NOTES (UNLESS OTHERWISE SPECIFIED)

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	ORIGINAL RELEASE	02-15-22	D.A.

DETAIL A
LAYER STACKUP
SCALE: NONE

.062" THK +/- 10%

FINISHED Cu WEIGHT

LAYER 1	COMPONENT SIDE	1/2oz+plating
LAYER 2	GROUND PLANE	1 oz.
LAYER 3	POWER PLANE	1 oz.
LAYER 4	SOLDER SIDE	1/2oz+plating

DETAIL B
IMPEDANCE REQUIREMENTS
IMPEDANCE TOLERANCE IS 10%

Layers	Single Ended		Differential			Differential	
	Trace Width (mils)	Impedance (Ohms)	Trace Width (mils)	Trace Spacing (mils)	Impedance (Ohms)	Trace Width (mils)	Trace Spacing (mils)	Impedance (Ohms)
L1	5.06	50	4.7	4.68	100	4.79	8.68	90
L4	5.90	50				4.79	8.68	90

DRILL CHART: TOP to BOTTOM ALL UNITS ARE IN MILS				
FIGURE	FINISHED SIZE	TOLERANCE_DRILL	PLATED	QTY
+	8.0	+0.0/-8.0	PLATED	142
⊕	28.0	+4.0/-0.0	PLATED	8
⊕	40.0	+3.0/-3.0	PLATED	3
⊕	40.0	+2.0/-2.0	NON-PLATED	2
▲	63.0	+1.0/-2.0	NON-PLATED	3
▲	63.0	+4.0/-0.0	NON-PLATED	2
●	79.0	+2.0/-2.0	NON-PLATED	4

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 - SEE DETAIL "B"

6. MINIMUM CONDUCTIVE WIDTH/SPACING TO BE .0042"/.0036"

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

⚠4 ALL THROUGH HOLE VIAS MAY BE PLATED SHUT.

9. SOLDERMASK - TO MEET THE REQUIREMENTS OF IPC-SM-840E (OR LATEST REVISION).
   GREEN COLOR, BOTH SIDES. MODIFICATION OF SOLDERMASK IS NOT ALLOWED WITHOUT WRITTEN PERMISSION FROM NXP.
   TYPE: LPI OR EQUIVALENT.
   A. LOCATION - +/-.002" OF PLATED PADS.
   B. DIAMETER OR SIZE - +/-.002 OF ORIGINAL DATA

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 (PB)

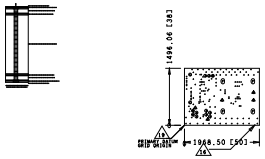
18. THE PWB WILL BE MARKED AS LEAD FREE PROCESS COMPATIBLE BY USE OF AN INK STAMP (260°C)

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

⚠22 THIS BOARD USES VIA-IN-PAD; SEE FAB_VIAFILL.ART
   A. ALL VIAS USING X.1 DRILL SIZES ARE TO BE FILLED WITH NON-CONDUCTIVE VIA FILL. LACKENBERG-PETERS PP2780 OR EQUIVALENT AND MADE PLANAR TO THE PADS.
   B. OVERPLATE THE FILLED VIA AND APPLY FINISH METAL TREATMENT.
   C. DIMPLE OR PROTRUSION ON VIA-IN-PADS MUST BE NO GREATER THAN .001".



PART NO. 170-xxxxx

COMPANY PUBLIC
COMPANY INTERNAL
COMPANY CONFIDENTIAL

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO NXP. IT MAY NOT BE COPIED OR USED FOR CONSTRUCTION PURPOSES, PROCUREMENT OR MANUFACTURE IN WHOLE OR IN PART WITHOUT THE CONSENT OF NXP.

APPROVALS	DATE
DRAWN: ALBERT LI	02-15-22
CHECKED: AL MORROW	02-15-22
DESIGN ENGINEER: AL MORROW	02-15-22

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE: FRACTIONS ±1/32" .XX ±.02 .XXX ±.005 ANGLES ±2°
⚠ PRO ALL RIGHTS RESERVED BREAK ALL SHARP EDGES AND REMOVE BURRS. UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DO NOT SCALE DRAWING. SURFACE SPECIFICATION PROJECTION IS USED.

NXP SEMICONDUCTORS
4501 WILLIAM CANNON DRIVE WEST AUSTIN, TEXAS 78735 USA

TITLE: PRINTED WIRING BOARD
MEMORY DAUGHTER CARD

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

SCALE: DO NOT SCALE DRAWING SHEET 1 OF 2