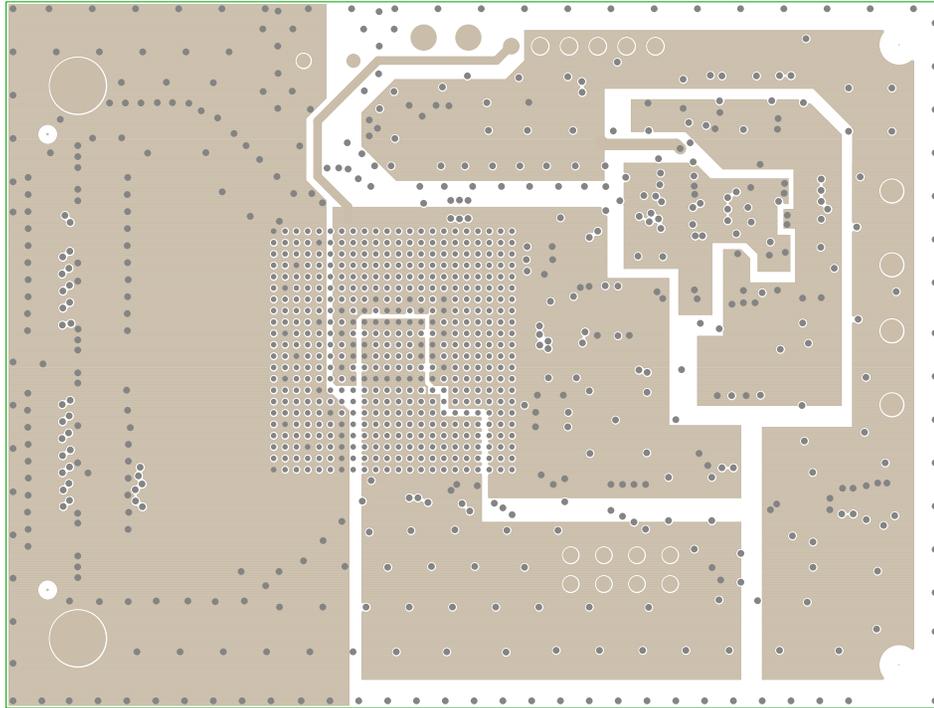
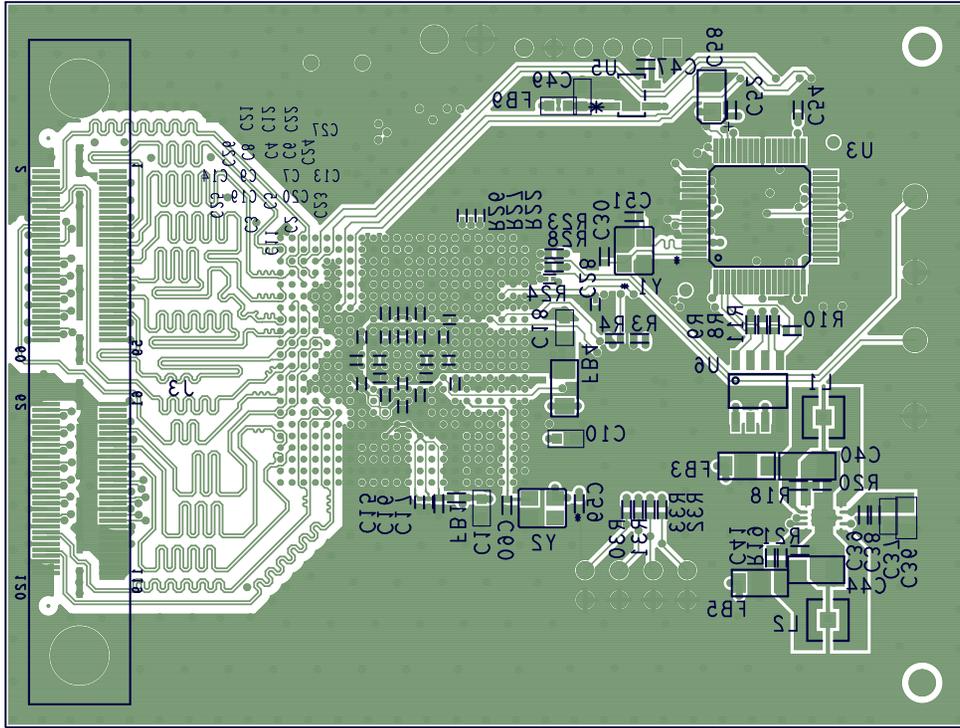


