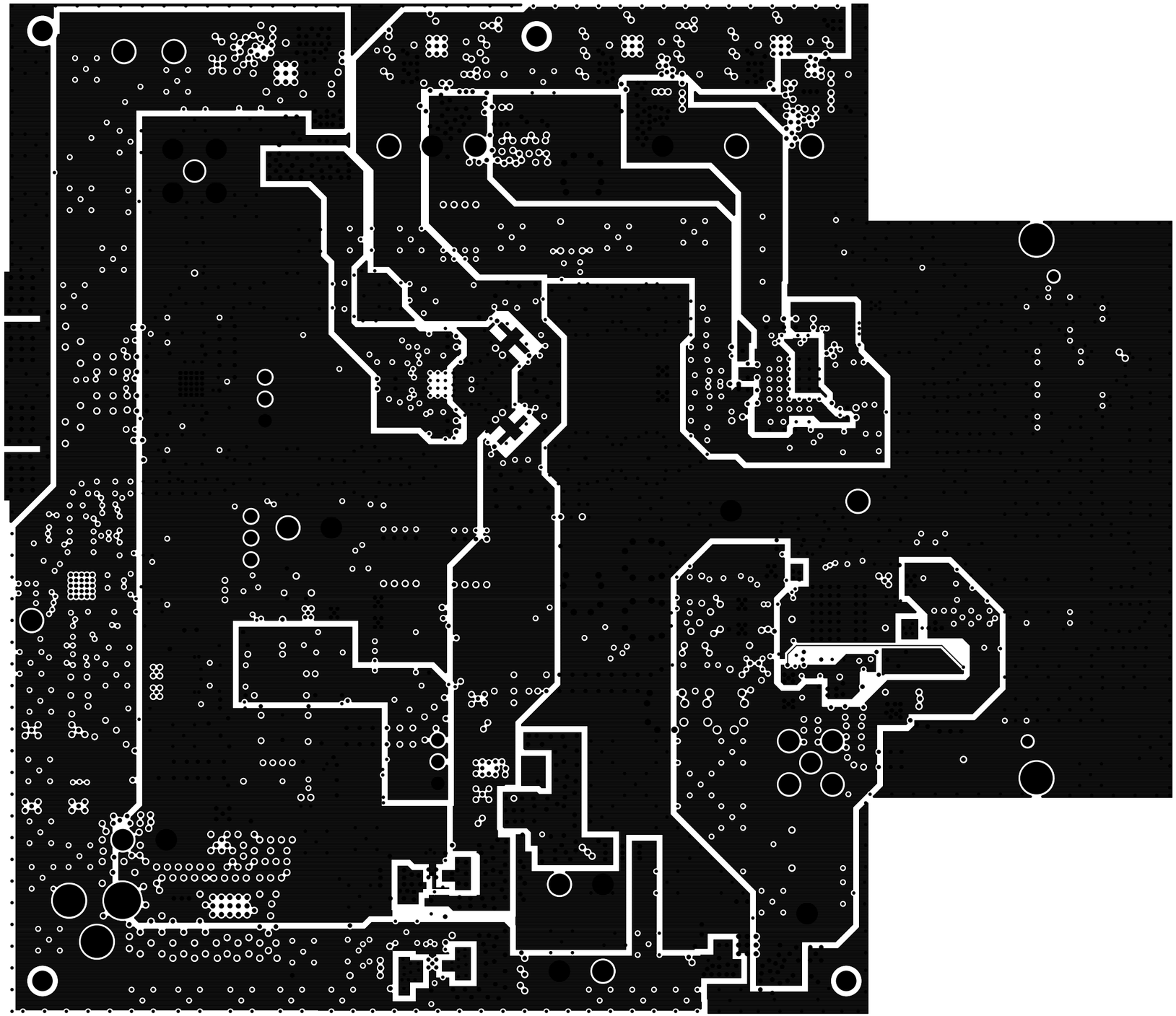
TEXAS INSTRUMENTS, INC.
TSW16DX370EVM REV B

LAYER 2- GROUND PLANE 1



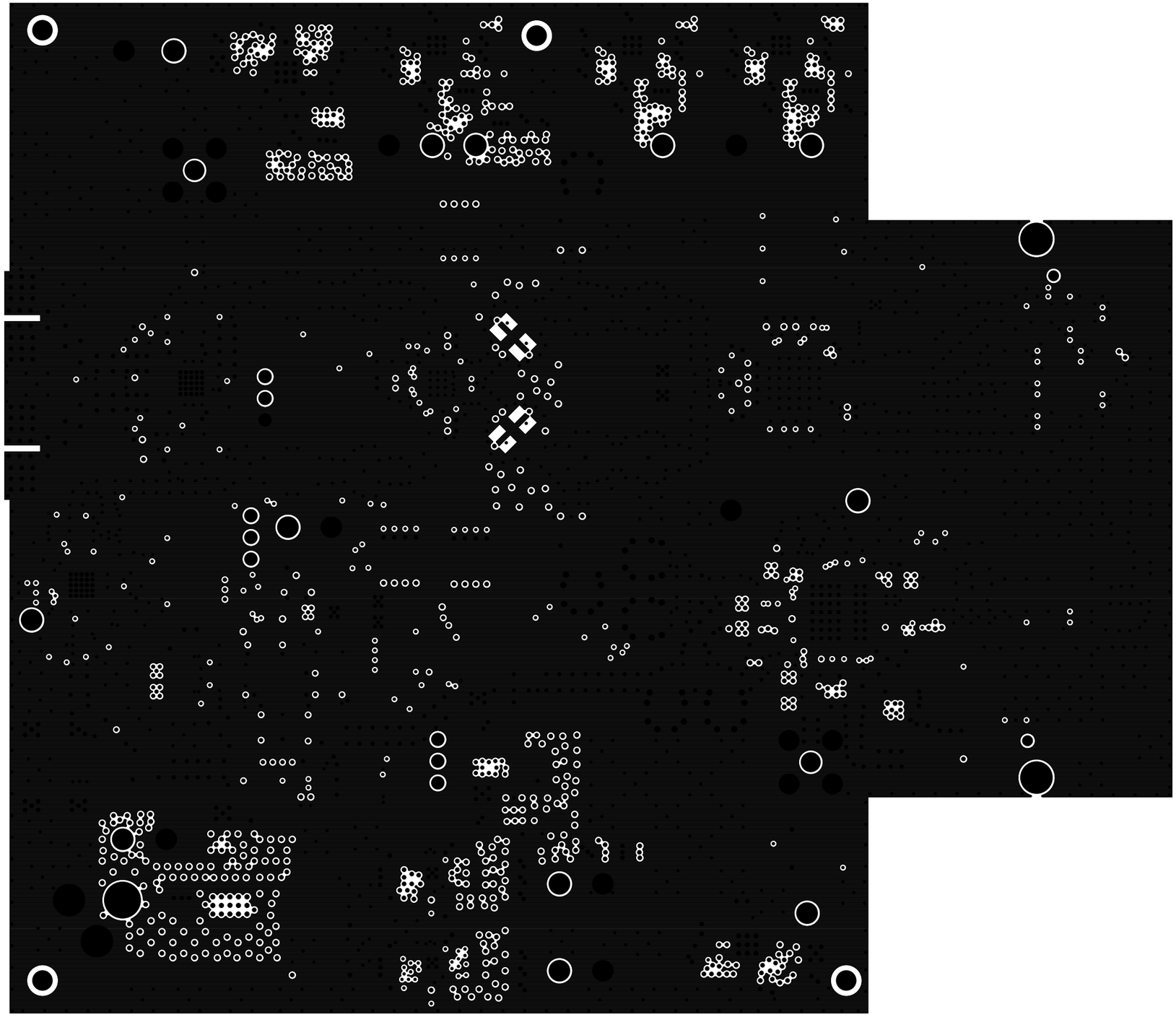
TEXAS INSTRUMENTS, INC.
TSW16DX370EVM REV B

LAYER 3- POWER PLANE



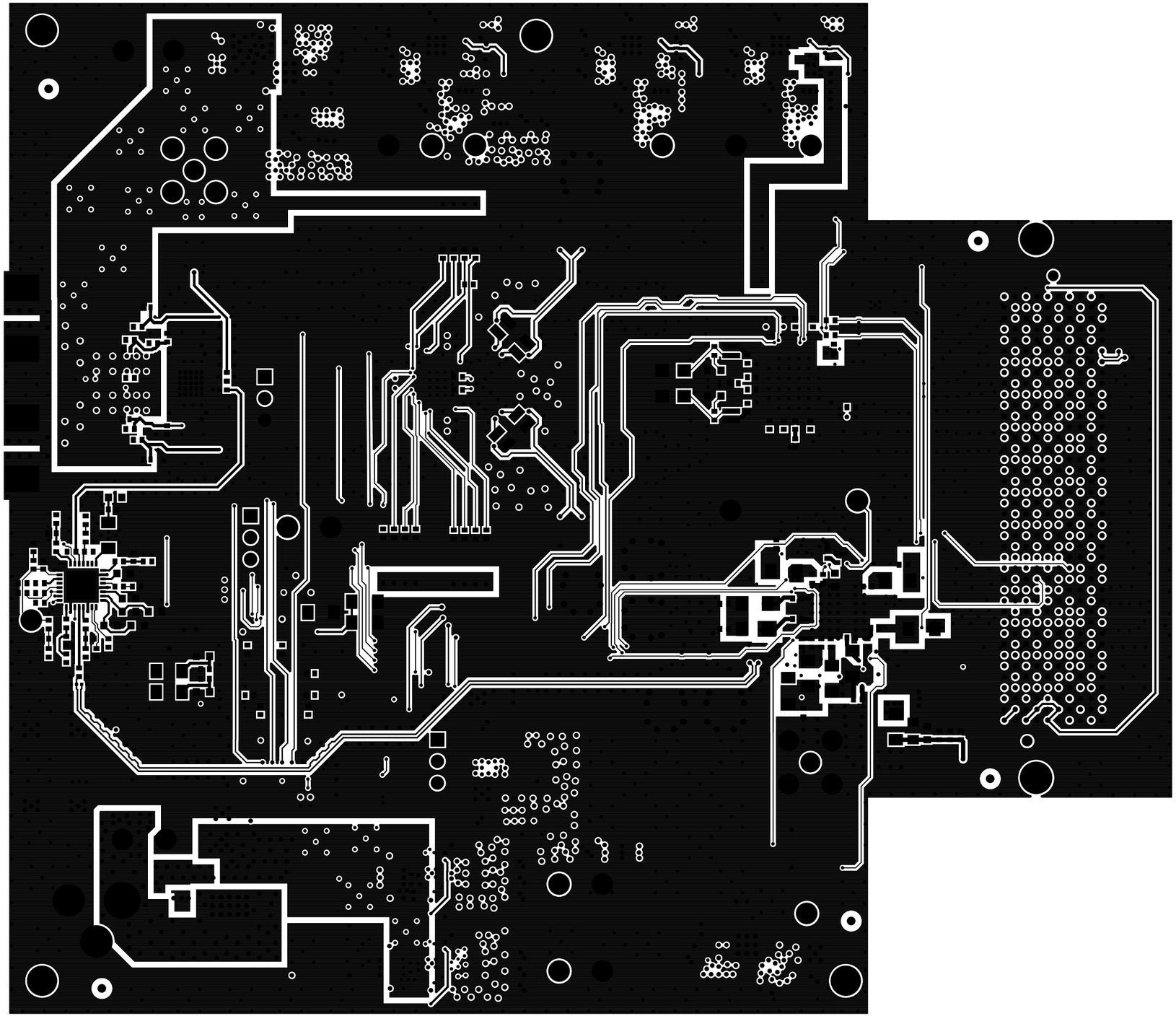
