

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 260 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 - NOT APPLIC

6. MINIMUM CONDUCTIVE WIDTH/SPACING TO BE .005"/.005"

7. PLATING FINISH - BOTH SIDES ENIG (ELECTROLESS NICKEL IMMERSION GOLD):
.05080-.232 MICRON (2-8 MICROINCH) OF GOLD OVER
2.540-6.350 MICRON (100-250 MICROINCH) OF NICKEL.

8. ALL THROUGH HOLE VIAS MAY BE PLATED SHUT.

9. SOLDERMASK - ORANGE COLOR (TAIYO OR EQUIVALENT), BOTH SIDES.
MODIFICATION OF SOLDERMASK IS NOT ALLOWED WITHOUT WRITTEN PERMISSION FROM FREESCALE.

10. SILKSCREEN - WHITE 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. TEARDROPS MAYBE ADDED AT THE FAB HOUSE TO ALL SIGNAL LAYERS.

15. TWO SOLDER SAMPLES TO BE PROVIDED.

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

17. SUPPLIER MARKINGS - ON SOLDER 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 (P6)

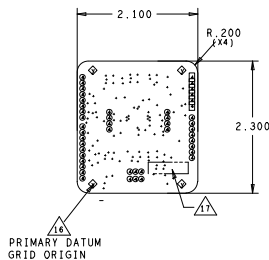
19. THE PWB WILL BE MARKED AS LEAD FREE PROCESS COMPATIBLE BY USE OF AN INK STAMP (260°C)

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 MANUFACTURERS REQUIREMENTS. THE ADDITION OF RAILS AND .125"NON-PLATED TOOLING HOLES ARE AT THE DISCRETION OF CONTRACT MANUFACTURER. PANELIZATION MUST BE APPROVED BY CONTRACT MANUFACTURER.

22. INTENTIONAL SHORTS AT:

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SH1 VDD & VDD_8491
SH2 SDA_SH & SDA
SH3 SCL_SH & SCL
SH4 GND & GND
SH5 N06441 & I2C_SCL1
SH6 N06477 & I2C_SDA1
SH7 N14772 & XOUT
SH8 N06007 & YOUT
SH9 N13995 & ZOUT
SH10 N14916 & EN
SH11 N05971 & I2C_SDA0
SH12 N05981 & I2C_SCL0
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DRILL CHART: TOP to BOTTOM				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
•	8.0	+0.0/-8.0	PLATED	112
◉	40.0	+3.0/-3.0	PLATED	40
◉	41.0	+3.0/-3.0	PLATED	6
◉	125.0	+2.0/-2.0	NON-PLATED	4

—— 0.062" THICK +/- 10%



FINISHED Cu WEIGHT
1 oz.
1 oz.

DETAIL A
LAYER STACKUP
SCALE: NONE

PART NO. <div style="text-align: center; font-size: 1.2em;">170-28977</div>		<div style="text-align: center; font-size: 1.5em; font-weight: bold;">FREESCALE</div>	
<input type="checkbox"/> PUB (PUBLIC INFORMATION) <input checked="" type="checkbox"/> FCF (FREESCALE INTERNAL USE ONLY) <input type="checkbox"/> FCP (FREESCALE CONTRACT PROPRIETARY)		THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO FREESCALE AND SHALL NOT BE USED FOR ENGINEERING DESIGN OR REPRODUCTION OF MANUFACTURE IN WHOLE OR IN PART WITHOUT THE CONSENT OF FREESCALE.	
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES AND DECIMALS ANGLES SURF. <input checked="" type="checkbox"/> X .0005 <input checked="" type="checkbox"/> X .001 UNLESS SHOWN OTHERWISE SURF. ALL SHARP EDGES AND CORNERS ROUNDED DIMENSIONS SHOWN DO NOT TO SCALE. DIM. UNLESS OTHERWISE SPECIFIED IN THESE UNITS		6501 WILLIAM CANNON DRIVE WEST AUSTIN, TEXAS 78735 USA <div style="text-align: center; font-size: 1.2em; font-weight: bold;">PRINTED WIRING BOARD FRDMSTBC-A8491</div>	
APPROVALS DRAWN SAHIL C CHECKED SAHIL C DESIGN ENGINEER SAHIL C		DATE 9/11/15 9/11/15 9/11/15	
SIZE D LAY-28977		CAD FILE NAME INC. NO. FAB-28977	
SCALE 1/1		DO NOT SCALE DRAWING	
SHEET 1		OF 1	