TEXAS INSTRUMENTS, INC.  
TSW1405EVM  
PCB REV C  
GROUND PLANE-LYR 2



TEXAS INSTRUMENTS, INC.  
TSW1405EVM  
PCB REV C  
POWER PLANE-LYR 3



TEXAS INSTRUMENTS, INC.  
TSW1405EVM  
PCB REV C  
SOLDER MASK BOTTOM 4

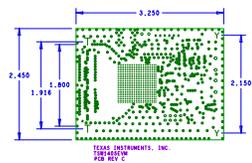
8 7 6 5 4 3 2 1

- UNLESS OTHERWISE SPECIFIED, ALL NOTES ARE APPLICABLE.  
 NOTES PRECEDED BY AN UNMARKED "□" ARE NOT 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.
  - 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: □ 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: 0.082 +/- .018
  - 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).
  - SILKSCREEN □ TOP SIDE □ BOTH SIDES; USING □ YELLOW □ 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.

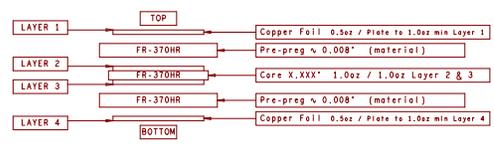
- ALL OUTER LAYERS USING A X.XX mil TRACE WIDTH SHALL BE 50ohms SINGLE ENDED, +/- 5% TOLERANCE.
- ALL OUTER LAYERS USING A X.XX mil TRACE WIDTH SHALL BE 100ohms SINGLE ENDED, +/- 5% TOLERANCE.
- ALL INNER LAYERS USING A X.XX mil TRACE WIDTH SHALL BE 50ohms SINGLE ENDED, +/- 5% TOLERANCE.
- ALL INNER LAYERS USING A X.XX mil TRACE WIDTH SHALL BE 100ohms SINGLE ENDED, +/- 5% TOLERANCE.
- ALL OUTER LAYERS USING A 5.00 mil TRACE WIDTH AND 5.00 mil SPACING SHALL BE 100 ohms DIFFERENTIAL, +/-10% TOLERANCE.
- ALL INNER LAYERS USING A X.XX mil TRACE WIDTH AND X.XX mil SPACING SHALL BE 100 ohms DIFFERENTIAL, +/-10% TOLERANCE.
- MINIMUM COPPER CONDUCTOR WIDTH IS: .MIL.  
 MINIMUM COPPER SPACING IS: .MIL.
- SMOBC/IMMERSON GOLD: 3-8 uin OVER 100-200 uin NICKEL PLATING.
- ALL THRU HOLE VIAS TO BE PLATED AND FILLED WITH NON-CONDUCTIVE EPOXY.  
 FILLED VIAS SHALL BE PLATED AFTER FILLING AND COPLANAR.
- 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).
- BOARD TO BE PANELIZED FOR ASSEMBLY.
- HOLE SIZE APPLIES AFTER PLATING. TOLERANCE TO +/- .003/- .010.
- FILL 10MIL VIAS UNDER BGA (UI) WITH NON CONDUCTIVE MATERIAL.

REVISIONS		DATE	APPROVED
ZONE	LTR	DESCRIPTION	

DETAIL "A"



DRILL CHART: TOP to BOTTOM			
ALL UNITS ARE IN MILS			
FIGURE	SIZE	PLATED	QTY
+	10.0	PLATED	484
+	12.0	PLATED	368
+	13.0	PLATED	165
+	36.0	PLATED	8
+	38.0	PLATED	6
+	55.0	PLATED	4
+	62.0	PLATED	2
+	35.0	NON-PLATED	2
+	40.0	NON-PLATED	2
Y	125.0	NON-PLATED	2
T	156.0	NON-PLATED	2



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES +/- .XXX +/- .005 +/-	CONTRACT NO.	TEXAS INSTRUMENTS INC.	
	APPROVALS	DATE	FABRICATION DRAWING TSW1405VM
MATERIAL	ENGR L. NGUYEN	04-10-12	
SEE NOTE 5			
FINISH	SEE NOTES 7, 8, 9	SIZE	CODE IDENT NO   DRAWING NO.
DO NOT SCALE DRAWING		SCALE	NONE   SHEET 1 OF 1

8 7 6 5 4 3 2 1

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