TEXAS INSTRUMENTS, INC.
TSW16DX370EVM REV B

LAYER 4- GROUND PLANE 2



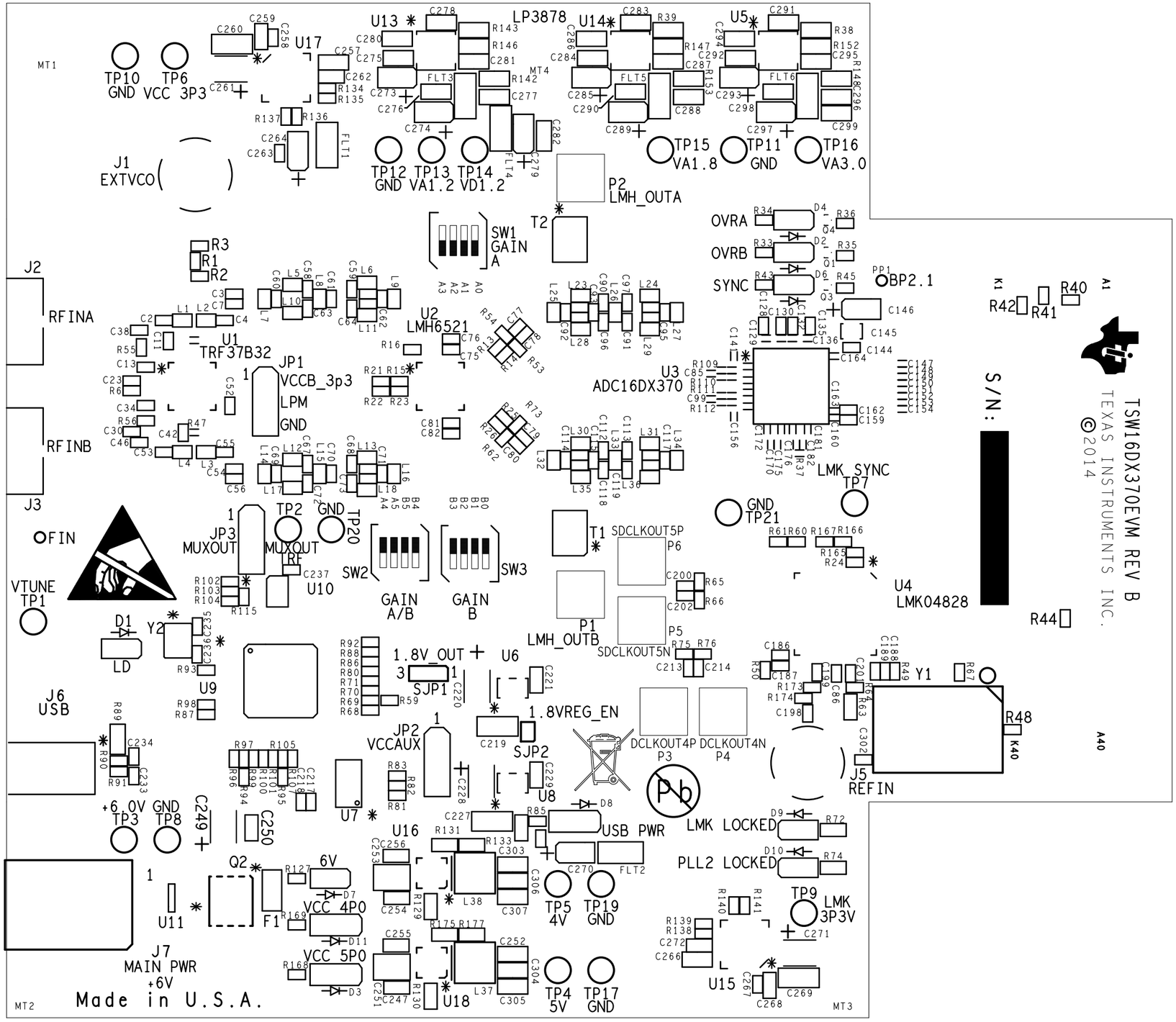
TEXAS INSTRUMENTS, INC.
TSW16DX370EVM REV B

LAYER 5- GROUND PLANE 3



TEXAS INSTRUMENTS, INC.
TSW16DX370EVM REV B

LAYER 6- BOTTOM SIDE

