

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	B	ORIGINAL RELEASE	02 - 19 - 19	D . A .
	B1	SILKSCREEN UPDATE	05 - 07 - 19	D . A .

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
 - T_g - MUST BE GREATER THAN OR EQUAL TO 150 DEGREES CELSIUS.
 - T_d - MUST BE GREATER THAN OR EQUAL TO 330 DEGREES CELSIUS.
4. COPPER FOIL WEIGHT - SEE STACKUP DETAIL 'A'
5. CHARACTERISTIC IMPEDANCE - N/A.
6. MINIMUM CONDUCTIVE WIDTH/SPACING TO BE .008"/.008"
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).
GREEN COLOR, BOTH SIDES. MODIFICATION OF SOLDERMASK IS NOT ALLOWED WITHOUT WRITTEN PERMISSION FROM NXP.
TYPE: LPI OR EQUIVALENT.
A. LOCATION = $\pm .002"$ OF PLATED PADS.
B. DIAMETER OR SIZE = $\pm .002$ OF ORIGINAL DATA
10. SILKSCREEN - WHITE EPOXY OR ACRYLIC INK, BOTH SIDES. NO SILKSCREEN ON ANY EXPOSED COPPER FEATURE.

11. ELECTRICAL TEST - 100% IPCD356.

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 $\pm .002$ 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.

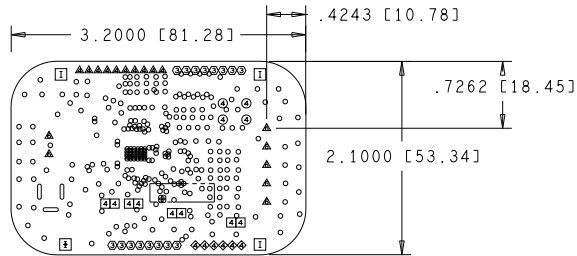
21. THE MANUFACTURE HAS THE OPTION TO ADD COPPER THIEVING ON OUTER AND INNER LAYERS, KEEP A MINIMUM DISTANCE OF .100" FROM ANY BOARD FEATURES.

22. THIS BOARD USES VIA-IN-PAD: SEE FAB_VIAFILL.ART

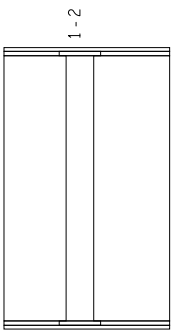
- A. ALL VIAS USING X.1 DRILL SIZES ARE TO BE FILLED WITH NON-CONDUCTIVE VIA FILL. LACKWERKE-PETERS PP2795 OR EQUIVALENT AND MADE PLANAR TO THE PADS.
- B. OVERPLATE THE FILLED VIA AND APPLY FINISH METAL TREATMENT.
- C. DIMPLE OR PROTRUSION ON VIA-IN-PADS MUST BE NO GREATER THAN .001".

23. INTENTIONAL 4 SHORTS AT:

Location	RefDes	Net 1	Net 2
(2047.00 358.00)	SH2	OUT2	& N18288587
(2047.00 568.00)	SH4	OUT4	& N18313700
(2047.00 968.00)	SH1	OUT1	& N18288585
(2047.00 768.00)	SH3	OUT3	& N18313687



PRIMARY DATUM
GRID ORIGIN



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* SURFACE - AIR 0 MIL
* DIELECTRIC - DRY FILM MASK 0.8 MIL
L1 TOP CONDUCTOR - 20Z_COPPER 2.8 MIL

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* DIELECTRIC - FR-4 56.5 MIL

L2 BOTTOM CONDUCTOR - 2OZ COPPER 2.8 MIL
* DIELECTRIC - DRY FILM MASK 0.8 MIL
* SURFACE - AIR 0 MIL

DESIGN CROSS SECTION CHART
TOTAL THICKNESS 63.7 MIL

DRILL CHART: TOP to BOTTOM						
ALL UNITS ARE IN MILS						
FIGURE	FINISHED SIZE	ROTATION	TOLERANCE_DRILL	TOLERANCE_TRAVEL	PLATED	QTY
	10.0	-	+0.0/-10.0	-	PLATED	271
	10.1	-	+0.0/-10.1	-	PLATED	24
	36.0	-	+3.0/-3.0	-	PLATED	16
	40.0	-	+3.0/-3.0	-	PLATED	4
	43.0	-	+2.0/-2.0	-	PLATED	10
	44.0	-	+2.0/-2.0	-	PLATED	8
	45.0	-	+3.0/-3.0	-	PLATED	6
	63.0	-	+3.0/-3.0	-	PLATED	7
	125.0	-	+3.0/-3.0	-	NON-PLATED	4
	165.0x40.0	90.000	+3.0/-3.0	+3.0/-3.0	PLATED	2
	165.0x40.0	0.000	+3.0/-3.0	+3.0/-3.0	PLATED	1

PART NO. 170-45718		NXP SEMICONDUCTORS	
COMPANY PUBLIC <input checked="" type="checkbox"/> N100 (NXP INTERNAL USE ONLY) NCP (NXP CONFIDENTIAL PROPRIETARY)		6501 WILLIAM CANNON DRIVE WEST AUSTIN, TEXAS 78735 USA	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: DECIMALS ANGLES .XX .01 .0-30" .XXX .005 <input checked="" type="checkbox"/> RMS ALL MACHINED SURFACES BREAK ALL SHARP EDGES AND CORNERS. REMOVE BURRS. UNDERLINE DIM. NOT TO SCALE. THIRD ANGLE ORTHOGRAPHIC PROJECTION IS USED.		APPROVALS DRAWN ANDREI ILIE CHECKED DAFNE ARIAS DESIGN ENGINEER MARIUS TEODORESCU	DATE 05-07-19 05-07-19 05-07-19
		TITLE: PRINTED WIRING BOARD FRDM-XS2410EVb	
		SIZE D LAY-45718	CAD FILE NAME DWG. NO. FAB-45718
		REV B1	
		SCALE 1 / 1 DO NOT SCALE DRAWING	SHEET 1 OF 2

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		SIZE	CAD FILE NAME	DWG. NO.	REV
		D	LAY-45718	FAB-45718	B1
		SCALE	DO NOT SCALE DRAWING		SHEET 2 OF 2