

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 13MIL TRACE WIDTH SHALL BE 50 OHMS SINGLE ENDED +/- 10%.

14. ALL OUTER LAYERS USING A 8MIL 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. PCB MUST BE ROHS COMPLIANT AND SURVIVE LEAD FREE ASSEMBLY,
MAX REFLOW OF 260 DEGREES C (6 PASSES).

18. ALL THROUGH VIAS TO BE PLUGGED WITH NON-CONDUCTIVE EPOXY MATERIAL.
PLUGGED VIAS TO BE PLATED AFTER PLUGGING TO PRESENT FLAT SURFACE TO DEVICE.
NO POTHOLE.

19. HOLE SIZE APPLY AFTER PLATING. TOLERANCE TO BE +.001/- .000, DRILL SIZE 60.

20. HOLE SIZE APPLY AFTER PLATING. TOLERANCE TO BE +.001/- .000, DRILL SIZE 80.

21. HOLE SIZE TOLERANCE TO BE +.002/- .002, DRILL SIZE 96.

22. Cu TO THE BOARD EDGES IS INTENTIONAL.

REVISIONS

ZONE	LTR	DESCRIPTION	DATE	APPROVED
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DRILL CHART: TOP to BOTTOM
ALL UNITS ARE IN MILS

FIGURE	SIZE	PLATED	QTY
.	8.0	PLATED	30
.	10.0	PLATED	16
.	12.0	PLATED	2239
.	12.0	PLATED	32
•	36.0	PLATED	4
*	40.0	PLATED	20
o	55.0	PLATED	6
o	60.0	PLATED	1
o	62.0	PLATED	2
c	80.0	PLATED	1
⦿	106.0	PLATED	2
⊗	120.0	PLATED	2
Y	125.0	PLATED	4
⊙	140.0	PLATED	1
•	46.0	NON-PLATED	2
•	50.0	NON-PLATED	2
Δ	96.0	NON-PLATED	4

SEE NOTE 19

SEE NOTE 20

SEE NOTE 21

4.82

4.22

1.345

.200

.200

3.650

4.620

LAYER 1

TOP

Copper Foil 1.0oz / Plate to 2.0oz min Layer 1

MEGTRON6 R-5575K

Pre-preg 0.007"

LAYER 2

PCL-370HR

Core 0.004" 1.0oz / 1.0oz Layer 2 & 3

LAYER 3

PCL-370HR

Pre-preg 0.040"

LAYER 4

PCL-370HR

Core 0.004" 1.0oz / 1.0oz Layer 4 & 5

LAYER 5

MEGTRON6 R-5575K

Pre-preg 0.007"

LAYER 6

BOTTOM

Copper Foil 1.0oz / Plate to 2.0oz min Layer 6

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

CONTRACT NO.

APPROVALS DATE
DRAWN L NGUYEN 10-04-15
ENG J CARNES 10-04-15

MATERIAL
SEE NOTE 5

FINISH
SEE NOTE 7, 8, 9

DO NOT SCALE DRAWING

TEXAS INSTRUMENTS INC.

FABRICATION DRAWING
ADC14X250 EVM

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

SCALE NONE SHEET 1 OF 1