REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	ORIGINAL RELEASE	10-24-15	Y.X.

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, 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

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)

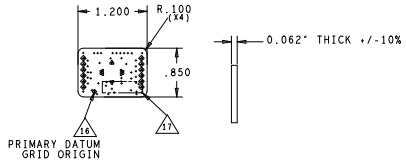
19. THE PWB WILL BE MARKED AS LEAD FREE PROCESS COMPATIBLE BY USE OF AN INK STAMP (260°C)

20. ALL PLATED AND NON-PLATED THROUGH HOLES ARE TO BE DRILLED AT PRIMARY DRILL STEP. ALL HOLE LOCATION TOLERANCES ARE TO BE +/-.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.

15. INTENTIONAL SHORTS AT

GND & GND_C
SPI_CS & SPI_CS_C
VDDIO_8471 & VDDIO_8471_C
SPI_MOSI_C & SPI_MOSI
SPI_MISO & SPI_MISO_C
NC2_C & NC2
SPI_CLK & SPI_CLK_C
NC1_C & NC1
INT2_SPI_ACCEL & INT2_SPI_ACCEL_C
INT1_SPI_ACCEL & INT1_SPI_ACCEL_C
RST_8471 & RST_8471_C
VDD_8471 & VDD_8471_C



DRILL CHART: TOP to BOTTOM				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
•	8.0	+0.0/-8.0	PLATED	46
•	12.0	+2.0/-2.0	PLATED	16
◆	45.0	+3.0/-3.0	PLATED	12
◆	25.0	+2.0/-2.0	NON-PLATED	1

8

		FINISHED Cu WEIGHT
LAYER 1	COMPONENT SIDE	1 oz.
LAYER 2	SOLDER SIDE	1 oz.

DETAIL A
LAYER STACKUP
SCALE: NONE

__ PUBI (PUBLIC INFORMATION)
X FIUO (FREESCALE INTERNAL USE ONLY)
__ FCP (FREESCALE CONFIDENTIAL PROPRIETARY)

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
DECIMALS ANGLES
.XX ±.01 ±5-30'
.XXX ±.005
√ RMS ALL MACHINED SURFACES
BREAK ALL SHARP EDGES AND CORNERS.
REMOVE BURRS.
UNDIMLINED DIM. NOT TO SCALE.
THIRD ANGLE ORTHOGRAPHIC PROJECTION IS USED.

PART NO. 170-28975

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.

APPROVALS		DATE
DRAWN	ASWIN S	10-24-15
CHECKED	HALEN XU	10-24-15
DESIGN ENGINEER	ASWIN S	10-24-15

FREESCALE
6501 WILLIAM CANNON DRIVE WEST AUSTIN, TEXAS 78735 USA

TITLE: PRINTED WIRING BOARD
BRKTSTBC-A8471

SIZE	CAD FILE NAME	DWG. NO.	REV
D	LAY-28975	FAB-28975	A

SCALE 1/1 DO NOT SCALE DRAWING SHEET 1 OF 1