

UNLESS OTHERWISE SPECIFIED. ALL NOTES ARE APPLICABLE.

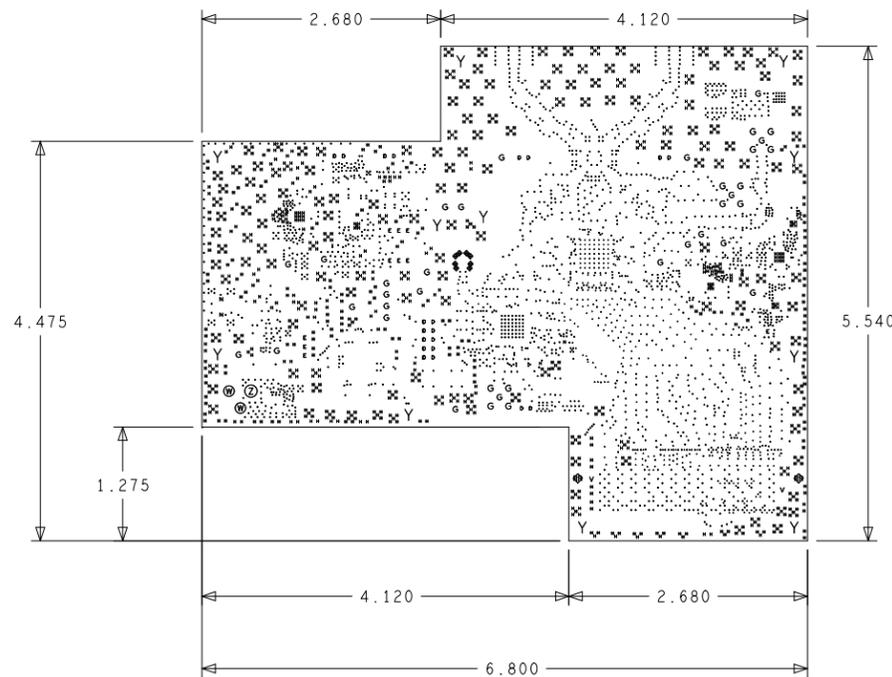
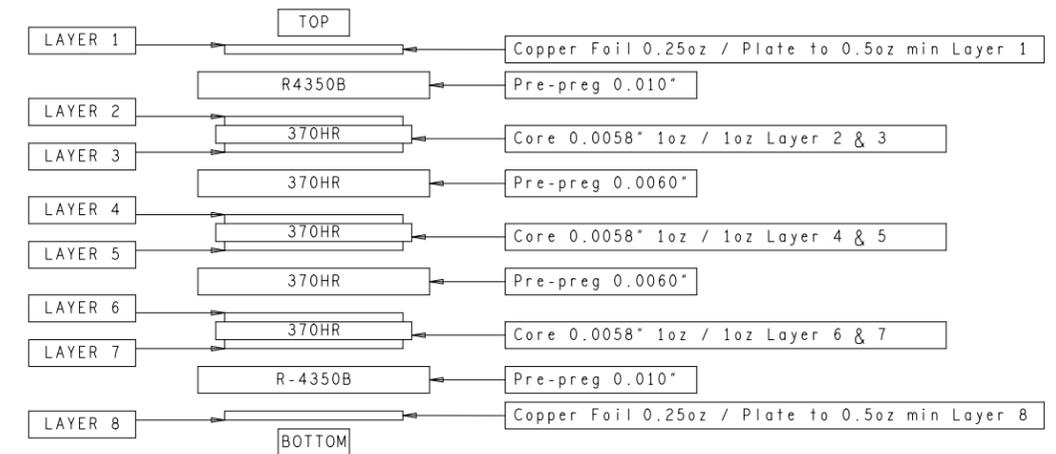
- APPLICATION DESIGN MANUFACTURING AND INSPECTION DOCUMENTS.
IPC-2221A & IPC-2222 / DESIGN STANDARD FOR RIGID PRINTED CIRCUIT BOARDS AND RIGID PRINTED BOARD ASSEMBLIES.
IPC-6012B / QUALIFICATION AND PERFORMANCE SPECIFICATION FOR RIGID PRINTED BOARD.
IPC-A-600G / ACCEPTABILITY OF PRINTED BOARDS.
- HOLE SIZE APPLIES AFTER PLATING. TOLERANCE TO BE +/- .003.
VIA HOLE SIZES 8, 10 AND 12MILS APPLY AFTER PLATING. TOLERANCE TO BE +.003/- .010.
- REGISTRATION TOLERANCE: ARTWORK +/- .002
ALL HOLE CENTERS +/- .005 FROM DIMENSION DATUM.
- MINIMUM COPPER WALL THICKNESS SHALL BE .001 INCH.
FOR ALL PLATED THROUGH HOLES. BREAKOUT NOT ALLOWED.
- PROCESS AND MATERIAL MUST CONFORM TO UL 796. MATERIAL MUST MEET OR EXCEED UL FLAMMABILITY RATING 94V-0.
MATERIAL: MULTI-LAYER, USE VIASYSTEMS STACKUP "DAC38J84_R04350". DETAIL "A" IS FOR REFERENCE.
SEE LAYER STACKUP FOR ALL PRE-PREG & CORE THICKNESSES, COPPER OZ AND MATERIAL. FINISHED BOARD THICKNESS: 0.062 +/- 10%
- MANUFACTURE'S UL MARKING, FLAMMABILITY RATING, LOGO AND DATE CODE TO BE PLACED IN SILKSCREEN ON BOTTOM SIDE OF THE BOARD.
- SOLDERMASK BOTH SIDES USING TAIYO (OR EQUIVALENT).
COLOR-RED (0.001 TO 0.002" THICK OVER METAL). VIASYSTEMS STACKUP JOB NAME: DAC38J84_R04350
- SILKSCREEN BOTH SIDES USING WHITE NPI LEADFREE.
REGISTRATION TOLERANCE TO BE +/- .005. INK IS NOT ALLOWED ON EXPOSED PLATED AREA.
- P.C. BOARD TO BE FREE OF DIRT, OIL, FINGER PRINTS, ETC.
- BOARD WARPAGE: WARP AND TWIST SHALL NOT EXCEED .007 INCH PER INCH.
MEASURED AT ANY LOCATION OR DIRECTION ON THE BOARD.
- BOARD MUST BE 100% ELECTRICALLY TESTED TO ENSURE NO SHORTS OR OPEN CIRCUITS AT 20V.
- ALL INNER LAYER UNCONNECTED PADS SHALL BE REMOVED.

