

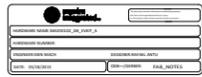
REVISIONS			
REV	DESCRIPTION	APPROVED	DATE

- UNLESS OTHERWISE SPECIFIED
- DIMENSIONS ARE IN INCHES EXCEPT WHERE NOTED.
MATERIAL: (USE CHECKED ITEMS FOR MATERIAL)
 - BOARD MATERIAL:
(X) FR4 (RHS COMPLIANT) OR EQUIVALENT
(1) ISOLA FR408R
(1) NELCO-4000-13 OR EQUIVALENT
(1) 370HR (RHS COMPLIANT) OR EQUIVALENT
(1) ROGERS 430B
(1) ROGERS 4003C
(1) OTHER _____
 - THE PCB SHALL BE FABRICATED TO IPC-6013, TYPE X, CLASS 2.
WORKMANSHIP SHALL CONFORM TO IPC-A-600, CLASS 2, CURRENT REVISIONS.
 - BOARD MATERIAL & CONSTRUCTION SHALL MEET THE REQUIREMENTS OF UL796 WITH FLAMMABILITY RATING OF 94V-0.
 - 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.
 - BOW & TWIST NOT TO EXCEED 0.0075 IN. (0.75%) PER LINEAR INCH.
BOW & TWIST SHOULD BE MEASURED PER IPC-TM-650, METHOD 2-A-2.2.
- TOOLING: (USE CHECKED ITEMS FOR TOOLING)
- PHOTO ETCH CIRCUITRY PER ENCLOSED GERBER R3724X OR ODB++ FORMAT FILE.
DRILL LOCATION AND SIZE CONTROLLED BY EXCELLEN CMC 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% DIMS 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 TRACK WIDTH OR SPACING MUST HAVE PRIOR WRITTEN APPROVAL FROM MAXIM.
 - ALL TRACES FILED TO ENHANCE RELIABILITY AT PAD JUNCTIONS WHERE SPACING PERMITS. UNLESS OTHERWISE SPECIFIED:
(1) FILED
(X) NOT FILED
 - LAYER TO LAYER REGISTRATIONS SHALL BE WITHIN .003 INCHES.
LEGEND TO LEGEND +/- 0.007 INCHES
(USE CHECKED ITEMS FOR PLATING)
- FINISH: (USE CHECKED ITEMS FOR PLATING)
- PLATING SPECIFICATION:
(X) STARTING COPPER WEIGHT FOR OUTER LAYERS CAN BE (0.5 OZ), THE FINISH COPPER WEIGHT IS (1 OZ).
FOR OUTER LAYERS WHERE SPACING PREVENTS THE USE OF (1 OZ) AS A STARTING WEIGHT THE STARTING WEIGHT CAN BE (0.5 OZ) AS LONG AS THE FINISH COPPER WEIGHT IS (1 OZ) UNLESS OTHERWISE SPECIFIED
(1) STARTING COPPER WEIGHT FOR OUTER LAYERS CAN BE (1 OZ), THE FINISH COPPER WEIGHT IS (1 OZ).
FOR OUTER LAYERS WHERE SPACING PREVENTS THE USE OF (1 OZ) AS A STARTING WEIGHT, THE STARTING WEIGHT CAN BE (0.5 OZ) AS LONG AS THE FINISH COPPER WEIGHT IS (1 OZ). UNLESS OTHERWISE SPECIFIED
(1) STARTING COPPER WEIGHT FOR OUTER LAYERS TO BE (2 OZ), THE FINISH COPPER WEIGHT IS (2 OZ) MINIMUM.
FOR OUTER LAYERS WHERE SPACING PREVENTS THE USE OF (2 OZ) AS A STARTING WEIGHT, THE STARTING WEIGHT CAN BE (1 OZ) AS LONG AS THE FINISH COPPER WEIGHT IS (2 OZ). UNLESS OTHERWISE SPECIFIED
(1) OTHER _____
 - CHECK ALL THAT APPLY
(1) FINISH CONDUCTOR SURFACES: IMMERSION GOLD, 2-8 MICRO INCHES OVER
100 MICRO INCHES MINIMUM OF ELECTROLESS NICKEL
(1) LEAD FREE AND RHS COMPLIANT OR EQUIVALENT LEAD FREE PLATING
(1) ELECTROPOSITED HARD GOLD PLATE, TYPE I (99.7% MIN GOLD), GRADE C (HNO3 HARDNESS 130-200), CLASS 1 (50-100 MICRO INCHES THICK) IN ACCORDANCE WITH MIL-G-45204C. GENERAL SURFACING REQUIREMENTS MUST MEET ANSI/IPC-A-600 (CURRENT REV) SECTION 4.0, CLASS 1 (50-100 MICROINCHES THICK OVER ELECTROPOSITED NICKEL PLATE IN ACCORDANCE WITH ANSI/IPC-A-600, SECTION 4.0, CLASS 1 (200-500 MICROINCHES THICK).
(1) FINISH CONDUCTOR SURFACES: IMMERSION GOLD, 2-5 MICRO INCHES OVER
118-236 MICRO INCHES MINIMUM OF ELECTROLESS NICKEL
(1) FINGERS TO BE GOLD PLATED.
(1) OTHER _____
 - DRILL SIZES ARE FINISHED HOLE SIZES. ALL HOLES SHALL BE LOCATED WITHIN .805 DTP. MINIMUM BARREL PLATING OF .002 IN. PLATED HOLES SHALL NOT BE ROUGH OR IRREGULAR SO AS TO HINDER PROPER SOLDER WICKING.
 - CHECK ALL THAT APPLY
(1) GREEN SOLDERMASK OVER BARE COPPER/BARE GOLD (BOTH SIDES) WITH LIQUID PHOTO IMAGEABLE INK (LPI) PER ARTWORK.
(1) GREEN TAPES FOR 4000
(1) OTHER _____
 - CHECK ALL THAT APPLY
(X) APPLY SOLDERMASK USING A NON-CONDUCTIVE, WHITE EPOXY BASED INK PER ARTWORK.
(1) OTHER _____
 - 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-356A NETLIST OR ODB++ FORMAT FILE. (REQUIRED UNLESS OTHERWISE SPECIFIED IN QUOTE)
THE PER 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
- FOR ALL DRILL INFORMATION REFER TO DRILL CHART.
(1) NON CONDUCTIVE EPOXY, FILL AND CAP ALL 0.0008 INCH DRILLED VIAS.
(1) SILVER, FILL AND CAP ALL 0.0008 INCH DRILLED VIAS.
 - IF PRESENT, ALL MICRO VIAS LESS THAN 0.008 INCHES FHS WHEN USED AS VIP (VA IN PAD) OR STACKED TO BE PLATED SHUT WITH COPPER, UNLESS OTHERWISE SPECIFIED.
 - FINISHED SURFACE CONTACTS AND FILLED VIAS TO BE FREE OF ANY FFS, 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.
 - THROWING:
(1) SUPPLIER MAY ADD THROWING TO COMPENSATE FOR LOW COPPER DENSITY AREAS ON THIS DESIGN.
(X) SUPPLIER MAY NOT ADD THROWING TO COMPENSATE FOR LOW COPPER DENSITY AREAS ON THIS DESIGN.
 - PERMITS
(1) PERMITS TO BE INSTALLED BY SUPPLIER
(1) PERMITS NOT TO BE INSTALLED BY SUPPLIER
(X) NOT APPLICABLE