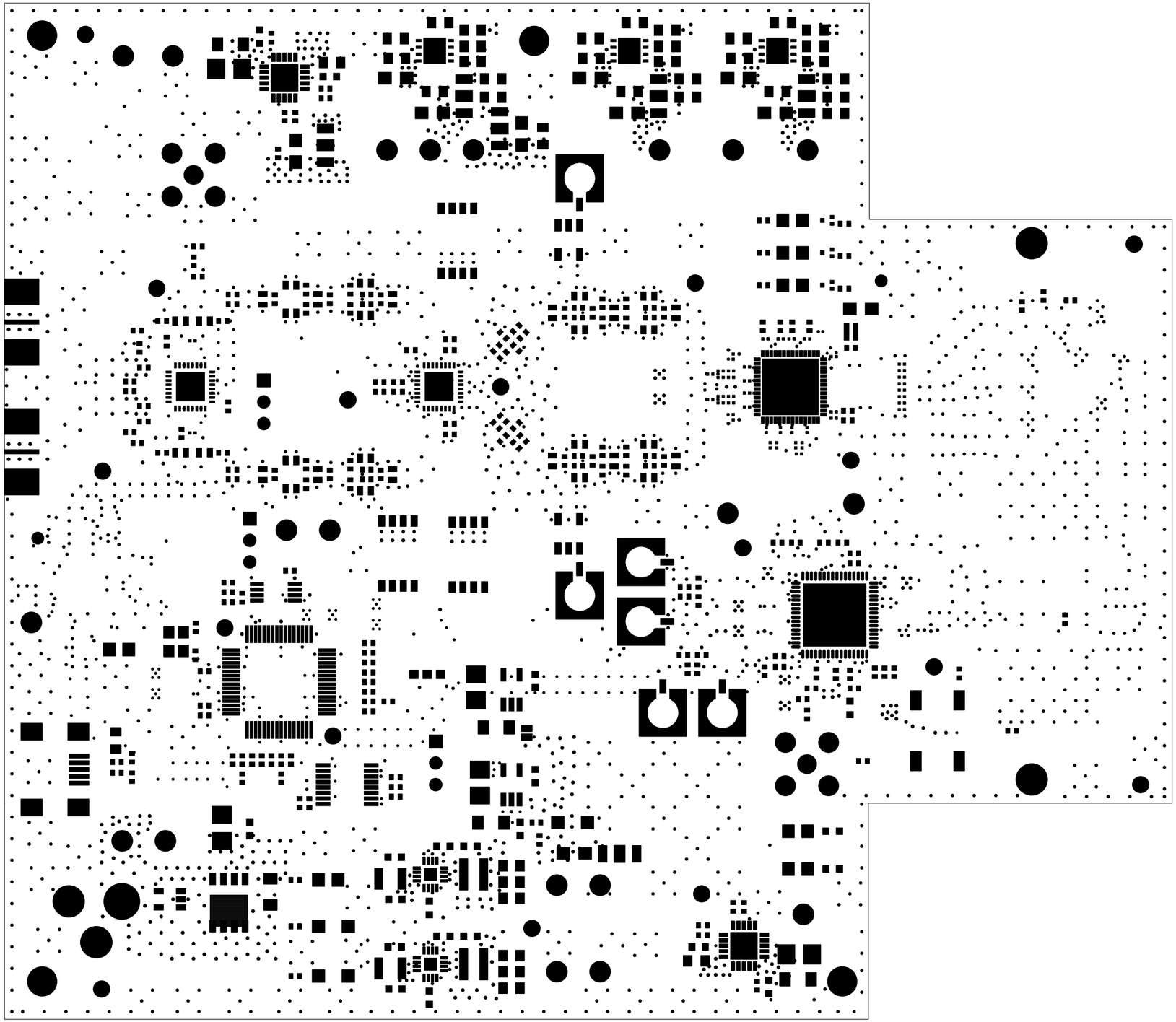


TEXAS INSTRUMENTS, INC.
TSW16DX370EVM REV B

SILKSCREEN TOP

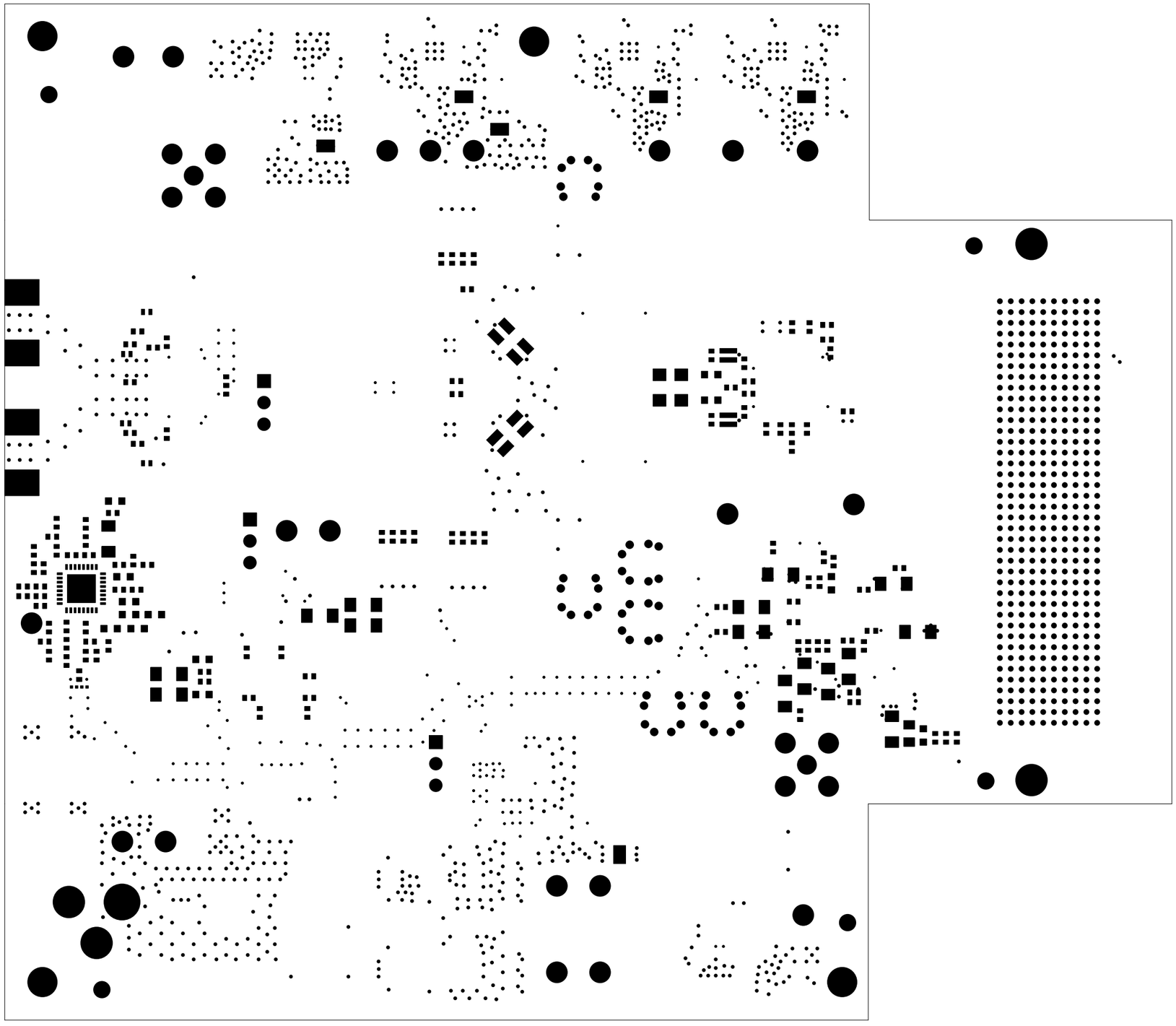
TEXAS INSTRUMENTS, INC.
TSW16DX370EVM REV B

SILKSCREEN BOTTOM



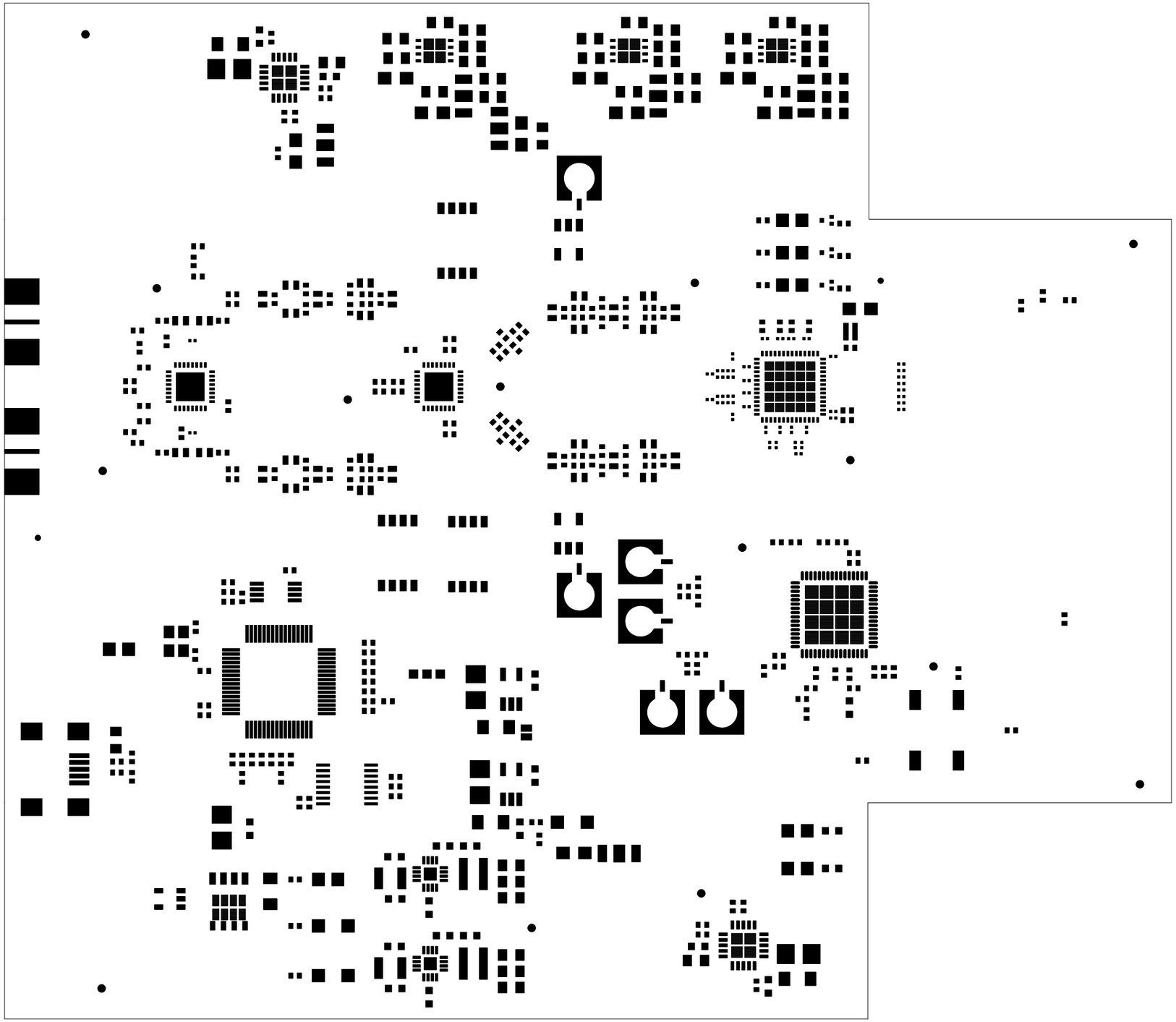
TEXAS INSTRUMENTS, INC.
