

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-6012 / QUALIFICATION AND PERFORMANCE SPECIFICATION FOR RIGID PRINTED BOARD, CLASS 2, CURRENT REVISION.
IPC-A-600 / ACCEPTABILITY OF PRINTED BOARDS, CLASS 2, CURRENT REVISION.

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 19MIL TRACE WIDTH SHALL BE 50 OHMS SINGLE ENDED +/- 10%.

14. ALL OUTER LAYERS USING A 8.5MIL TRACE WIDTH AND 15MIL PITCH SHALL BE 100 OHMS DIFFERENTIAL +/- 10%.

15. MINIMUM COPPER CONDUCTOR WIDTH IS: 4MIL.
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 THROUGH VIAS, 8MIL, 10MIL AND 12MIL, TO BE PLUGGED WITH NON-CONDUCTIVE EPOXY MATERIAL.
PLUGGED VIAS TO BE PLATED AFTER PLUGGING TO PRESENT FLAT SURFACE TO DEVICE.
NO POTHOLES.

REVISIONS

| ZONE | LTR | DESCRIPTION | DATE | APPROVED |
|------|-----|-------------|------|----------|
|------|-----|-------------|------|----------|

SEE FABRICATION VENDORS STACKUP FOR MATERIAL AND THICKNESS

LAYER 1

LAYER 2

TOP

MEGTRON 6

Copper Foil 0.25oz / Plate to 0.5oz min Layer 1

0.5oz / 0.5oz Layer 1 & 2

LAYER 3

LAYER 4

370HR

370HR

0.5oz / 0.5oz Layer 3 & 4

LAYER 5

LAYER 6

MEGTRON 6

BOTTOM

0.5oz / 0.5oz Layer 5 & 6

Copper Foil 0.25oz / Plate to 0.5oz min Layer 6

DRILL CHART: TOP to BOTTOM

ALL UNITS ARE IN MILS

| FIGURE | SIZE | PLATED | QTY |
|--------|-------|------------|------|
| . | 8.0 | PLATED | 2120 |
| . | 10.0 | PLATED | 49 |
| * | 12.0 | PLATED | 150 |
| κ | 40.0 | PLATED | 4 |
| ⊘ | 62.0 | PLATED | 13 |
| ⊘ | 67.0 | PLATED | 4 |
| ⊘ | 106.0 | PLATED | 2 |
| ⊘ | 120.0 | PLATED | 2 |
| Y | 125.0 | PLATED | 2 |
| Ⓢ | 140.0 | PLATED | 1 |
| κ | 39.0 | NON-PLATED | 2 |
| v | 50.0 | NON-PLATED | 2 |

SEE NOTE 18

SEE NOTE 18

SEE NOTE 18

1.918

2.70

.782

.295

5.055

5.35

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 J SETON

DATE

07-24-15

07-24-15

TEXAS INSTRUMENTS INC.

FABRICATION DRAWING
ADS54J40EVM

SIZE

D

CODE

NONE

IDENT NO.

DRAWING NO.

REV.

D

SHEET 1 OF 1