

NOTES (UNLESS OTHERWISE SPECIFIED):
1. THIS DRAWING SPECIFIES THE REQUIREMENTS FOR A PRINTED WIRING BOARD IN ACCORDANCE WITH SPECIFICATION IPC-6012 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-4101D-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 - NA

6. MINIMUM CONDUCTIVE WIDTH/SPACING TO BE .006"/.006"

7. PLATING FINISH: A. BOTH SIDES ENIG; TO MEET THE REQUIREMENTS OF IPC-4552 (LATEST REVISION).

8. ALL THROUGH HOLE VIAS MAY BE PLATED SHUT.

9. SOLDERMASK - TO MEET THE REQUIREMENTS OF IPC-SM-840E (OR LATEST REVISION).
ORANGE COLOR, BOTH SIDES. MODIFICATION OF SOLDERMASK IS NOT ALLOWED WITHOUT WRITTEN PERMISSION FROM NXP.
TYPE: LDI - OR EQUIVALENT,

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

11. ELECTRICAL TEST - 100% IPCD356. PCB FABRICATOR TO PERFORM A NET COMPARE AGAINST THE IPCD356 NETLIST PROVIDED BY NXP.

12. PRINTED WIRING BOARD IS TO BE INDIVIDUALLY BAGGED.

13. DFM CHECK MUST BE RUN ON BOARD DATA BEFORE BUILDING BOARDS, UNLESS PRIOR APPROVAL IS GIVEN IN WRITING BY NXP.

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

15. TWO SOLDER SAMPLES TO BE PROVIDED.

16. SUPPLIER MARKINGS - ON SECONDARY SIDE ONLY, WHERE SHOWN.
- MUST BE UL RECOGNIZED AND MUST HAVE AN ID THAT CONFORMS TO UL94V-0

17. THE PWB WILL BE MARKED AS LEAD FREE BY USE OF AN INK STAMP ☒

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

19. 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
UNLESS OTHERWISE SPECIFIED.

20. 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.

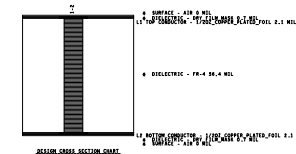
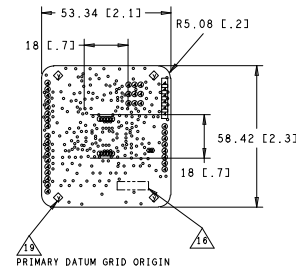
21. THE MANUFACTURE HAS THE OPTION TO ADD COPPER THIEVING ON OUTER AND INNER LAYERS. KEEP A MINIMUM DISTANCE OF .100" FROM ANY BOARD FEATURES.

INTENTIONAL 21 SHORTS AT:

Location	RefDes	Net 1	Net 2
(-815.00 665.00)	SH22	N16701284	INT1
(-790.00 -785.00)	SH35	N006028	12C_SDA0
(-790.00 -745.00)	SH34	N006622	12C_SDA0
(-790.00 -745.00)	SH34	N1652889	INT1
(-790.00 -190.00)	SH30	N1653001	SPI_CS1
(-790.00 -200.00)	SH31	N1652859	SDA1_MOSI
(-790.00 -300.00)	SH32	N1652885	SAO_MISO
(-790.00 365.00)	SH37	N16720544	INTF_SCL
(-790.00 365.00)	SH37	N16720544	INTF_MDO
(-50.00 -185.00)	SH1	N16711845	INT1
(-50.00 170.00)	SH5	N16711877	INT1_SCLCLK
100.00 -185.00)	SH10	N16711839	INT2
(0.00 -185.00)	SH20	N16711843	GND
(0.00 -185.00)	SH20	N16711843	VDD
(50.00 170.00)	SH4	N16711873	SDA1_MOSI
100.00 170.00)	SH6	N16711871	SPI_CS1
(0.00 170.00)	SH11	N16711875	SAO_MISO
(785.00 365.00)	SH27	INT2	N0659634
(785.00 365.00)	SH27	WAKEUP	N0659634
(785.00 800.00)	SH23	12C_SDA1	N05729
(785.00 800.00)	SH21	12C_SCL1	N056492

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	ORIGINAL RELEASE	04-07-21	R. Y.
	B	UPDATE THE SENSOR PART LAYOUT	07-02-21	R. Y.
	C	UPDATE PER THE LATEST SCH	11-10-21	R. Y.

DRILL CHART: TOP to BOTTOM				
ALL UNITS ARE IN MILS				
FIGURE	FINISHED SIZE	TOLERANCE DRILL	PLATED	QTY
○	10.0	+0.0/-10.0	PLATED	257
⊗	26.0	+2.0/-2.0	PLATED	2
⊗	28.0	+2.0/-2.0	PLATED	10
⊗	40.0	+3.0/-3.0	PLATED	35
⊗	41.0	+3.0/-3.0	PLATED	6
⊗	125.0	+2.0/-2.0	NON-PLATED	4



PART NO. 170-48254		NXP SEMICONDUCTORS	
_____ COMPANY PUBLIC _____ COMPANY INTERNAL _____ COMPANY CONFIDENTIAL		THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO NXP AND IS NOT TO BE USED FOR ENGINEERING DESIGN OR REPRODUCTION OF MANUFACTURE IN WHOLE OR IN PART WITHOUT THE CONSENT OF NXP.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: DECIMALS .010 FRACTIONS 1/32 Holes .005 ✓ ALL Holes MACHINED SURFACES BREAK ALL SHARP EDGES AND CORNERS. REMOVE BURRS. DIMENSIONS LONGER THAN TO SCALE. THIRD ANGLE ISOMETRIC PROJECTION IS USED.		6501 WILLIAM CANNON DRIVE WEST AUSTIN, TEXAS 78735 USA PRINTED WIRING BOARD FRDM-STBA-A8964	
APPROVALS		DATE	
DRAWN JUSTIN XIANG		11-10-21	
CHECKED JAMES 10-27		11-10-21	
ROY YANG		11-10-21	
DESIGN RICK YU		11-10-21	
SIZE		Dwg. No.	
D		LAY-48254	
SCALE		FAB-48254	
1/1		DO NOT SCALE DRAWING.	
SHEET		1 OF 1	