TSW16DX370EVM REV B

SOLDERMASK TOP



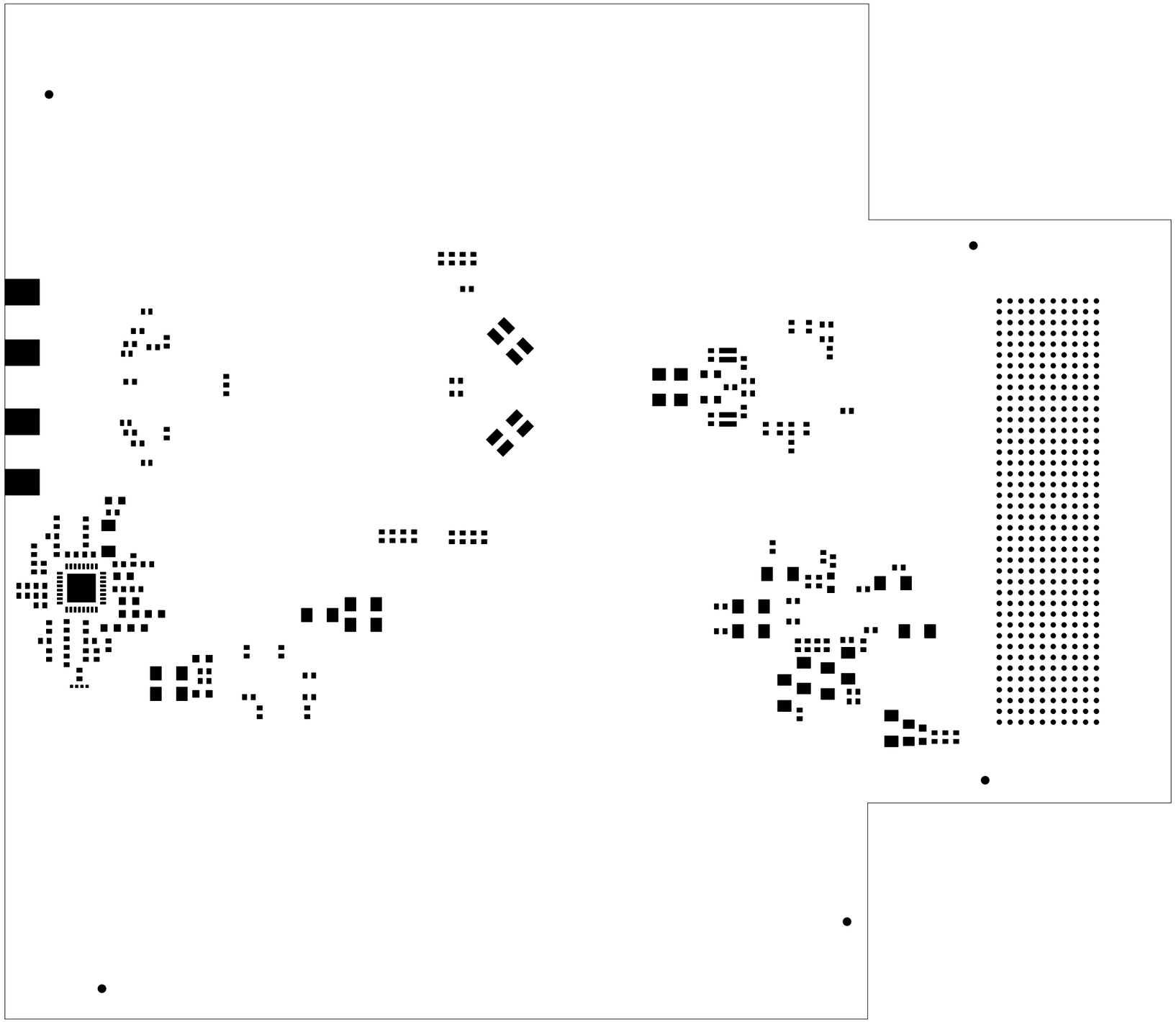
TEXAS INSTRUMENTS, INC.
TSW16DX370EVM REV B

SOLDERMASK BOTTOM



TEXAS INSTRUMENTS, INC.
TSW16DX370EVM REV B

PASTEMASK TOP



TEXAS INSTRUMENTS, INC.
TSW16DX370EVM REV B

