

1. THIS DRAWING SPECIFIES THE REQUIREMENTS FOR A PRINTED WIRING BOARD IN ACCORDANCE WITH SPECIFICATION IPC-A-400 CLASS 2 (LATEST REVISION).

2. THE PWB MUST BE LEAD FREE ASSEMBLY PROCESS COMPATIBLE AND MUST BE ABLE TO HANDLE A MAXIMUM OF 5 CYCLES AT 200 DEGREES CELSIUS FOR 10 SECONDS.

3. BASE MATERIAL - LAMINATE AND PREPREG SHALL MEET IPC-4100-20, 83 +/- 80

Tg - MUST BE GREATER THAN OR EQUAL TO 150 DEGREES CELSIUS.  
T4 - MUST BE GREATER THAN OR EQUAL TO 300 DEGREES CELSIUS.

4. COPPER FOIL WEIGHT - SEE STACKUP DETAIL "A"

5. CHARACTERISTIC IMPEDANCE - SEE DETAIL "B"

6. MICROHOLE CONDUCTIVE RESISTANCE TO BE .0027 +/- .0007

7. PLATING FINISH - BOTH SIDES ENIG (ELECTROLESS NICKEL IMMERSION GOLD):  
30000- 220 MICRON (1.8 MICROMETER) OF GOLD OVER  
0.500-0.100 MICRON (100-1000 MICROMETER) OF NICKEL.

ALL THROUGH HOLE VIAS MAY BE PLATED SHEET.

8. SOLDERMASK - BLUE COLOR, BOTH SIDES.

MODIFICATION OF SOLDERMASK IS NOT ALLOWED WITHOUT WRITTEN PERMISSION FROM FREESCALE.

9. SILKSCREEN - WHITE INK, BOTH SIDES. NO SILK ON PADS.

10. ELECTRICAL TEST - 100% IPEX004.

11. PRINTED WIRING BOARD IS TO BE INDIVIDUALLY BAGGED.

12. DRCS MUST BE RUN ON THE BOARD BEFORE BUILDING BOARD, UNLESS PRIOR APPROVAL IS GIVEN IN WRITING BY FREESCALE.

13. ADD TEARDROPS TO ALL SIGNAL LAYERS.

14. SOLDER SAMPLES TO BE PROVIDED.

BASIC GRID INCREMENT AT 1:1 IS .0001.

SUPPLIER MARKINGS - ON SOLDER SIDE ONLY, WHERE SHOWN, MUST BE UL RECOGNIZED AND MUST HAVE AN ID THAT CONFORMS TO UL94V-0

15. THE PWB WILL BE MARKED AS LEAD FREE BY USE OF AN INK STAMP

16. THE PWB WILL BE MARKED AS LEAD FREE PROCESS COMPATIBLE BY USE OF AN INK STAMP

17. ALL PLATED AND NON-PLATED THROUGH HOLES ARE TO BE DRILLED AT PRIMARY DRILL STEP. ALL HOLE LOCATION TOLERANCES ARE TO BE +/- .002 IN REFERENCE TO THE PRIMARY DATUM.

18. FINISHED PWB MUST BE PARALLELED FOR ASSEMBLY ACCORDING TO CONTRACT MANUFACTURING REQUIREMENT, UNLESS OTHERWISE SPECIFIED. USE 2.400 INCH NAILS AND 0.125 INCH TOOLING HOLES.

19. FAB HOUSE MAY ADD RAMPED-RELIEF ON THE SOLDERMASK IF NEEDED TO AVOID SOLDER BRIDGING.

20. THERE ARE EXACTLY 10 INTENTIONAL SHORTS ON THE PWB. EACH ONE IS BRIDGING AND SHORTING A RESISTOR LOCATION.



PRIMARY DATUM GRID ORIGIN

DETAIL B  
IMPEDANCE REQUIREMENTS

	LAYER 1	COMPONENT SIDE	3/8 oz.
	LAYER 2	GROUND	1/2 oz.
	LAYER 3	SIGNAL 1	1/2 oz.
	LAYER 4	GROUND/POWER 1	1/2 oz.
	LAYER 5	GROUND/POWER 2	1/2 oz.
	LAYER 6	SIGNAL 2	1/2 oz.
	LAYER 7	GND	1/2 oz.
	LAYER 8	SOLDER SIDE	3/8 oz.

DETAIL A  
1.0000 0.0000