

REVISIONS			
REV	DESCRIPTION	APPROVED	DATE
A	RELEASE		

- NOTES: UNLESS OTHERWISE SPECIFIED
1. DIMENSIONS ARE IN INCHES (EXCEPT WHERE NOTED).
(USE CHECKED ITEMS FOR MATERIAL.)
- MATERIAL:
2. BOARD MATERIAL:
(X) FR-4 (EQUIVALENT) OR EQUIVALENT
() ISO/A-FR408HR
() NEMCO-4000-13 OR EQUIVALENT
() 370HR (Rohs COMPLIANT) OR EQUIVALENT
() ROGERS 4350B/FR408HR
() ROGERS 4003C/FR408HR
() OTHER -----
3. THE PCB SHALL BE FABRICATED TO IPC-6012, TYPE X, CLASS 2.
WORKMANSHIP SHALL CONFORM TO IPC-A-600, CLASS 2, CURRENT REVISIONS.
4. BOARD MATERIAL & CONSTRUCTION SHALL MEET THE REQUIREMENTS OF UL796
WITH FLAMMABILITY RATING OF 94V-0.
5. OVERALL BOARD THICKNESS REFER TO LAMINATION DIAGRAM. TOLERANCE APPLIES AFTER ALL LAMINATION AND PLATING PROCESSES. IT IS TO BE MEASURED FROM TOP PCB METAL TO BOTTOM PCB METAL UNLESS OTHERWISE SPECIFIED.
6. BOW & TWIST NOT TO EXCEED 0.0075 IN. (0.75%) PER LINEAR INCH.
BOW & TWIST SHOULD BE MEASURED PER IPC-TM-650, METHOD 2.4.22.

TOOLING: (USE CHECKED ITEMS FOR TOOLING)

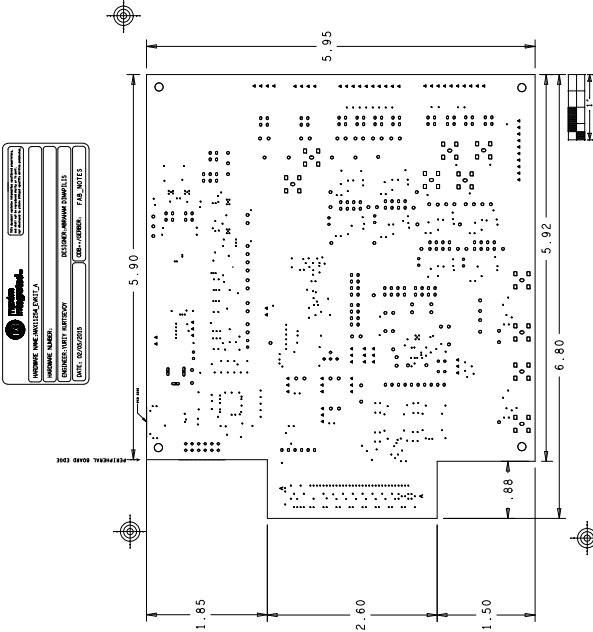
7. PHOTO ETCH CIRCUITRY PER ENCLOSED GERBER RS274X OR 08+*, FORMAT FILE.
DRILL LOCATION AND SIZE CONTROLLED BY EXCELLEN CNC DRILL FILE.
8. IF STATED IN THE LAMINATION DIAGRAM, THE DIELECTRIC THICKNESS OF ANY CONTROLLED IMPEDANCE LAYER IS FOR REFERENCE ONLY. FINAL ACCEPTANCE SHALL BE DETERMINED BY THESE LAYERS HAVING A CHARACTERISTIC IMPEDANCE OF +/- 10% OHMS AS STATED IN THE LAMINATION DIAGRAM. THE IMPEDANCE OF THE LAYERS SHALL BE MEASURED AFTER THE LAMINATION AND OVERALL BOARD THICKNESS IS MAINTAINED. ANY ADJUSTMENT MADE TO TRACE WIDTH OR SPACING MUST HAVE PRIOR WRITTEN APPROVAL FROM MAXIM.
9. ALL TRACES FILLETED OPTION TO ENHANCE RELIABILITY AT PAD JUNCTIONS WHERE SPACING PERMITS. UNLESS OTHERWISE SPECIFIED:
(X) FILLETED
() NOT FILLETED
10. LAYER TO LAYER REGISTRATIONS SHALL BE WITHIN .003 INCHES.
LEGEND TO LEGEND +/- 0.007 INCHES
- FINISH: (USE CHECKED ITEMS FOR PLATING)
11. PLATING SPECIFICATION:
(X) STARTING AND FINISH COPPER WEIGHT FOR OUTER LAYERS TO BE (1.0Z).
FOR OUTER LAYERS WHERE SPACING PREVENTS THE USE OF (1.0Z) AS A STARTING WEIGHT THE STARTING WEIGHT CAN BE (0.5 OZ) AS LONG AS THE FINISH COPPER WEIGHT IS (1.0Z) UNLESS OTHERWISE SPECIFIED
() STARTING COPPER WEIGHT FOR OUTER LAYERS TO BE (1.0Z). THE FINISH COPPER WEIGHT IS (2.0Z).
FOR OUTER LAYERS WHERE SPACING PREVENTS THE USE OF (1.0Z) AS A STARTING WEIGHT, THE FINISH COPPER WEIGHT CAN BE (0.5 OZ) AS LONG AS THE FINISH COPPER WEIGHT IS (2.0Z). UNLESS OTHERWISE SPECIFIED
() STARTING COPPER WEIGHT FOR OUTER LAYERS TO BE (2.0Z). THE FINISH COPPER WEIGHT IS (2.0Z) MINIMUM.
FOR OUTER LAYERS WHERE SPACING PREVENTS THE USE OF (1.0Z) AS A STARTING WEIGHT, THE STARTING WEIGHT CAN BE (+2.0Z) AS LONG AS THE FINISH COPPER WEIGHT IS (2.0Z). UNLESS OTHERWISE SPECIFIED
() OTHER -----

