

87654321

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 - FINISH AT 1/2 OZ. TO 1 OZ. COPPER.

5. CHARACTERISTIC IMPEDANCE - NONE

6. MINIMUM CONDUCTIVE WIDTH/SPACING TO BE .00X"/.00X"

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

10. SILKSCREEN - WHITE EPOXY INK, BOTH SIDES. NO SILKSCREEN ON ANY EXPOSED COPPER FEATURE.

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 NXP.

14. TEARDROPS MAYBE ADDED AT THE FAB HOUSE TO ALL SIGNAL LAYERS.

15. 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 +/- .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.

DRILL CHART: TOP to BOTTOM

ALL UNITS ARE IN MILS

FIGURE	SIZE	TOLERANCE	PLATED	QTY
1	6.0	+0.0/-0.0	PLATED	21
2	8.0	+0.0/-0.0	PLATED	242
3	10.0	+0.0/-0.0	PLATED	412
4	26.0	+2.0/-2.0	PLATED	10
5	40.0	+2.0/-2.0	PLATED	2
6	59.0x33.0	+2.0/-2.0	PLATED	2

2.20

.99

DETAIL B

IMPEDANCE REQUIREMENTS

IMPEDANCE TOLERANCE IS 10%

LAYERS	SINGLE ENDED		DIFFERENTIAL					
	TRACE WIDTH (MILS)	IMPEDANCE (OHMS)	TRACE WIDTH (MILS)	TRACE SPACING "AIR GAP" (MILS)	IMPEDANCE (OHMS)	TRACE WIDTH (MILS)	TRACE SPACING "AIR GAP" (MILS)	IMPEDANCE (OHMS)
L1_PS	xxxx	xx	8.00	5.50	90	6.00	5.50	100
L2_GND_1								
L3_INT_1								
L4_INT_2			8.00	5.50	90			
L5_GND_2								
L6_SS			8.00	5.50	90	6.00	5.50	100

0.062" +/- 10%

A. - TARGET= 7.8 MILS

B. - TARGET= 5 MILS

C. - TARGET= 28 MILS

D. - TARGET= 5 MILS

E. - TARGET= 7.8 MILS

LAYER 1 COMPONENT SIDE 1/2 oz.

LAYER 2 GROUND PLANE 1 oz.

LAYER 3 INTERNAL 1 1 oz.

LAYER 4 INTERNAL 2 1 oz.

LAYER 5 GROUND PLANE2 1 oz.

LAYER 6 SOLDER SIDE 1/2 oz.

DETAIL A

LAYER STACKUP

SCALE: NONE

FINISHED Cu WEIGHT

---	PUBI (PUBLIC INFORMATION)
---	IUD (COMPANY INTERNAL USE ONLY)
X.	CP (COMPANY CONFIDENTIAL PROPRIETARY)

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

APPROVALS

A QUIROZ

CHECKED

A QUIROZ

DESIGN ENGINEER

J RAMIREZ

DATE

11-28-17

11-28-17

11-28-17

PART NO.

170-30019

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

TITLE

PRINTED WIRING BOARD

OM40007

SIZE

CAD FILE NAME

DWG. NO.

REV

SCALE

DO NOT SCALE DRAWING

SHEET

OF

87654321