

- NOTES (UNLESS OTHERWISE SPECIFIED):
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, B3 or B9  
T<sub>g</sub> - MUST BE GREATER THAN OR EQUAL TO 150 DEGREES CELSIUS.  
T<sub>d</sub> - MUST BE GREATER THAN OR EQUAL TO 330 DEGREES CELSIUS.
  4. COPPER FOIL WEIGHT - SEE STACKUP DETAIL 'A'
  5. CHARACTERISTIC IMPEDANCE - NOT APPLICABLE
  6. 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.

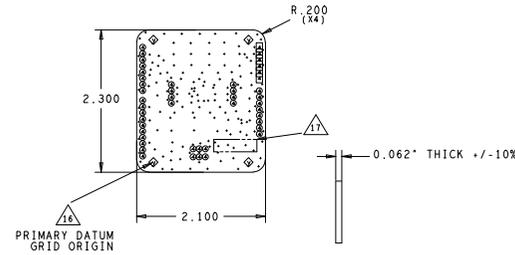
- △ ALL THROUGH HOLE VIAS MAY BE PLATED SHUT.
9. SOLDERMASK - ORANGE COLOR (TAYLO OR EQUIVALENT), BOTH SIDES.  
MODIFICATION OF SOLDERMASK IS NOT ALLOWED WITHOUT WRITTEN PERMISSION FROM FREESCALE.
  10. SILKSCREEN - WHITE EPOXY INK, BOTH SIDES. NO SILK ON PADS.
  11. ELECTRICAL TEST - 100% IPCD356.
  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.

- △ 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

18. THE PWB WILL BE MARKED AS LEAD FREE BY USE OF AN INK STAMP (96)
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 +/- .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:  
SH1 VDD\_1 & VDD/VDD\_3115  
SH2 VDDIO\_1 & VDDIO/VDDIO\_3115  
SH3 GND\_1 & GND/GND\_1  
SH4 J3-3 & INT2\_3115  
SH5 J4-6 & I2C\_SCL1  
SH6 J3-6 & INT1\_3115  
SH7 J4-5 & I2C\_SDA1  
SH8 J5-9 & I2C\_SDA0  
SH9 J5-10 & I2C\_SCL0

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
A		ORIGINAL RELEASE	11-09-15	F.L.

DRILL CHART: TOP to BOTTOM				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
•	8.0	+0.0/-8.0	PLATED	161
⊙	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



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

DETAIL A  
LAYER STACKUP

PART NO. 170-28981		FREESCALE	
<input type="checkbox"/> PUBLIC (PUBLIC INFORMATION) <input checked="" type="checkbox"/> FIDU (FREESCALE INTERNAL USE ONLY) <input type="checkbox"/> FCP (FREESCALE CONFIDENTIAL PROPRIETARY)		6501 WILLIAM CANNON DRIVE WEST AUSTIN, TEXAS 78735 USA PRINTED WIRING BOARD FRDMSTBC-P3115	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: DECIMALS ANGLES .XX .XX .005 .0-90° <input checked="" type="checkbox"/> FINISH MACHINED SURFACES BREAK ALL SHARP EDGES AND CORNERS. REMOVE BURRS. DIMENSIONS SHOWN BUT TO SCALE. THIRD ANGLE ORTHOGRAPHIC PROJECTION IS USED.		APPROVALS DATE DRAWN FRANK L 11-09-15 CHECKED KRITHI S 11-09-15 DESIGN ENGINEER FRANK L 11-09-15	TITLE SIZE CAD FILE NAME DWG. NO. REV D LAY-28981 FAB-28981 A SCALE 1/1 DO NOT SCALE DRAWING SHEET 1 OF 1