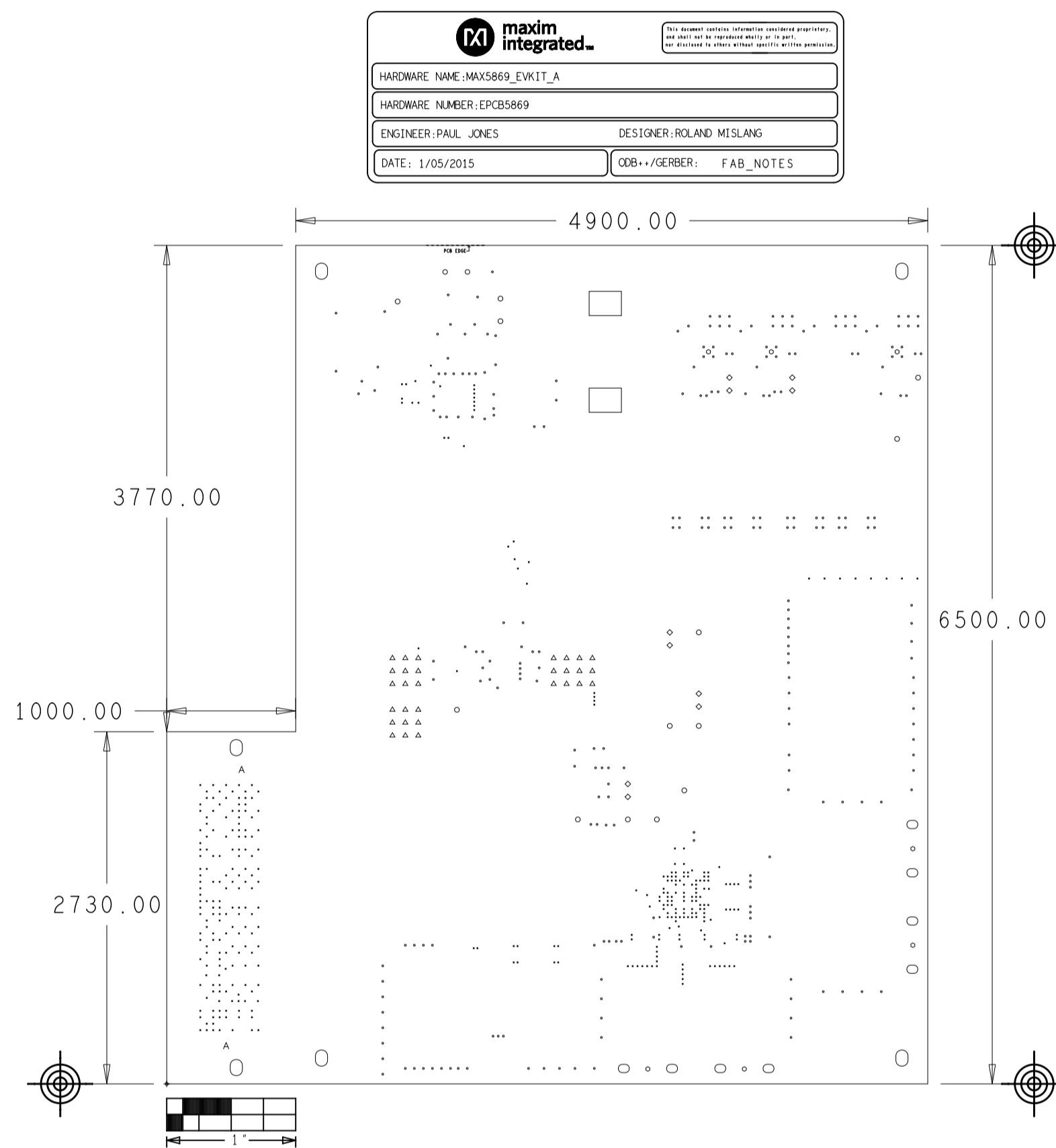


D

C

B

A



IMPEDANCE TABLE			
LAYER	50 OHM	100 OHM DIFF. TRACE / SPACE	50 OHM DIFF. TRACE / SPACE
L1	0.012	0.008 / 0.0055	0.000 / 0.000
X	0.XXX	0.000 / 0.000	0.000 / 0.000
L3	0.XXX	0.004 / 0.004	0.000 / 0.000
L10	0.XXX	0.008 / 0.0055	0.000 / 0.000


LAMINATION DIAGRAM			
LAYER NUMBER	LAYER NAME	FINISHED CU WEIGHT (OZ)	DIELECTRIC THICKNESS (in.)
1	TOP	1.0	FOIL
2	L2_GND	1.0	ROGERS4350B Fr+3.48 6.6 MIL
3	L3_SIGNAL1	1.0	PRE-PREG Fr+3.8 8 MIL
4	L4_GND	1.0	PRE-PREG Fr+3.8 8 MIL
5	L5_POWER	1.0	PRE-PREG Fr+3.8 8 MIL
6	L6_GND	1.0	PRE-PREG Fr+3.8 CORE AS NEEDED
7	L7_POWER	1.0	PRE-PREG Fr+3.8 8 MIL
8	L8_SIGNAL2	1.0	PRE-PREG Fr+3.8 8 MIL
9	L9_GND	1.0	PRE-PREG Fr+3.8 8 MIL
10	BOTTOM	1.0	ROGERS4350B Fr+3.48 6.6 MIL

