

NOTES (UNLESS OTHERWISE SPECIFIED):  
1. THIS DRAWING SPECIFIES THE RESULT

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 APPLICABLE

8. MINIMUM CONDUCTIVE WIDTH/SPACING TO BE .008 / .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 ~~Pb~~

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.

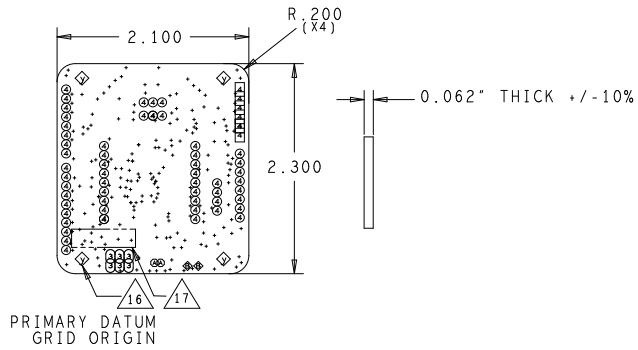
21. FINISHED PCB MUST BE PANELIZED FOR ASSEMBLY ACCORDING TO CONTRACT MANUFACTURERS REQUIREMENTS. THE ADDITION OF RAILS AND .125"NON-PLATED TOOLING HOLES ARE AT THE DISCRETION OF CONTRACT MANUFACTURER. PANELIZATION MUST BE APPROVED BY CONTRACT MANUFACTURER.

22. INTENTIONAL SHORTS AT:


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SH1  P3V3_V & P3V3
SH2  P1V8_V & P1V8
SH3  N20682958 & GND
SH4  N20685164 & INT_I
SH5  N20850437 & PDB_B
SH6  N20845228 & S_5SB GPI03
SH7  N20845230 & S_5SPI MOSI
SH8  N20845232 & S_5SPI SDO
SH9  N20845234 & S_5SPI SCLK
SH10 N20845300 & TC2_SDA0
SH11 N20845302 & TC2_SCL0
SH12 N20845655 & TC2_SCL1
SH13 N20845661 & TC2_SDA1
SH14 N20845657 & RST_GPIO
SH15 N20845659 & BKGD
SH15 N20857390 & GPI013
SH16 N20857393 & INT_O

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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	200
⊙	39.0	+3.0/-3.0	PLATED	6
⊗	40.0	+3.0/-3.0	PLATED	54
⊠	41.0	+3.0/-3.0	PLATED	6
⊙	28.0	+2.0/-2.0	NON-PLATED	2
◆	35.0	+2.0/-2.0	NON-PLATED	2
◆	125.0	+2.0/-2.0	NON-PLATED	4

		FINISHED Cu WEIGHT
	LAYER 1 L1_PS	1 oz.
	LAYER 2 L2_SS	1 oz.

DETAIL A  
LAYER STACKUP  
SCALE: NONE

PART NO. 170-28959		FREESCALE			
THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO FREESCALE AND SHALL NOT BE USED FOR ENGINEERING DESIGN PROCUREMENT OR MANUFACTURE IN WHOLE OR IN PART WITHOUT THE CONSENT OF FREESCALE.		6501 WILLIAM CANNON DRIVE WEST AUSTIN, TEXAS 78735 USA			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: DECIMALS ANGLES .XX .01 .0-30' .XXX .005		TITLE: PRINTED WIRING BOARD FRDM-STBC-SA9500			
APPROVALS DATE DRAWN KRITHI S 10-09-15 CHECKED DESIGN ENGINEER KRITHI S 10-09-15		SIZE CAD FILE NAME D LAY-28959		DWG. NO. REV FAB-28959 A1	
RMS ALL MACHINED SURFACES BREAK ALL SHARP EDGES AND CORNERS. REMOVE BURRS. UNDERLINED DIM. NOT TO SCALE. THIRD ANGLE ORTHOGRAPHIC PROJECTION IS USED.		SCALE 1/1 DO NOT SCALE DRAWING		SHEET 1 OF 1	