IMPEDANCE TABLE (RFG ONLY)			
LAYER	50 OHM	100 OHM DIFF	75 OHM DIFF
	THICK / SPACE	THICK / SPACE	THICK / 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	TBD	FOR
2	PWR	0.5	TBD	FR4(RHS)/EQV
3	GND	0.5	TBD	FR4(RHS)/EQV
4	BOTTOM	1	TBD	FOR

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



DRILL CHART: TOP TO BOTTOM					
ALL UNITS ARE IN MILS					
FIGURE	SIZE	TOLERANCE	PLATED	QTY	NOTES
▲	6.0	+3.0/-4.0	PLATED	38	
◊	32.0	+3.0/-3.0	PLATED	8	

TOLERANCES UNLESS OTHERWISE SPECIFIED			maxim integrated™ HARDWARE NAME: MAX30102_DB_EVKIT_A
FRACTIONS +/- //	DECIMALS XX +/- .01 XXX +/- .005		
MATERIAL: SEE NOTES	DRAWN BY: RAFAEL ANTU	DATE: 05/18/15	HARDWARE NUMBER: XX-XXXX-XXX
FINISH: SEE NOTES	CHECKED BY:	DATE:	APPR. BY:
	APPR. BY:	DATE:	DATE:
			NOT TO SCALE
			TEMPLATE REV:2.1
			SHEET 1 OF 1