

Title		
Size	Number	Revision
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Date:	4/18/2017	Sheet of
File:	C:\Users\...\Lakota_PCB.SchDoc	Drawn By:

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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

FABRICATION NOTES

1. BASE MATERIAL
A. 1 MM +/- 10% THICK GLASS EPOXY, FR-4, TG 170
NATURAL COLOR NEMA GRADE
B. COPPER WEIGHT AS PER PROVIDED STACK-UP

2. FINISH: ENIG. NO EXPOSED COPPER PERMITTED

3. ALL TRACE WIDTHS ARE STATED AS FINISHED TRACE WIDTHS

4. DRILL SIZES ARE STATED AS TOOL SIZES

5. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE STATED

6. SOLDERMASK
A. PHOTO-IMAGED LIQUID POLYMER IN ACCORDANCE WITH IPC-SM840D, TYPE B1, CLASS 1, OVER BARE COPPER AS INDICATED WITHIN THE ELECTRONIC DATA
B. SOLDERMASK COLOR IS TO BE GREEN
C. FINISH IS TO BE MATTE

7. SILKSCREEN
A. SILKSCREEN AS INDICATED WITHIN THE ELECTRONIC DATA USING NON CONDUCTIVE WHITE EPOXY INK
B. SILKSCREEN TO BE REMOVED FROM VIAS, PADS, AND HOLES PROVIDING A MINIMUM CLEARANCE OF 0.005 INCHES
C. VENDORS UL LOGO OR DESIGNATION SHALL BE RUBBER STAMPED OR SILKSCREENED AT THE VENDOR'S DISCRETION ON EITHER SIDE OF THE PCB

8. OTHER APPLICABLE STANDARDS
A. FABRICATE PER IPC-2221A CLASS 2 LEVEL B
IPC-2222 TYPE 3. INSPECT PER IPC-A-600G CLASS 2
B. FABRICATE IN ACCORDANCE WITH IPC-6012B CLASS 2, PER IPC-6011 USING SUPPLIED DATA FILES
C. THIS BOARD SHALL CONFORM TO UL94V-0

9. OTHER APPLICABLE NOTES
A. REFER TO STACK-UP AND IMPEDANCE INFORMATION
B. TEARDROPPING IS ACCEPTABLE ON INNER SIGNAL LAYERS
C. COPPER THEIVING MAY NOT BE ADDED TO PCB DESIGN, ONLY TO PANEL
D. BOW OR TWIST NOT TO EXCEED 0.178 MM/25.4 MM
E. THE PCB SHALL BE 100% ELECTRICALLY TESTED FOR OPENS AND SHORTS. THE RESULTS OF THIS TEST SHALL BE DOCUMENTED AND DELIVERED WITH EACH LOT

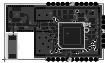
10. ROHS COMPLIANCE IS REQUIRED
A. ALL MATERIALS USED WITHIN THE FABRICATION ARE TO BE ROHS COMPLIANT AND MUST SUPPORT A PB-FREE ASSEMBLY PROCESS (E.G. ACCEPTABLE TG/ID, ETC)

11. PANEL DESIGN: POBS SHALL BE ROUTED WITH MOUSE BITES. NO V-SCORE ON ANY SIDE. INCLUDE TOOLING HOLES AND FIDUCIALS. BOARDS TO REMAIN ON THE PANEL FOR ASSEMBLY.

12. TARGET IMPEDANCE LAYER 1: 0.01409 INCH TRACK WIDTH = 50 OHM +/- 10%

13. ANY ARTWORK MODIFICATIONS MUST BE REVIEWED AND APPROVED BY MMB NETWORKS PRIOR TO MANUFACTURING

DRILL CHART: TOP to BOTTOM				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
•	8.0	+3.0/-8.0	PLATED	151
•	12.0	+3.0/-12.0	PLATED	9
•	20.0	+3.0/-3.0	PLATED	29



•	SURFACE -- AR 0 MIL
1:	TOP CONDUCTOR -- COPPER 1.4 MIL
•	DIELECTRIC -- FR-4 8 MIL
2:	LAYER2 PLANE -- COPPER 1.4 MIL
•	DIELECTRIC -- FR-4 17.77 MIL
3:	LAYER3 CONDUCTOR -- COPPER 1.4 MIL
•	DIELECTRIC -- FR-4 8 MIL
4:	BOTTOM CONDUCTOR -- COPPER 1.4 MIL
•	SURFACE -- AR 0 MIL

DESIGN CROSS SECTION CHART
TOTAL THICKNESS 39.37 MIL

UNLESS OTHERWISE SPECIFIED	SIGNATURES	DATE	MMB Networks		
	DRAWN				
	CHECKED				
	ENGRG				
	ISSUED				
			SIZE	FSCM NO	DWG NO
			SCALE		SHEET

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