

D

C

B

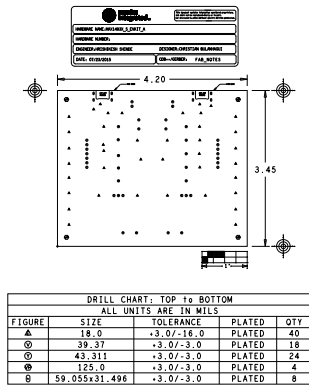
A

D

C

B

A



LAMINATION DIAGRAM				
Layer	Material	Thickness (in.)	Plating	Notes
1 TOP	1		FOIL	
2 L2_OSD	1	TBD	FR4/BARS//EGV	
3 L3_PBF	1	TBD	FR4/BARS//EGV	
4 BOTTOM	1		FOIL	

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

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.		maxim integrated™	
FRACTIONS	DECIMALS	ANGLES			HARDWARE NAME:	
1/16--1/8	.001--1.0	1/16--1/2			MAX1493X S EVKIT	
MATERIAL:			DRAWN BY: C.BULANAGUI DATE: 07/2015		HARDWARE NUMBER:	
SEE NOTES			CHECKED BY: DATE:		REV	
FINISH:			APPR. BY: DATE:		A	
SEE NOTES			APPR. BY: DATE:		NOT TO SCALE	
					SHEET 1 OF 1	

