





















TEXAS INSTRUMENTS		Copper Layer Name				Silkscreen		S Mask		P Mask		Assembly		Drill Drawing
Board No.	Rev.	Top	Internal	Bot	Top	Bot	Top	Bot	Top	Bot	Top	Bot	Top	Bot
PWR145	A	L1	L2	L3	L4	S1	S4	M1	M4	P1	P4	TA	BA	FB
Date: 6/7/2012	Filename: PWR145LPCB	Engineer: E. Wright		PCB Designer: E. Wright		Modified Date: 6/7/2012				Software: PADS v8.3				

FABRICATION CHART				
FINISHED THICKNESS	SILKSCREEN	SOLDERMASK	FINISHED COPPER WEIGHT	
			EXTERNAL	INTERNAL
<input type="checkbox"/> 0.031 <input checked="" type="checkbox"/> 0.062 <input type="checkbox"/> 0.093 <input type="checkbox"/> 0.125	<input checked="" type="checkbox"/> LAYER 1 <input type="checkbox"/> LAYER 2 <input type="checkbox"/> NONE	<input checked="" type="checkbox"/> LAYER 1 <input checked="" type="checkbox"/> LAYER 2 <input type="checkbox"/> NONE	<input type="checkbox"/> 1 OZ. <input type="checkbox"/> 2 OZ. <input checked="" type="checkbox"/> OTHER <u>1.5oz</u>	<input checked="" type="checkbox"/> 1 OZ. <input type="checkbox"/> 2 OZ. <input type="checkbox"/> OTHER _____
DESIGN	TRACE/GAP SPACING		LAYER COUNT	
<input type="checkbox"/> SMD <input type="checkbox"/> THRU-HOLE <input checked="" type="checkbox"/> MIX	<input checked="" type="checkbox"/> 0.010/0.010 <input type="checkbox"/> 0.008/0.007 <input type="checkbox"/> 0.006/0.006		<input type="checkbox"/> SINGLE SIDED <input checked="" type="checkbox"/> 4 LAYER <input type="checkbox"/> 8 LAYER <input type="checkbox"/> OTHER _____	<input type="checkbox"/> 2 LAYER <input type="checkbox"/> 6 LAYER <input type="checkbox"/> 10 LAYER

## NOTES: UNLESS OTHERWISE SPECIFIED

- MATERIAL: ALL MATERIALS, INCLUDING BUT NOT LIMITED TO BASE LAMINATE, BONDING MATERIALS AND SOLDERMASK COATINGS FORMING THE FINISHED PRINTED CIRCUIT BOARD SHALL MEET UL-796 REQUIREMENTS AND BE RoHS COMPLIANT AND HAVE A FLAMMABILITY OF UL94V-0.
- BASE LAMINATE: PLASTIC SHEET, LAMINATED METAL CLAD, ONE OR TWO SIDES, BASE MATERIAL NEMA TYPE FR-4 OR EQUIVALENT, W/Tg =140 Deg C OR HIGHER. MINIMUM DECOMPOSITION TEMP (Td) OF 320 Deg c. GLASS EPOXY RESIN, COPPER-CLAD IN ACCORDANCE WITH 4 LAYER STACK-UP, COMPLIANT WITH LEAD FREE PROCESS.
- SOLDERMASK: SOLDERMASK OVER BARE COPPER (SMOBC) USING LIQUID PHOTO-IMAGEABLE SOLDERMASK IN ACCORDANCE WITH IPC-SM-840. COLOR: GREEN. MINOR SOLDERMASK ADJUSTMENTS TO FACILITATE PCB FAB AND OR ASSEMBLY IS ALLOWED PROVIDED NO DEFECTS ARE CREATED TO FINAL ASSEMBLY AS A RESULT.
- TOLERANCES: UNLESS OTHERWISE SPECIFIED PCB TOLERANCES SHALL BE +/- .005 INCHES, HOLE DIAMETERS SHALL BE +/- .003 INCHES.
- PLATING: HOLES REQUIRING PLATING, SEE HOLE CHART, TO HAVE 1 OZ. (0.0014) MIN. THK MIN. THICK COPPER.
- FINISH: PLATE WITH RoHS COMPLIANT, IMMERSION SILVER PREFERRED, IMMERSION TIN OR Sn/Ag/Cu, WITH RMA FLUX, 0.0003" to .0005" THICK ALL EXPOSED AREAS AS COATED, NO ACTIVE FLUXES ARE ACCEPTABLE.
- LEGEND: IF REQUIRED, SILKSCREEN LEGEND(S) WITH WHITE NON-CONDUCTIVE EPOXY INK.
- MARKINGS: BOARD MUST BEAR VENDOR'S IDENTIFICATION CODE (ETCH OR WHITE NON-CONDUCTIVE INK). LOCATION OPTIONAL.
- WORKMANSHIP: BOARD IS TO BE MANUFACTURED PER IPC-A-600 CLASS 2 REQUIREMENTS OR BETTER.
- DOCUMENTATION: PCB VENDOR IS REQUIRED TO RETURN ANY AND ALL DOCUMENTS SUPPLIED OR ULTIMATELY PURCHASED BY TEXAS INSTRUMENTS UPON COMPLETION OF PURCHASE ORDER.
- DRILL SIZES: HOLE DIAMETERS SHOWN ARE FINISHED SIZES AFTER PLATING UNLESS OTHERWISE NOTED.
- PANEL BORDER: ANY METAL IN BORDER AREA INCLUDING PART NUMBER, DATECODE AND/OR REVISION LETTERS MUST BE COVERED WITH SOLDERMASK.
- PROCESS CHANGES: NO DIMENSIONAL, MATERIAL, OR PROCESS CHANGES ARE ALLOWED WITHOUT PRIOR EXPLICIT WRITTEN PERMISSION FROM TEXAS INSTRUMENTS.
- CONTROLLED IMPEDANCE REQUIRED: ALL PAIRS OF 11 MIL TRACES WITH 8 MIL SPACING BETWEEN THEM ON THE TOP AND BOTTOM LAYER ARE CONTROLLED IMPEDANCE. ALL PAIRS OF 20 MIL TRACES WITH 13 MIL SPACING BETWEEN THEM ON THE TOP AND BOTTOM LAYER ARE CONTROLLED IMPEDANCE. REQUIREMENT FOR THE 11 AND 20 MIL EDGE-COUPLED COATED MICRO STRIP ON THE TOP AND BOTTOM LAYER IS 100 OHMS +/- 10%. CONTROLLED IMPEDANCE APPLIES TO THE FOLLOWING NET PAIRS: PD1P/PD1N, PD2P/PD2N, PD3P/PD3N, PD4P/PD4N, D1P/D1N, D2P/D2N, D3P/D3N, D4P/D4N