

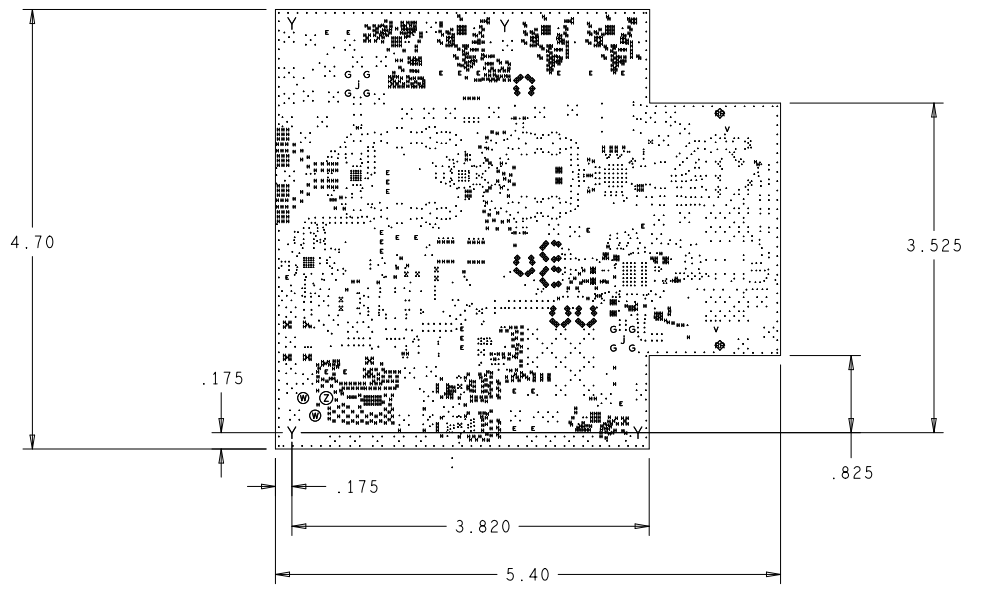
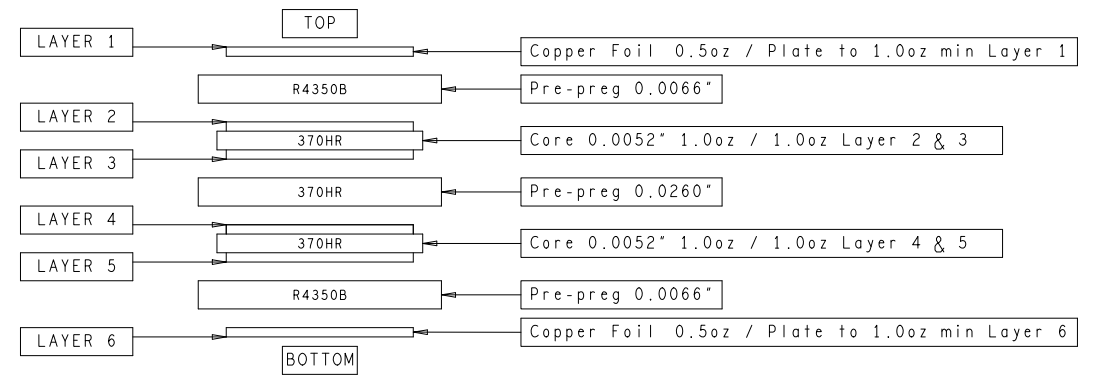
REVISIONS			
ZONE	LTR	DESCRIPTION	DATE

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.
- VIA SIZE APPLY AFTER PLATING. TOLERANCE TO BE  $\pm .003/- .010$ .  
HOLE SIZE APPLY AFTER PLATING. TOLERANCE TO BE  $\pm .003$ .
- REGISTRATION TOLERANCE: ARTWORK  $\pm .002$ .  
ALL HOLE CENTERS  $\pm .005$  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 (SEE DETAIL 'A')  
SEE LAYER STACKUP FOR ALL PRE-PREG & CORE THICKNESSES, COPPER OZ AND MATERIAL. FINISHED BOARD THICKNESS:  $.062 \pm 10\%$
- MANUFACTURE'S UL MARKING, FLAMMABILITY RATING, LOGO AND DATE CODE TO BE PLACED IN SILKSCREEN ON BOTTOM SIDE OF THE BOARD.
- SMOBC/IMMERSION GOLD: 2 - 5  $\mu$ IN OVER 118-236  $\mu$ IN NICKEL PLATING.
- SOLDERMASK BOTH SIDES USING TAIYO (OR EQUIVALENT)  
COLOR = RED (0.001 TO 002" THICK OVER METAL.
- SILKSCREEN BOTH SIDES USING WHITE NPI LEADFREE.  
REGISTRATION TOLERANCE TO BE  $\pm .005$ .  
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 OUTER LAYERS USING A 12MIL TRACE WIDTH SHALL BE 50 OHMS SINGLE ENDED  $\pm 10\%$ .
- ALL OUTER LAYERS USING A 7.5MIL TRACE WIDTH AND 8MIL SPACING SHALL BE 100 OHMS DIFFERENTIAL  $\pm 10\%$ .
- MINIMUM COPPER CONDUCTOR WIDTH IS: 5MIL.  
MINIMUM COPPER CONDUCTOR SPACING IS: 5MIL.
- ALL INNER LAYER UNCONNECTED PADS SHALL BE REMOVED.
- PWB MUST BE ROHS COMPLIANT AND SURVIVE LEAD FREE ASSEMBLY,  
MAX REFLOW OF 260 DEGREES C (6 PASSES).
- ALL 8MIL, 10MIL, 12MIL & 15MIL 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.
- COPPER TO THE BOARD EDGE IS INTENTIONAL. DO NOT CUT BACK.
- BOARD VENDOR MAY SLIGHTLY MODIFY DIELECTRIC TO MAINTAIN BOARD THICKNESS.

DETAIL 'A'  
STACKUP PER VIASYSTEMS JOB NAME: TI\_TSW16DX370



DRILL CHART: TOP to BOTTOM			
ALL UNITS ARE IN MILS			
FIGURE	SIZE	PLATED	QTY
.	8.0	PLATED	1608
·	10.0	PLATED	391
*	12.0	PLATED	1045
+	15.0	PLATED	48
ε	40.0	PLATED	29
j	62.0	PLATED	2
g	67.0	PLATED	8
⊕	106.0	PLATED	2
⊗	120.0	PLATED	2
Y	125.0	PLATED	4
⓪	140.0	PLATED	1
v	50.0	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 TSW16DX370EVM	
MATERIAL SEE NOTE 5	DRAWN JV SMITH	05-01-14	SCALE	NONE
FINISH SEE NOTE 7, 8, 9	ENG J CARNES	05-01-14	CODE IDENT NO.	D
DO NOT SCALE DRAWING	SHEET 1 OF 1		DRAWING NO.	B

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