PASTEMASK BOTTOM

J4
U19
C6
C10
C8
C9
C39
C20
C21
C22
C5
C31
C47
C14
C48
C43
C37
C35
C28
C29
C32
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C81
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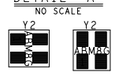
C88

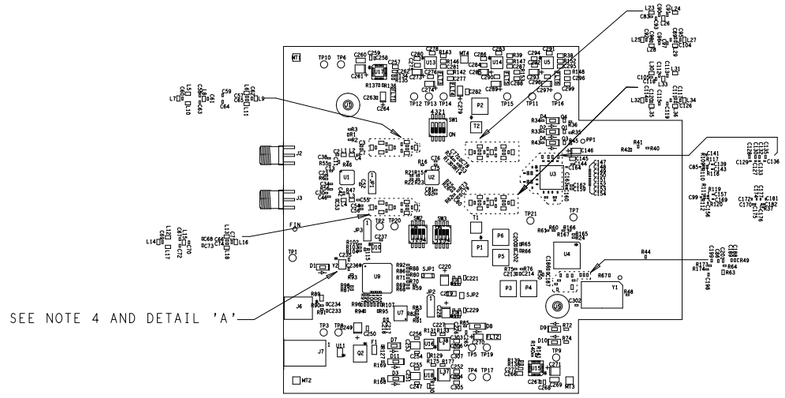
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED

NOTES:

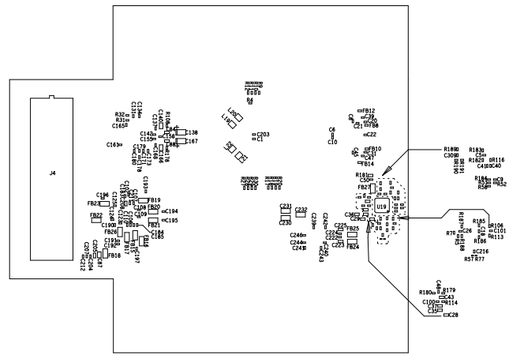
1. THIS DRAWING IS INTENDED TO HELP IN THE ASSEMBLY OF THE DESIGN. REFER TO ODB++ FILE FOR SPECIFIC COMPONENT LOCATION INFORMATION.
2. USE WATER SOLUBLE FLUX DURING BOARD ASSEMBLY.
3. ASSEMBLY MUST BE RoHS COMPLIANT AND LEAD FREE.
4. Y2 - PER THE TOP MARKING FROM LEFT TO RIGHT, PIN ONE IS ALWAYS LOWER LEFT. DO NOT USE THE CHAMFERED PART PAD AS THE PIN ONE INDICATOR. SEE DETAIL 'A'.

