

D

C

B

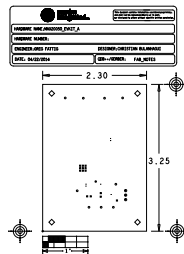
A

D

C

B

A



DRILL CHART: TOP & BOTTOM				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
+	15.0	+3.0/-3.0	PLATED	6
□	25.0	+3.0/-3.0	PLATED	14
@	29.53	+3.0/-3.0	PLATED	3
○	35.0	+3.0/-3.0	PLATED	1
○	39.37	+3.0/-3.0	PLATED	13
○	125.0	+3.0/-3.0	PLATED	4

LAMINATION DIAGRAM				
LAYER NUMBER	LAYER NAME	FINISHED CU WEIGHT (OZ)	DIELECTRIC THICKNESS (in.)	DIELECTRIC MATERIAL
1	TOP	2	180	FOIL
2	BOTTOM	2	8-STAGE	FOIL

THE FINISHED PCB THICKNESS TO BE: 0.0025" +/- 0.001"

REVISIONS			
REV	DESCRIPTION	APPROVED	DATE
A	RELEASE		

- NOTES:
- UNLESS OTHERWISE SPECIFIED:
 - DIMENSIONS ARE IN INCHES (EXCEPT WHERE NOTED).
 - MATERIAL: (USE CHECKED ITEMS FOR MATERIAL.)
 - BOARD MATERIAL:
 - FRA (RABS COMPLIANT) OR EQUIVALENT
 - TECLA-FRABOND
 - NELO-4000-13 OR EQUIVALENT
 - 3T09H (RABS COMPLIANT) OR EQUIVALENT
 - ROGERS 4300B/FRABOND
 - ROGERS 4003C/FRABOND
 - OTHER
 - THE PCB SHALL BE FABRICATED TO IPC-4101, TYPE 1, CLASS 2.
 - WORKMANSHIP SHALL CONFORM TO IPC-A-600, CLASS 2, CURRENT REVISIONS.
 - BOARD MATERIAL & CONSTRUCTION SHALL MEET THE REQUIREMENTS OF ULTM 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.
 - BOB & TWIST NOT TO EXCEED 0.005 IN. (0.125 IN. PER LINEAR INCH). BOB & TWIST SHOULD BE MEASURED PER IPC-TM-650, METHOD 2.4.22.
- (USE CHECKED ITEMS FOR TOOLING)
- PHOTO ETCH CIRCUITRY PER ENCLOSED GEMER ROSTAR OR OOR-1. FORMAT FILE. DRILL LOCATION AND SIZE CONTROLLED BY EXCELLEN ONE 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 WITHIN 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 TRACE WIDTH OR SPACING MUST HAVE PRIOR WRITTEN APPROVAL FROM MAXIM.
 - ALL TRACES FILLETED OPTION TO ENHANCE RELIABILITY AT PAD JUNCTIONS WHERE SPACING PERMITS. UNLESS OTHERWISE SPECIFIED:
 - FILLETED
 - NOT FILLETED
 - LAYER TO LAYER REGISTRATION SHALL BE WITHIN .003 INCHES. LEGEND TO LOGGING +/- 0.007 INCHES
- (USE CHECKED ITEMS FOR PLATING)
- PLATING SPECIFICATION:
 - STARTING AND FINISH COPPER WEIGHT FOR OUTER LAYERS TO BE (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
- STARTING COPPER WEIGHT FOR OUTER LAYERS TO BE (1 OZ). THE FINISH COPPER WEIGHT IS (2 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 (2 OZ). UNLESS OTHERWISE SPECIFIED
- 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 (1 OZ) AS A STARTING WEIGHT, THE STARTING WEIGHT CAN BE (1.2 OZ) AS LONG AS THE FINISH COPPER WEIGHT IS (2 OZ). 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.
 - LEAD FREE AND RABS COMPLIANT OR EQUIVALENT LEAD FREE PLATING
