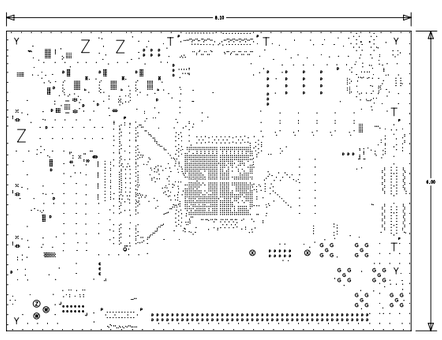
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED

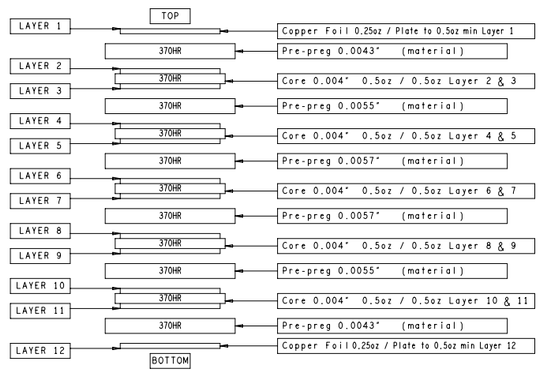
UNLESS OTHERWISE SPECIFIED. ALL NOTES ARE APPLICABLE.
NOTES PRECEDED BY AN UNMARKED "☐" ARE NOT APPLICABLE.

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. HOLE SIZE APPLIES 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: ☐ SINGLE SIDED, ☐ DOUBLE SIDED, ☒ MULTI-LAYER (SEE DETAIL "A")
   SEE LAYER STACKUP FOR ALL PRE-PREG & CORE THICKNESSES, COPPER OZ AND MATERIAL. FINISHED BOARD THICKNESS: 0.062 +/-10%
6. MANUFACTURE'S UL MARKING, FLAMMABLILITY RATING, LOGO AND DATE CODE TO BE PLACED IN SILKSCREEN ON BOTTOM SIDE OF THE BOARD.
7. SOLDERMASK BOTH SIDES USING TAIYO (OR EQUIVALENT).
   COLOR=RED (0.001 TO 0.002" THICK OVER METAL).
8. SILKSCREEN ☒ TOP SIDE ☐ BOTH SIDES, USING ☐ YELLOW ☒ WHITE NPI LEADFREE.
   REGISTRATION TOLERANCE TO BE +/-.005. INK IS NOT ALLOWED ON EXPOSED PLATED AREA.
9. P.C. BOARD TO BE FREE OF DIRT, OIL, FINGER PRINTS, ETC.
10. BOARD WARPAGE: WARP AND TWIST SHALL NOT EXCEED .007 INCH PER INCH. MEASURED AT ANY LOCATION OR DIRECTION ON THE BOARD.
11. BOARD MUST BE 100% ELECTRICALLY TESTED TO ENSURE NO SHORTS OR OPEN CIRCUITS AT 20V.
12. ALL INNER LAYER UNCONNECTED PADS SHALL BE REMOVED.
13. OUTER LAYERS USING A 6.5 mil TRACE WIDTH SHALL BE 50ohms SINGLE ENDED, +/- 10% TOLERANCE.
    INNER LAYERS USING A 4.5 mil TRACE WIDTH SHALL BE 50ohms SINGLE ENDED, +/- 10% TOLERANCE.
    OUTER LAYERS USING A 4.5 mil TRACE WIDTH AND 7.0 mil SPACING SHALL BE 100 ohms DIFFERENTIAL, +/- 10% TOLERANCE.
    INNER LAYERS USING A 4.0 mil TRACE WIDTH AND 7.0 mil SPACING SHALL BE 100 ohms DIFFERENTIAL, +/- 10% TOLERANCE.
14. MINIMUM COPPER CONDUCTOR WIDTH IS: 4 MIL.
    MINIMUM COPPER SPACING IS: 4 MIL.
15. SMOBC/IMMERSION GOLD: 3-8 uIN OVER 100-200 uIN NICKEL PLATING.
16. GROUND ETCH TO BOARD EDGE IS INTENTIONAL. DO NOT PULL BACK.
17. NO CHANGES TO ANY ARTWORK ARE PERMITTED WITHOUT WRITTEN AUTHORIZATION.
18. FINISHED BOARD MUST BE RoHS COMPLIANT AND SURVIVE A LEAD FREE ASSEMBLY, MAXIMUM REFLOW OF 260 DEGREES C (6 PASSES).



DRILL CHART: TOP to BOTTOM				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
·	8.0	+3.0/-8.0	PLATED	1087
·	10.0	+3.0/-10.0	PLATED	5
·	10.0	+3.0/-10.0	PLATED	2102
*	32.0	+0.0/-0.0	PLATED	12
*	35.0	+0.0/-0.0	PLATED	10
*	38.0	+0.0/-0.0	PLATED	118
*	40.0	+0.0/-0.0	PLATED	14
◦	40.0	+0.0/-0.0	PLATED	3
◞	50.0	+0.0/-0.0	PLATED	2
◦	62.0	+0.0/-0.0	PLATED	6
◦	67.0	+0.0/-0.0	PLATED	24
◉	120.0	+3.0/-3.0	PLATED	2
Ⓩ	140.0	+3.0/-3.0	PLATED	1
Z	250.0	+0.0/-0.0	PLATED	3
·	18.0	+0.0/-0.0	NON-PLATED	2
*	40.0	+0.0/-0.0	NON-PLATED	4
*	44.0	+0.0/-0.0	NON-PLATED	1
*	47.0	+0.0/-0.0	NON-PLATED	2
◦	63.0	+0.0/-0.0	NON-PLATED	1
⊗	110.0	+0.0/-0.0	NON-PLATED	2
Y	125.0	+0.0/-0.0	NON-PLATED	4
T	156.0	+0.0/-0.0	NON-PLATED	4

DETAIL "A"



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS +/- DECIMALS .XX +/-.01 .XXX +/-.005 ANGLES +/-	CONTRACT NO.	TEXAS INSTRUMENTS INC.
	APPROVALS / DATE	FABRICATION DRAWING
	DRAWN P. LARSON 01/03/2011	TSW1400
MATERIAL SEE NOTE 5	ENGR H. FRAZ	
FINISH SEE NOTES 7, 8, 9		SIZE B / CODE IDENT NO. / DRAWING NO. / REV. D
DO NOT SCALE DRAWING		SCALE NONE / SHEET 1 OF 1