DETAIL 'A'
NO SCALE





COMPONENT SIDE



SOLDER SIDE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS +/- DECIMALS .XX +/-.01 .XXX +/-.005 ANGLES +/-	CONTRACT NO.	TEXAS INSTRUMENTS INC.
	APPROVALS / DATE	ASSEMBLY DRAWING, TSW16DX370EVM
	DRAWN JV SMITH 05-01-14	
MATERIAL	ENG J CARNES 05-01-14	
FINISH		SIZE D · CODE IDENT NO. · DRAWING NO. · REV. B
DO NOT SCALE DRAWING		SCALE

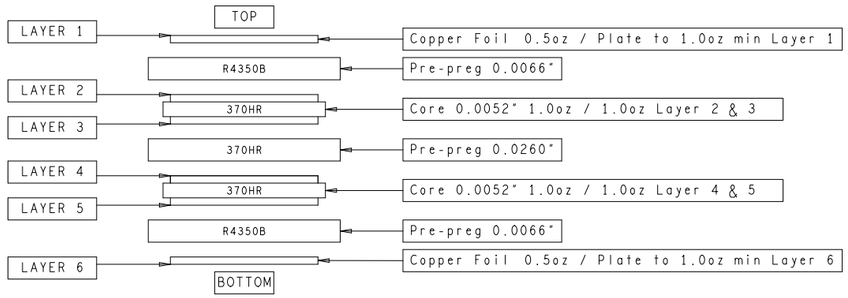
UNLESS OTHERWISE SPECIFIED. ALL NOTES ARE APPLICABLE.

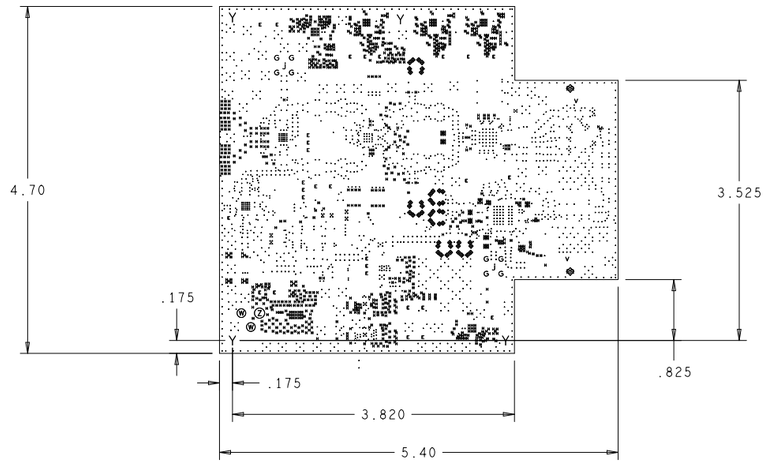
1. APPLICATION DESIGN, MANUFACTURING AND INSPECTION DOCUMENTS.
   IPC-2221A & IPC-2222 / DESIGN STANDARD FOR RIGID PRINTED CIRCUIT BOARDS AND RIGID PRINTED BOARD ASSEMBLIES.
   IPC-6012B / QUALIFICATION AND PERFORMANCE SPECIFICATION FOR RIGID PRINTED BOARD.
   IPC-A-600G / ACCEPTABILITY OF PRINTED BOARDS.
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 12MIL TRACE WIDTH SHALL BE 50 OHMS SINGLE ENDED +/- 10%.
14. ALL OUTER LAYERS USING A 7.5MIL TRACE WIDTH AND 8MIL SPACING SHALL BE 100 OHMS DIFFERENTIAL +/- 10%.
15. MINIMUM COPPER CONDUCTOR WIDTH IS: 5MIL.
    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 8MIL, 10MIL, 12MIL & 15MIL 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.
19. COPPER TO THE BOARD EDGE IS INTENTIONAL. DO NOT CUT BACK.
20. BOARD VENDOR MAY SLIGHTLY MODIFY DIELECTRIC TO MAINTAIN BOARD THICKNESS.

REVISIONS

ZONE	LTR	DESCRIPTION	DATE	APPROVED

DETAIL 'A'
STACKUP PER VIASYSTEMS JOB NAME: TI_TSW16DX370





DRILL CHART: TOP to BOTTOM			
ALL UNITS ARE IN MILS			
FIGURE	SIZE	PLATED	QTY
·	8.0	PLATED	1608
·	10.0	PLATED	391
▪	12.0	PLATED	1045
◆	15.0	PLATED	48
E	40.0	PLATED	29
J	62.0	PLATED	2
G	67.0	PLATED	8
❁	106.0	PLATED	2
Ⓡ	120.0	PLATED	2
Y	125.0	PLATED	4
Ⓩ	140.0	PLATED	1
v	50.0	NON-PLATED	2

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS +/- DECIMALS .XX +/-.01 .XXX +/-.005 ANGLES +/-

MATERIAL: SEE NOTE 5

FINISH: SEE NOTE 7, 8, 9

DO NOT SCALE DRAWING

CONTRACT NO.

APPROVALS	DATE
DRAWN JV SMITH	05-01-14
ENG J CARNES	05-01-14

TEXAS INSTRUMENTS INC.

FABRICATION DRAWING
TSW16DX370EVM

SIZE	CODE IDENT NO.	DRAWING NO.	REV.
D			B

SCALE NONE | SHEET 1 OF 1

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