

1. THIS DRAWING SPECIFIES THE REQUIREMENTS FOR A PRINTED WIRING BOARD IN ACCORDANCE WITH SPECIFICATION IPC-A-600 CLASS 2 (LATEST REVISION).
2. THE PWB MUST BE LEAD FREE ASSEMBLY PROCESS COMPATIBLE AND MUST BE ABLE TO HANDLE A MINIMUM OF 5 CYCLES AT 240 DEGREES CELSIUS FOR 10 SECONDS.
3. BASE MATERIAL - LAMINATE AND PREPREG SHALL MEET IPC-4101B-26, 83 or 98
  - Tg - MUST BE GREATER THAN OR EQUAL TO 150 DEGREES CELSIUS.
  - Td - MUST BE GREATER THAN OR EQUAL TO 330 DEGREES CELSIUS.
4. COPPER FOIL WEIGHT - SEE STACKUP DETAIL 'A'
5. CHARACTERISTIC IMPEDANCE - SINGLE ENDED - 50 OHMS +/- 10% FOR ALL SIGNAL LAYERS .006" (0.1534 MM) THICK.
6. MINIMUM CONDUCTIVE WIDTH/SPACING TO BE .006"/.0059"
7. PLATING FINISH - A. BOTH SIDES ENIG (ELECTROLESS NICKEL IMMERSION GOLD):
  - .05080-.232 MICRON [2-8 MICRON] OF GOLD OVER
  - 2.540-4.350 MICRON [100-250 MICRON] OF NICKEL.

9. SOLDERMASK - WHITE COLOR ,BOTH SIDES.  
MODIFICATION OF SOLDERMASK IS NOT ALLOWED WITHOUT WRITTEN PERMISSION FROM FREESCALE.

10. SILKSCREEN - BLACK EPOXY INK, BOTH SIDES. NO SILK ON PADS.

11. ELECTRICAL TEST - 100% IPCD356.

12. PRINTED WIRING BOARD IS TO BE INDIVIDUALLY BAGGED.

13. DRC'S MUST BE RUN ON THE GERBER BEFORE BUILDING BOARDS, UNLESS PRIOR APPROVAL IS GIVEN IN WRITING BY FREESCALE.

14. ADD TEARDROPS TO ALL SIGNAL LAYERS.

15. SOLDER SAMPLES TO BE PROVIDED.

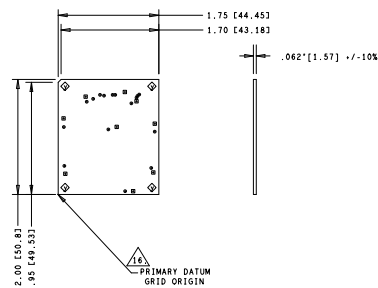
△ 16. BASIC GRID INCREMENT AT 1:1 IS .0001.

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

18. THE PWB WILL BE MARKED AS LEAD FREE BY USE OF AN INK STAMP (Pb) ON SECONDARY SIDE SILKSCREENS  
19. THE PWB WILL BE MARKED AS LEAD FREE PROCESS COMPATIBLE BY USE OF AN INK STAMP (260°C)

20. ALL PLATED AND NON-PLATED THROUGH HOLES ARE TO BE DRILLED AT PRIMARY DRILL STEP. ALL HOLE LOCATION TOLERANCES ARE TO BE  $\pm .002$  IN REFERENCE TO THE PRIMARY DATUM

21. FINISHED PCB MUST BE PANELIZED FOR ASSEMBLY ACCORDING TO CONTRACT MANUFACTURING REQUIREMENT.  
ADDITION OF .25" RAILS AND .125" NON-PLATED TOOLING HOLES ARE AT THE DISCRETION OF  
CONTRACT MANUFACTURER AND FAB HOUSE.



| DRILL CHART: TOP TO BOTTOM |       |            |            |   |
|----------------------------|-------|------------|------------|---|
| ALL UNITS ARE IN MILS      |       |            |            |   |
| FIGURE                     | SIZE  | TOLERANCE  | PLATED     | Q |
| 8                          | 12.0  | +0.0/-12.0 | PLATED     |   |
| 9                          | 24.0  | +0.0/-24.0 | PLATED     |   |
| 10                         | 32.0  | +3.0/-3.0  | NON-PLATED |   |
| 11                         | 128.0 | +3.0/-3.0  | NON-PLATED |   |

|   |                        |       |
|---|------------------------|-------|
|  | LAYER 1 COMPONENT SIDE | 1 oz. |
|  | LAYER 2 SOLDER SIDE    | 1 oz. |

DETAIL A  
LAYER STACKUP  
SCALE: NONE

[illegible]