NOTES (UNLESS OTHERWISE SPECIFIED)

1. THIS DRAWING SPECIFIES THE REQUIREMENTS FOR A PRINTED WIRING BOARD IN ACCORDANCE WITH SPECIFICATION IPC-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.

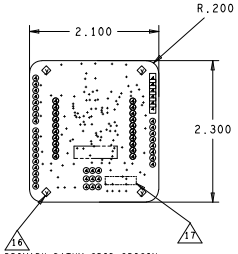
21 INTENTIONAL SHORTS AT

Refdes	Net1	Net2
SH1	INT1_8962_A	INT1_8962
SH2	INT1_3110_A	INT1_3110
SH3	RST_21002_A	RST_21002
SH4	VDD_8962	VDD
SH5	I2C_SCL	SCL1_SCLK
SH6	INT1_3115_A	INT1_3115
SH7	INT1_21002_A	INT1_21002
SH8	SPI_CS_A_A	SPI_CS_A
SH9	I2C_SDA	SDA1_MOSI
SH10	INT2_8962_A	INT2_8962
SH11	SA0_MISO_A	SA0_MISO
SH12	VDD_21002	VDD
SH13	SPI_CS_G_A	SPI_CS_G
SH14	VDDIO_21002	VDD
SH15	INT2_21002_A	INT_PG2
SH16	VDD_3110	VDD
SH17	VDDIO_3110	VDD
SH18	VDD_3115	VDD
SH19	VDDIO_3115	VDD
SH20	GND	GND
SH21	I2C_SCL1	N05692
SH22	INT1_8962_A	N00516
SH23	I2C_SDA1	N05729
SH24	INT2_21002_A	N16659746
SH25	INT1_3110_A	N04953
SH26	SPI_CS_G_A	N16663074
SH27	INT2_8962_A	N16659634
SH28	INT1_3115_A	N16659515
SH29	INT1_21002_A	N00598
SH30	SPI_CS_A_A	N16653091
SH31	I2C_SDA	N16652859
SH32	SA0_MISO_A	N16652885
SH33	I2C_SCL	N16652889
SH34	I2C_SDA0	N00622
SH35	I2C_SCL0	N00628

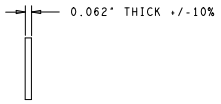
REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	ORIGINAL RELEASE	12-07-16	Y.X.
	B	CHANGED U2'S PACKAGE	09-27-17	Y.X.

DRILL CHART: TOP to BOTTOM				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
•	8.0	+0.0/-8.0	PLATED	130
⊕	40.0	+3.0/-3.0	PLATED	55
⊡	41.0	+3.0/-3.0	PLATED	6
◇	125.0	+2.0/-2.0	NON-PLATED	4

8



PRIMARY DATUM GRID ORIGIN



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

DETAIL A
LAYER STACKUP
SCALE: NONE

___ COMPANY PUBLIC
X COMPANY INTERNAL
___ COMPANY CONFIDENTIAL

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
DECIMALS .XX ±.01 .XXX ±.005
ANGLES ±0-30'
✓ RMS ALL MACHINED SURFACES
BREAK ALL SHARP EDGES AND CORNERS.
REMOVE BURRS.
UNDERLINED DIM. NOT TO SCALE.
THIRD ANGLE ORTHOGRAPHIC PROJECTION IS USED.

PART NO. 170-29427

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO NXP AND SHALL NOT BE USED FOR ENGINEERING DESIGN, PROCUREMENT OR MANUFACTURE IN WHOLE OR IN PART WITHOUT THE CONSENT OF NXP.

APPROVALS	DATE
DRAWN ASWIN S	09-27-17
CHECKED	09-27-17
DESIGN ENGINEER ASWIN S	09-27-17

NXP SEMICONDUCTORS

6501 WILLIAM CANNON DRIVE WEST AUSTIN, TEXAS 78735 USA

TITLE: PRINTED WIRING BOARD
FRDM-STBC-AGMP03

SIZE	CAD FILE NAME	DWG. NO.	REV
D	LAY-29427	FAB-29427	B

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