- NOTES:
- UNLESS OTHERWISE SPECIFIED
 - EXPRESSIONS ARE IN INCHES (EXCEPT WHERE NOTED).
 - MATERIAL: (USE CHECKED ITEMS FROM MATERIAL)
 - BOARD MATERIAL:
 - (X) FR4 (RHS COMPLIANT) OR EQUIVALENT
 - () ISOLA-FRABRIM
 - () NISLO-4000-13 OR EQUIVALENT
 - () STORM (RHS COMPLIANT) OR EQUIVALENT
 - () ROGERS 4350B/FRABRIM
 - () ROGERS 4003C/FRABRIM
 - () OTHER
 - THE PCB SHALL BE FABRICATED TO IPC-6012, TYPE 2, CLASS 2.
 - NORMANSHIP SHALL CONFORM TO IPC-A-600, CLASS 2, CURRENT REVISIONS.
 - BOARD MATERIAL & CONSTRUCTION SHALL MEET THE REQUIREMENTS OF ULTR WITH FLAMMABILITY RATING OF 94V-0.
 - OVERALL BOARD THICKNESS MUST TO LAMINATION DIAGRAM. TOLERANCE APPLIES AFTER ALL LAMINATION AND PLATING PROCESSES. IT IS TO BE MEASURED FROM TOP FOR METAL TO BOTTOM FOR METAL UNLESS OTHERWISE SPECIFIED.
 - ROW & TRIST NOT TO EXCEED 0.0075 IN. (0.193) PER LINEAR INCH. ROW & TRIST SHOULD BE MEASURED PER IPC-TM-650, METHOD 2.4.02.
 - TOOLING:
 - () USE CHECKED ITEMS FROM TOOLING
 - PHOTO ETCH CIRCUITRY PER ENCLOSED MEMBER RST04X OR 00M+ FORMAT FILE. DRILL LOCATION AND SIZE CONTROLLED BY EXCELLENCE DRILL FILE.
 - 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 MUST TO TRACE WIDTH OR SPACING MUST HAVE PRIOR WRITTEN APPROVAL FROM MAXIM.
 - ALL TRACES FILLETED OPTION TO INCREASE RELIABILITY AT PAD JUNCTIONS WHERE SPACING PERMITS, UNLESS OTHERWISE SPECIFIED:
 - () FILLETED
 - (X) NOT FILLETED
 - LAYER TO LAYER REGISTRATION SHALL BE WITHIN .005 INCHES. LEGEND TO LEGEND +/- 0.001 INCHES.
 - FINISH:
 - () USE CHECKED ITEMS FROM PLATING
 - PLATING SPECIFICATION:
 - (X) STARTING COPPER WEIGHT FOR OUTER LAYERS TO BE (1.02). THE FINISH COPPER WEIGHT IS (1.02). FOR OUTER LAYERS WHERE SPACING PREVENTS THE USE OF (1.02) AS A STARTING WEIGHT, THE STARTING WEIGHT CAN BE (0.5.02) AS LONG AS THE FINISH COPPER WEIGHT IS (1.02) UNLESS OTHERWISE SPECIFIED
 - () STARTING COPPER WEIGHT FOR OUTER LAYERS TO BE (1.02). THE FINISH COPPER WEIGHT IS (1.02). FOR OUTER LAYERS WHERE SPACING PREVENTS THE USE OF (1.02) AS A STARTING WEIGHT, THE STARTING WEIGHT CAN BE (0.5.02) AS LONG AS THE FINISH COPPER WEIGHT IS (1.02). UNLESS OTHERWISE SPECIFIED
 - () STARTING COPPER WEIGHT FOR OUTER LAYERS TO BE (2.02). THE FINISH COPPER WEIGHT IS (2.02) MINIMUM. FOR OUTER LAYERS WHERE SPACING PREVENTS THE USE OF (2.02) AS A STARTING WEIGHT, THE STARTING WEIGHT CAN BE (1.02) AS LONG AS THE FINISH COPPER WEIGHT IS (2.02). UNLESS OTHERWISE SPECIFIED
 - () OTHER
 - 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 RHS COMPLIANT OR EQUIVALENT LEAD FREE PLATING
 - () ELECTRODEPOSITED HARD GOLD PLATE, TYPE 1 (99.7% MIN GOLD), GRADE C (99.99% MINIMUM 100-100), CLASS 1 (20-100 MICRO INCHES THICK) IN ACCORDANCE WITH MIL-G-45204C. GENERAL SURFACING REQUIREMENTS MUST MEET ANSI/IPC-A-600(CURRENT REV) SECTION 4.6. CLASS 3 (20-100 MICROINCHES THICK) OVER ELECTRODEPOSITED NICKEL PLATE IN ACCORDANCE WITH ANSI/IPC-A-600, SECTION 4.6, CLASS 3 (20-100 MICROINCHES THICK).
 - () FINISH CONDUCTOR SURFACES, IMMERSION GOLD, 2-5 MICRO INCHES OVER 100-100 MICRO INCHES MINIMUM OF ELECTROLESS NICKEL.
 - () FINISHES TO BE GOLD PLATED.
 - () OTHER
 - DRILL SIZES ARE FINISHED HOLE SIZES. ALL HOLES SHALL BE LOCATED WITHIN .005 INCH. MINIMUM HOLE PLATING OF .001 IN. PLATED HOLES SHALL NOT BE ROUGH OR IRREGULAR SO AS TO IMPAIR PROPER SOLDER WICKING.
 - CHECK ALL THAT APPLY:
 - (X) GREEN SOLDERMASK OVER BARE COPPER/BARE GOLD (BOTH SIDES) WITH LIQUID PHOTO IMAGEABLE INK (LPI) PER ARTWORK.
 - () GREEN PAINT FOR-0000
 - () OTHER
 - CHECK ALL THAT APPLY:
 - (X) APPLY SLACKENIN USING A NON-CONDUCTIVE, WHITE EPOXY BASED INK PER ARTWORK.
 - () OTHER
 - VENDOR LOGO & DATE CODE REQUIRED IN INK ON BOTTOM SIDE ONLY. DATE CODE FORMAT MUST BE YYYY ONLY
 - TESTING:
 - () FINAL ELECTRICAL TEST TO BE PERFORMED USING PROVIDED IPC-D-385A NETLIST OR 00M+ FORMAT FILE. (REQUIRED UNLESS OTHERWISE SPECIFIED IN QUOTE)
 - THE PCB SHALL HAVE A VERIFICATION STAMP.
 - () 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:
 - () ALL BLIND/BORED VIAS WITH AN ASPECT RATIO >1:1 TO BE PLATED SHOT WITH COPPER WHEN USED AS VIA-IN-PAD OR AS A STAGGED VIA. BLIND/BORED VIAS WITH AN ASPECT RATIO >1:1 TO BE FILLED WITH NON-CONDUCTIVE EPOXY, UNLESS OTHERWISE SPECIFIED.
 - IF PRESENT, ALL BLIND/BORED VIAS WITH AN ASPECT RATIO >1:1 TO BE PLATED SHOT WITH COPPER WHEN USED AS VIA-IN-PAD OR AS A STAGGED VIA. BLIND/BORED VIAS WITH AN ASPECT RATIO >1:1 TO BE FILLED WITH NON-CONDUCTIVE EPOXY, UNLESS OTHERWISE SPECIFIED.
 - FOR ALL DRILL INFORMATION REFER TO DRILL CHART.
 - () NON-CONDUCTIVE EPOXY, FILL AND CAP ALL 0.005 INCH DRILLED VIAS.
 - () SILVER, FILL AND CAP ALL 0.005 INCH DRILLED VIAS.
 - FINISHED SURFACE CONTACTS AND FILLED VIAS TO BE FREE OF ANY DTS, DISCREPANCIES FROM MARKS OR OTHER DEFECTS THAT COULD AFFECT THE APPEARANCE AND PERFORMANCE OF THE CONTACT SURFACES. CONTACTS ARE TO BE AS FLAT AS POSSIBLE, NOT TO EXCEED +/- 0.001" OF FLATNESS.
 - THICKENING:
 - () SUPPLIER MAY ADD THICKENING TO COMPENSATE FOR LOW COPPER DENSITY AREAS ON THIS DESIGN.
 - () SUPPLIER MAY NOT ADD THICKENING TO COMPENSATE FOR LOW COPPER DENSITY AREAS ON THIS DESIGN.
 - FOUNT:
 - () PERMITS TO BE INSTALLED BY SUPPLIER.
 - () PERMITS NOT TO BE INSTALLED BY SUPPLIER.
 - (X) NOT APPLICABLE