 - ELECTROPOSITED HARD GOLD PLATE, TYPE 1 (99.7% MIN GOLD), GRADE C (ENOF HARDNESS 180-200), CLASS 1 (50-100 MICRO INCHES THICK) IN ACCORDANCE WITH MIL-6-45204C. GENERAL SURFACING REQUIREMENTS MUST MEET ANSI/IPC-A-600 (CURRENT REV.) SECTION 4.9, CLASS 1 (50-100 MICROINCHES THICK) OVER ELECTROPOSITED NICKEL PLATE IN ACCORDANCE WITH ANSI/IPC-A-600, SECTION 4.9, CLASS 3 (200-400 MICROINCHES THICK).
 - FINISH CONDUCTOR SURFACES: IMMERSION GOLD, 2-5 MICRO INCHES OVER 110-200 MICRO INCHES MINIMUM OF ELECTROLESS NICKEL.
 - FINNERS TO BE GOLD PLATED.
 - OTHER
 - 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 ROUND OR IRREGULAR SO AS TO HINDER PROPER SOLDER WETTING.
 - CHECK ALL THAT APPLY
 - GREEN SOLDERMASK OVER BARE COPPER/BARE GOLD (BOTH SIDES) WITH LIQUID PHOTO IMAGEABLE INK (LPI) PER NETWORK.
 - GREEN TATTO PSR-4000
 - CHECK ALL THAT APPLY
 - APPLY SLACKENED TO BOTH SIDES USING A NON-CONDUCTIVE, WHITE EPOXY BASED INK PER NETWORK.
 - APPLY SLACKENED TO TOP SIDE USING A NON-CONDUCTIVE, WHITE EPOXY BASED INK PER NETWORK.
 - OTHER
 - VENDOR LOGO & DATE CODE REQUIRED IN INK ON BOTTOM SIDE ONLY. DATE CODE FORMAT MUST BE YYYY-MM-DD TESTING.
 - FINAL ELECTRICAL TEST TO BE PERFORMED USING PROVIDED IPC-D-350A NETLIST OR OOR-1. FORMAT FILE. (REQUIRED UNLESS OTHERWISE SPECIFIED IN QUOTE) THE PCB SHALL HAVE A VERIFICATION STAMP.
 - A TIME DRAWN REFLECTOMETRIC REPORT FOR EACH IMPEDANCE CONTROLLED LAYER AND A CERTIFICATE OF COMPLIANCE SHALL BE PROVIDED BY VENDOR AT TIME OF SHIPMENT
- MISCELLANEOUS:
- FOR BLIND AND BURIED VIA INFORMATION REFER TO DRILL CHART.
 - NON-CONDUCTIVE EPOXY, FILL AND CAP ALL 0.01X INCH DRILLED VIAS.
 - SILVER, FILL AND CAP ALL 0.00XX INCH DRILLED VIAS.
 - ALL MICRO-VIAS LESS THAN 0.004 INCHES PHS WILL BE PLATED SHUT WITH COPPER, UNLESS OTHERWISE SPECIFIED.
 - FOR VIA SIZES XX.XX INCH USE NON-CONDUCTIVE VIA FILL AND CAP
 - FINISHED SURFACE CONTACTS AND FILLED VIAS TO BE FREE OF ANY DITS, SCRATCHES, PROTRUSIONS 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.
 - THIEVING:
 - SUPPLIER MAY ADD THIEVING TO COMPENSATE FOR LOW COPPER DENSITY AREAS ON THIS DESIGN.
 - SUPPLIER MAY NOT ADD THIEVING TO COMPENSATE FOR LOW COPPER DENSITY AREAS ON THIS DESIGN.
 - PERMIT
 - PERMIT TO BE INSTALLED BY SUPPLIER
 - PERMIT NOT TO BE INSTALLED BY SUPPLIER

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				
XX +/-	.XX +/-	.01 +/-			TITLE: FABRICATION DWG. MAX20050 EVKIT	
MATERIAL:					SIZE: DRAWING NO. EPCB20050	
SEE NOTES			DRAWN BY: CPB		DATE: 4/14	
FINISH:			CHECKED BY:		DATE:	
SEE NOTES			APPR. BY:		DATE:	
			APPR. BY:		DATE:	
					SHEET 1 OF 1	