

REVISIONS			
REV	DESCRIPTION	APPROVED	DATE

NOTES:

UNLESS OTHERWISE SPECIFIED

1. DIMENSIONS ARE IN INCHES (EXCEPT WHERE NOTED).

MATERIAL: (USE CHECKED ITEMS FOR MATERIAL)

2. BOARD MATERIAL:

(X) FR4 (RHS COMPLIANT) OR EQUIVALENT

() ISOLA-FR408HR

() NEMCO-4000-13 OR EQUIVALENT

() 370HR (RHS COMPLIANT) OR EQUIVALENT

() ROGERS-4350B

() ROGERS-4003C

() 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 REFERS TO LAMINATION THICKNESS. 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)

(X) PHOTO ETCH CIRCUITRY PER ENCLOSED GEMBER R5274X OR ODB++ FORMAT FILE.

DRILL LOCATION AND SIZE CONTROLLED BY SELECTING 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 VENDOR CAN MAKE ADJUSTMENTS AS LONG AS THE STATED IMPEDANCE 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 OPTICALLY 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 +/- .0007 INCHES

FINISH: (USE CHECKED ITEMS FOR PLATING)

11. PLATING SPECIFICATION:

(X) STARTING COPPER WEIGHT FOR OUTER LAYERS CAN BE 0.5 OZ, THE FINISH COPPER WEIGHT IS 1.0 OZ.

FOR OUTER LAYERS WHERE SPACING PREVENTS THE USE OF 1.0 OZ AS A STARTING WEIGHT

THE STARTING WEIGHT CAN BE 0.5 OZ AS LONG AS THE FINISH COPPER WEIGHT IS 1.0 OZ

UNLESS OTHERWISE SPECIFIED

() STARTING COPPER WEIGHT FOR OUTER LAYERS CAN BE 1.0 OZ, THE FINISH COPPER WEIGHT IS 2.0 OZ.

FOR OUTER LAYERS WHERE SPACING PREVENTS THE USE OF 1.0 OZ AS A STARTING WEIGHT,

THE STARTING WEIGHT CAN BE 0.5 OZ AS LONG AS THE FINISH COPPER WEIGHT IS 2.0 OZ.

UNLESS OTHERWISE SPECIFIED

() STARTING COPPER WEIGHT FOR OUTER LAYERS TO BE 2.0 OZ, THE FINISH COPPER WEIGHT IS 0.2 MINIMUM

FOR OUTER LAYERS WHERE SPACING PREVENTS THE USE OF 0.2 OZ AS A STARTING WEIGHT,

THE STARTING WEIGHT CAN BE 0.5 OZ AS LONG AS THE FINISH COPPER WEIGHT IS 2.0 OZ.

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

() LEAD FREE AND RHS COMPLIANT OR EQUIVALENT LEAD FREE PLATING

() ELECTRODEPOSITED HARD GOLD PLATE, TYPE 1 (99.7% MIN GOLD), GRADE C.

ENDOCP HARDNESS: 130-200, CLASS 1 (50-100 MICRO INCHES THICK) IN ACCORDANCE WITH MIL-G-4520

GENERAL SURFACE REQUIREMENTS MUST MEET ANSI/IPC-A-600CURRENT REVISION 4.0, CLASS 3 (50-100 MICROINCHES THICK) OVER ELECTRODEPOSITED NICKEL PLATE

IN ACCORDANCE WITH ANSI/IPC-A-6000, 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.

() FININGS 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

() GREEN SOLDERMASK OVER BARE COPPER/BARE GOLD (BOTH SIDES) WITH LIQUID PHOTO IMAGEABLE INK (X) PER ARTWORK.

() GREEN TAYO PSH-4000

() OTHER _____

15. CHECK ALL THAT APPLY

(X) APPLY SOLDERMASK 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-MM-DD.

TESTING:

17. FINAL ELECTRICAL TEST TO BE PERFORMED USING PROVIDE PCP-356A NETLIST OR ODB++ FORMAT FILE.

(REQUIRED UNLESS THERE IS A VERIFICATION STAMP.

18. A TIME DOMAIN REFLECTOMETER REPORT FOR EACH IMPEDANCE CONTROLLED LAYER AND THE CERTIFICATE OF COMPLIANCE SHALL BE PROVIDED BY VENDOR AT TIME OF SHIPMENT.

MISCELLANEOUS:

19. FOR ALL DRILL INFORMATION REFER TO DRILL CHART.

() NON-CONDUCTIVE EPOXY FILL AND CAP ALL .00XXX INCH DRILLED VIAS.

() SILVER FILL AND CAP ALL .00XXX INCH DRILLED VIAS.

20. IF PRESENT, ALL MICRO VIAS LESS THAN .006 INCHES FHS WHEN USED AS VIA (IN PAD) OR STACKED TO BE PLATED SHUT WITH COPPER, UNLESS OTHERWISE SPECIFIED.

21. 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.

22. THIEVING:

() SUPPLIER MAY ADD TO BE COMPENSATE FOR LOW COPPER DENSITY AREAS ON THIS DESIGN.

(X) SUPPLIER MAY NOT ADD THIEVING TO COMPENSATE FOR LOW COPPER DENSITY AREAS ON THIS DESIGN.

23. PENMUT

() PENMUTS TO BE INSTALLED BY SUPPLIER

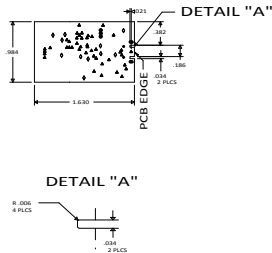
() PENMUTS NOT TO BE INSTALLED BY SUPPLIER


(X) NOT APPLICABLE

IMPEDANCE TABLE (RFQ ONLY)			
LAYER	50 OHM	100 OHM DIFF TRACE / SPACE	75 OHM DIFF TRACE / SPACE
TOP	0.0000	0.0000 / 0.0000	0.0000 / 0.0000
X	0.0000	0.0000 / 0.0000	0.0000 / 0.0000
X	0.0000	0.0000 / 0.0000	0.0000 / 0.0000
BOTTOM	0.0000	0.0000 / 0.0000	0.0000 / 0.0000

LAMINATION DIAGRAM				
LAYER NUMBER	LAYER NAME	FINISHED CU WEIGHT (OZ)	DIELECTRIC THICKNESS (in.)	DIELECTRIC MATERIAL
1	TOP	1		FOIL
2	BOTTOM	1		TBD
				FOIL

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

[illegible]

DRILL CHART: TOP to BOTTOM				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
	6.0	+3.0/-4.0	PLATED	43
	27.56	+3.0/-3.0	PLATED	3
	32.0	+3.0/-3.0	PLATED	11
	33.46x25.59	+3.0/-3.0	PLATED	2
	59.06x32.48	+3.0/-3.0	PLATED	2

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.		<div><div></div><div>maxim integrated™</div></div>	
FRACTIONS DECIMALS ANGLES +/- $\frac{\quad}{\quad}$.XX +/- .01 .XXX +/- .005				HARDWARE NAME: USBOSMB_EVKIT_A	
MATERIAL: SEE NOTES		DRAWN BY: RAFAEL ANTU DATE: 07/22/15		HARDWARE NUMBER: XX-XXXXXX-XXX	
FINISH: SEE NOTES		CHECKED BY: DATE: APPR. BY: DATE: APPR. BY: DATE:		REV A	
				NOT TO SCALE TEMPLATE REV-2.1 SHEET 1 OF 1	