THE FINISHED PCB THICKNESS TO BE: 0.095" +/- 0.010"

DRILL CHART: TOP to BOTTOM ALL UNITS ARE IN INCHES				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
+	0.008	+0.003/-0.003	PLATED	2
□	0.008	+0.003/-0.003	PLATED	344
○	0.015	+0.003/-0.003	PLATED	270
○	0.035	+0.003/-0.003	PLATED	7
○	0.03937	+0.003/-0.003	PLATED	37
◇	0.04331	+0.003/-0.003	PLATED	10
△	0.04528	+0.003/-0.003	PLATED	30
○	0.08504	+0.003/-0.003	PLATED	8
○	0.125	+0.003/-0.003	PLATED	6
□	0.25	+0.003/-0.003	PLATED	2
○	0.03543	+0.003/-0.003	NON-PLATED	2
A	0.05	+0.003/-0.003	NON-PLATED	2

REVISIONS			
REV	DESCRIPTION	APPROVED	DATE
A	RELEASE		

- NOTES:
- UNLESS OTHERWISE SPECIFIED
1. DIMENSIONS ARE IN INCHES (EXCEPT WHERE NOTED).
- MATERIAL: (USE CHECKED ITEMS FOR MATERIAL)
2. BOARD MATERIAL:
- () FR4 (R&HS COMPLIANT) OR EQUIVALENT
- () ISOLA-FR408HR
- () NELCO-4000-13 OR EQUIVALENT
- () 370HR (R&HS COMPLIANT) OR EQUIVALENT
- (X) ROGERS 4350B/FR408HR OUTER LAYERS
- () ROGERS 4003C/FR408HR
- () OTHER _____
3. THE PCB SHALL BE FABRICATED TO IPC-6012, TYPE X, CLASS 2.
- NORMANSHIP 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 R5274X OR ODB++ FORMAT FILE. DRILL LOCATION AND SIZE CONTROLLED BY EXCELLON 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 OPTION TO ENHANCE RELIABILITY AT PAD JUNCTIONS WHERE SPACING PERMITS. UNLESS OTHERWISE SPECIFIED:
- () FILLETED
- (X) NOT FILLETED
10. LAYER TO LAYER REGISTRATIONS SHALL BE WITHIN .003 INCHES. LEGEND TO LEGEND +/- 0.001 INCHES
- FINISH: (USE CHECKED ITEMS FOR PLATING)
11. PLATING SPECIFICATION:
- (X) STARTING COPPER WEIGHT FOR OUTER LAYERS TO 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
- () 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 (2 OZ) AS A STARTING WEIGHT, THE STARTING WEIGHT CAN BE (<2 OZ) AS LONG AS THE FINISH COPPER WEIGHT IS (2 OZ). UNLESS OTHERWISE SPECIFIED
- () OTHER _____
12. CHECK ALL THAT APPLY
- (X) FINISH CONDUCTOR SURFACES: IMMERSION GOLD, 3-8 MICRO INCHES OVER 100 MICRO INCHES MINIMUM OF ELECTROLESS NICKEL.
- (X) LEAD FREE AND R&HS COMPLIANT OR EQUIVALENT LEAD FREE PLATING
- () ELECTRODEPOSITED HARD GOLD PLATE, TYPE 1 (99.7% MIN GOLD), GRADE C (KNOOP 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 3 (50-100 MICROINCHES THICK) OVER ELECTRODEPOSITED NICKEL PLATE. IN ACCORDANCE WITH ANSI/IPC-A-600D, 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
- () GREEN SOLDERMASK OVER BARE COPPER/BARE GOLD (BOTH SIDES) WITH LIQUID PHOTO IMAGEABLE INK (LP1) PER ARTWORK.
- (X) GREEN TAIYO PSR-4000
- () OTHER _____
15. CHECK ALL THAT APPLY
- (X) APPLY SILKSCREEN 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-356A NETLIST OR ODB++ 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 ALL DRILL INFORMATION REFER TO DRILL CHART.
- () NON-CONDUCTIVE EPOXY. FILL AND CAP ALL 0.XXXX INCH DRILLED VIAS.
- () SILVER. FILL AND CAP ALL 0.XXXX INCH DRILLED VIAS.
20. IF PRESENT, ALL MICRO-VIAS LESS THAN 0.006 INCHES FHS WHEN USED AS VIP (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. THEIVING:
- () SUPPLIER MAY ADD THEIVING TO COMPENSATE FOR LOW COPPER DENSITY AREAS ON THIS DESIGN.
- (X) SUPPLIER MAY NOT ADD THEIVING TO COMPENSATE FOR LOW COPPER DENSITY AREAS ON THIS DESIGN.
23. PEMNUT
- () PEMNUTS TO BE INSTALLED BY SUPPLIER
- () PEMNUTS NOT TO BE INSTALLED BY SUPPLIER
- (X) NOT APPLICABLE

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.		 TITLE: FABRICATION DWG. MAX5869 EVKIT	
FRACTIONS	DECIMALS				
$\frac{XX}{YY}$.XX +/- .01 .XXX +/- .005	DRAWN BY: RM DATE:1/05/2015		SIZE: DRAWING NO. EPCB5869	
MATERIAL:	SEE NOTES	CHECKED BY: DATE:		REV A	
FINISH:	SEE NOTES	APPR. BY: DATE:		NOT TO SCALE	
		APPR. BY: DATE:		TEMPLATE REV 1.9	
				SHEET 1 OF 1	

D

C

B

A