12. CHECK ALL THAT APPLY
() FINISH CONDUCTOR SURFACES: IMMERSION GOLD, 3-8 MICRO INCHES OVER 100 MICRO INCHES MINIMUM OF ELECTROLESS NICKEL.
(X) LEAD FREE AND ROHS COMPLIANT OR EQUIVALENT LEAD FREE PLATING
() ELECTRODEPOSITED HARD GOLD PLATE, TYPE 1 (99.7% MIN GOLD), GRADE C (KNOPF HARDNESS 130-200), CLASS 1 (50-100 MICRO INCHES THICK) IN ACCORDANCE WITH MIL-G-45204C.
GENERAL SURFACING REQUIREMENTS: MAXIMUM ALLOWED CURRENT DENSITY SECTION 4.0, GENERAL SURFACING REQUIREMENTS: MAXIMUM ALLOWED CURRENT DENSITY SECTION 4.0, IN ACCORDANCE WITH ANSI/IPC-A-600, SECTION 4.0, CLASS 3 (200-600 MICROINCHES THICK).
() FINISH CONDUCTOR SURFACES: IMMERSION GOLD, 2-5 MICRO INCHES OVER 118-236 MICRO INCHES MINIMUM OF ELECTROLESS NICKEL.
() FINGERS TO BE GOLD PLATED.
() OTHER -----


13. DRILL SIZES ARE FINISHED HOLE SIZES. ALL HOLES SHALL BE LOCATED WITHIN .005 DTP. MINIMUM BARREL PLATING OF .001 IN. PLATED HOLES SHALL NOT BE ROUGH OR IRREGULAR SO AS TO HINDER PROPER SOLDER WICKING.
14. CHECK ALL THAT APPLY
(X) GREEN SOLDERMASK OVER BARE COPPER/BARE GOLD (BOTH SIDES) WITH LIQUID PHOTO IMAGEABLE INK (LPI) PER ARTWORK.
() GREEN TATTO PSR-4000
() GREEN TATTO PSR-4000
15. CHECK ALL THAT APPLY
(X) APPLY SILKSCREEN TO BOTH SIDES USING A NON-CONDUCTIVE, WHITE EPOXY BASED INK PER ARTWORK.
() APPLY SILKSCREEN TO TOP SIDE USING A NON-CONDUCTIVE, WHITE EPOXY BASED INK PER ARTWORK.
() OTHER -----
16. VENDOR LOGO & DATE CODE REQUIRED IN INK ON BOTTOM SIDE ONLY. DATE CODE FORMAT MUST BE YYYY ONLY
- TESTING:
17. FINAL ELECTRICAL TEST TO BE PERFORMED USING PROVIDED IPC-D-358A NETLIST OR 08+* FORMAT FILE. (REQUIRED UNLESS OTHERWISE SPECIFIED IN QUOTE)
THE PCB SHALL HAVE A VERIFICATION STAMP.
18. A TIME DOMAIN REFLECTOMETER REPORT FOR EACH IMPEDANCE CONTROLLED LAYER AND A CERTIFICATE OF COMPLIANCE SHALL BE PROVIDED BY VENDOR AT TIME OF SHIPMENT.
- MISCELLANEOUS:
19. FOR BLIND AND BURIED VIA INFORMATION REFER TO DRILL CHART.
() NON-CONDUCTIVE EPOXY- FILL AND CAP ALL 0.0XXX INCH DRILLED VIAS.
() SILVER FILL AND CAP ALL 0.0XXX INCH DRILLED VIAS.
21. ALL MICRO-VIAS LESS THAN 0.006 INCHES FHS WILL BE PLATED SHUT WITH COPPER, UNLESS OTHERWISE SPECIFIED.
22. FOR VIA SIZES XX.XX INCH USE NON CONDUCTIVE VIA FILL AND CAP
23. FINISHED SURFACE CONTACTS AND FILLED VIAS TO BE FREE OF ANY PITS, SCRATCHES PROBE MARKS OR OTHER DEFORMITIES THAT COULD EFFECT THE APPEARANCE AND PERFORMANCE OF THE CONTACT SURFACE. CONTACTS ARE TO BE AS FLAT AS POSSIBLE. NOT TO EXCEED +/- 0.001" OF FLATNESS.
24. (X) THEVINGS: () THEVINGS: (X) SUPPLIER MAY ADD THEVING TO COMPENSATE FOR LOW COPPER DENSITY AREAS ON THIS DESIGN. (X) SUPPLIER MAY NOT ADD THEVING TO COMPENSATE FOR LOW COPPER DENSITY AREAS ON THIS DESIGN.