- OUTER LAYERS USING A 20mil TRACE WIDTH SHALL BE 50ohms SINGLE ENDED, +/- 10% TOLERANCE.
OUTER LAYERS USING A 9.5mil TRACE WIDTH AND 5.5mil SPACING SHALL BE 100 ohms DIFFERENTIAL, +/- 10% TOLERANCE.
OUTER LAYERS USING A 8.75mil TRACE WIDTH SHALL BE 75ohms SINGLE ENDED, +/- 10% TOLERANCE.
OUTER LAYERS USING A 4.2mil TRACE WIDTH AND 9.8mil SPACING SHALL BE 100 ohms DIFFERENTIAL, +/- 10% TOLERANCE.
- MINIMUM COPPER CONDUCTOR WIDTH IS: 3.5MIL
MINIMUM COPPER SPACING IS: 4 MIL.
- SURFACE FINISH TO BE 3-8 uIN OVER 100-200 uIN NICKEL PLATING.
- GROUND ETCH TO BOARD EDGE IS INTENTIONAL. DO NOT PULL BACK.
- NO CHANGES TO ANY ARTWORK ARE PERMITTED WITHOUT WRITTEN AUTHORIZATION.
- FINISHED BOARD MUST BE RoHS COMPLIANT AND SURVIVE A LEAD FREE ASSEMBLY.
MAXIMUM REFLOW OF 260 DEGREES C (6 PASSES).
- FILL ALL 8mil, 10mil AND 12mil VIAS USING NON CONDUCTIVE MATERIAL.

REVISIONS			
ZONE	LTR	DESCRIPTION	DATE

DETAIL "A"

VIASYSTEMS STACKUP JOB NAME: TSW54J40_R04350
THIS STACK UP DETAIL IS FOR REFERENCE ONLY



DRILL CHART: TOP to BOTTOM			
ALL UNITS ARE IN MILS			
FIGURE	SIZE	PLATED	QTY
-	8.0	PLATED	469
-	10.0	PLATED	44
-	10.0	PLATED	2099
*	12.0	PLATED	1131
*	15.0	PLATED	8
*	38.0	PLATED	20
*	40.0	PLATED	10
o	62.0	PLATED	25
o	67.0	PLATED	12
o	106.0	PLATED	2
o	120.0	PLATED	2
Y	125.0	PLATED	9
o	140.0	PLATED	1
*	39.0	NON-PLATED	2
v	50.0	NON-PLATED	2
Y	125.0	NON-PLATED	2

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES +/- .XX +/- .01 +/- +/- .XXX +/- .005 +/-	CONTRACT NO.		TEXAS INSTRUMENTS INC.	
	APPROVALS	DATE	FABRICATION DRAWING TSW54J40 EVM	
DRAWN JV SMITH	01/10/2014	SIZE		
MATERIAL	ENGR M GUIBORD	01/10/2014	DRAWING NO.	REV. A
SEE NOTE 5				
FINISH	SEE NOTES 7, 8, 9			
DO NOT SCALE DRAWING			SCALE NONE	SHEET 1 OF 1