

87654321

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. VIAS, 10 & 12mil HOLES, 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 - 8 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 8.7MIL TRACE WIDTH SHALL BE 50 OHMS SINGLE ENDED +/- 10%.

14. 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%.

15. MINIMUM COPPER CONDUCTOR WIDTH IS: 4.5MIL.
MINIMUM COPPER CONDUCTOR SPACING IS: 4.5MIL.

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. COPPER TO THE BOARD EDGE IS INTENTIONAL. DO NOT CUT IT BACK.

REVISIONS

ZONE	LTR	DESCRIPTION	DATE	APPROVED
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USE VIASYSTEMS STACKUP PART NUMBER AD58J8X-10

LAYER 1

TOP

Copper Foil Plate to 0.5oz min Layer 1

R-5775K

Pre-preg 0.0048"

LAYER 2

R-5775K

Core 0.004" 0.5oz / 0.5oz Layer 2 & 3

LAYER 3

R-5775K

Pre-preg 0.0083"

LAYER 4

370H

Core 0.006" 0.5oz / 0.5oz Layer 4 & 5

LAYER 5

R-5775K

Pre-preg 0.0057"

LAYER 6

370H

Core 0.006" 0.5oz / 0.5oz Layer 6 & 7

LAYER 7

R-5775K

Pre-preg 0.0083"

LAYER 8

R-5775K

Core 0.004" 0.5oz / 0.5oz Layer 8 & 9

LAYER 9

R-5775K

Pre-preg 0.0048"

LAYER 10

BOTTOM

Copper Foil Plate to 0.5oz min Layer 10

3.550

5.00

.175

.175

6.475

9.150

9.33

Y

A

A

D

D

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
c	38.0	PLATED	18
*	38.0	PLATED	24
e	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:
FRACTIONS DECIMALS ANGLES
+/- .XX +/- .01 +/-
 .XXX +/- .005 +/-

MATERIAL

SEE NOTE 5

FINISH

SEE NOTE 7, 8, 9

DO NOT SCALE DRAWING

CONTRACT NO.

APPROVALS

DRAWN JV SMITH

ENG R PRENTICE

DATE

10-22-13

TEXAS INSTRUMENTS INC.

FABRICATION DRAWING
ADS58J89/ADS54J54 EVM

SIZE

D

CODE

IDENT NO.

DRAWING NO.

REV.

C

SCALE

1. NONE

SHEET 1 OF 1