LAMINATION DIAGRAM			
LAYER NUMBER	LAYER NAME	FINISHED COPY THICKNESS (IN.)	DIELECTRIC MATERIAL
1	TOP	1	TBD
2	INTERNAL 2	1	TBD
3	INTERNAL 3	1	TBD
4	INTERNAL 4	1	TBD
5	INTERNAL 5	1	TBD
6	BOTTOM	1	TBD

THE FINISHED PCB THICKNESS TO BE: 0.0625" +/- 0.010"



DRILL CHART: TOP 1x BOTTOM				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
+	8.0	+3.0/-6.0	PLATED	1
□	12.0	+3.0/-10.0	PLATED	489
○	18.0	+3.0/-16.0	PLATED	1
○	35.0	+3.0/-3.0	PLATED	16
○	39.37	+3.0/-3.0	PLATED	94
◇	41.34	+3.0/-3.0	PLATED	16
△	43.31	+3.0/-3.0	PLATED	69
○	45.28	+3.0/-3.0	PLATED	138
○	59.06	+3.0/-3.0	PLATED	10
□	62.99	+3.0/-3.0	PLATED	40
○	125.0	+3.0/-3.0	PLATED	4
A	50.0	+3.0/-3.0	NON-PLATED	2
◻	118.11x31.5	+3.0/-3.0	PLATED	1
⊞	118.11x31.5	+3.0/-3.0	PLATED	1
◻	137.8x31.5	+3.0/-3.0	PLATED	1

			
TOLERANCES UNLESS OTHERWISE SPECIFIED		THE INFORMATION CONTAINED IN THIS DOCUMENT IS PROPRIETARY TO MAXIM. THE INFORMATION IN THIS DOCUMENT IS NOT TO BE SHOWN, REPRODUCED, OR DISCLOSED TO ANYONE OUTSIDE OF MAXIM. WITHOUT PRIOR WRITTEN PERMISSION FROM MAXIM.	
FRACTIONS	DECIMALS	ANGLES	
1/2 --- 1/2	.XX --- .01	1/2 --- 1/2	
	.XX --- .005		
MATERIAL:		DRAWN BY: A.DIMAPILIS DATE: FEB 2015	
SEE NOTES		CHECKED BY:	DATE:
APPR. BY:		DATE:	
FINISH:			
SEE NOTES		APPR. BY:	DATE:
NOT TO SCALE		TEMPLATE REF:	5
SHEET 1 OF 1			

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FRACTIONS	DECIMALS	ANGLES	
+/-	.XX	+/- .01	+/-
	.XXX	+/- .005	
MATERIAL:		WITHOUT PRIOR WRITTEN PERMISSION FROM MAXIM.	
SEE NOTES		DRAWN BY: A.DIMAPILIS	
FINISH:		DATE: FEB 2015	
SEE NOTES		APPR. BY: E	
		NOT TO SCALE	
		TEMPLATE REV 1.5	