

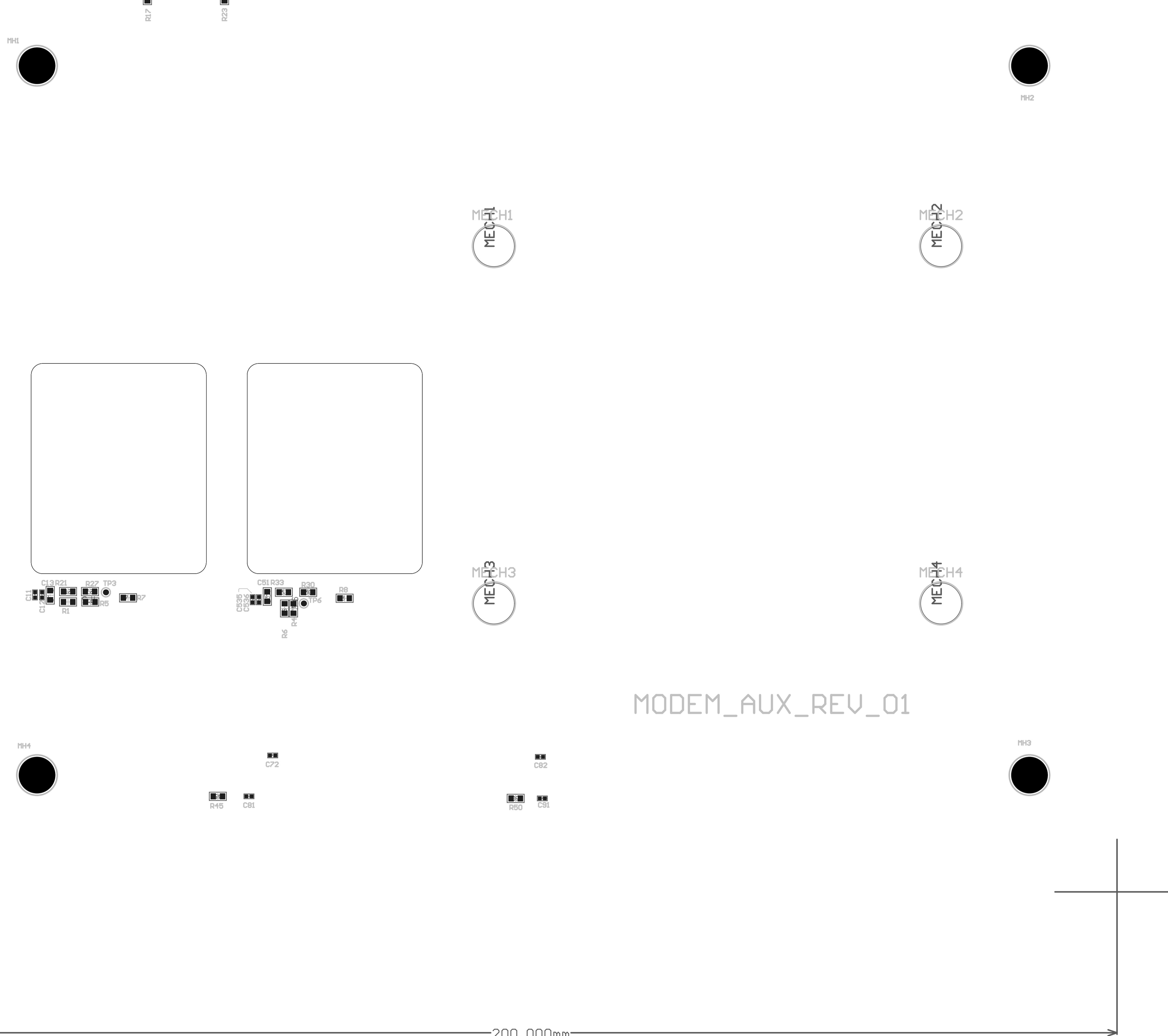
FABRICATION NOTES:

1. ALL DIMENSION ARE IN MM
2. MATERIAL:GLASS EPOXY
THICKNESS:1.6 MM, GRADE:FR4<tol,+/-10%>
3. FINISH:SMOBC, SURFACE FINISH:ENIG
LAMINATION :140 TO 180 Tg ,ROHS COMPLIANT.
4. COPPER CLAD 35u ON BOTH SIDES.
5. SOLDER MASK(GREEN) & LEGENT(WHITE) ON BOTH SIDES
6. GENERAL TOLERANCE :+/-0.1MM.
7. PCB DIMENSION: 200 MM(L) X 163 MM(W).
8. MINIMUM TRACE WIDTH IS 0.127 MM, MINIMUM PAD TO PAD SPACING=0.15MM.
9. MINIMUM DRILL SIZE 0.305 MM,MINIMUM PAD TO DRILL SPACING=0.135MM.
10. NO OF LAYERS: 4.
L1-TOP LAYER.
L2.SIGNAL1.
L3-SIGNAL2.
L2.BOTTOM LAYER .
11. UL- REQUIREMENTS -YES.
12. SUPPLEMENTARY PATTERN IS NOT ALLOWED.
13. SURFACE PROTECTION IS PB-FREE.
14. THIS BOARD IS ROHS COMPLIANT.
15. SILK SCREEN PRINTING :YES,COLOUR:WHITE.
16. THIS BOARD IS IMPEDANCE MATCHING (90 Ohm,50 Ohm).

Layers	50 OHMS	90 OHMS
TOP LAYER		Trace Width=0.127MM Trace Spacing=0.133MM Differential Pair
BOTTOM LAYER	Trace Width=0.178MM Single ended	Trace Width=0.127MM Trace Spacing=0.133MM Differential Pair

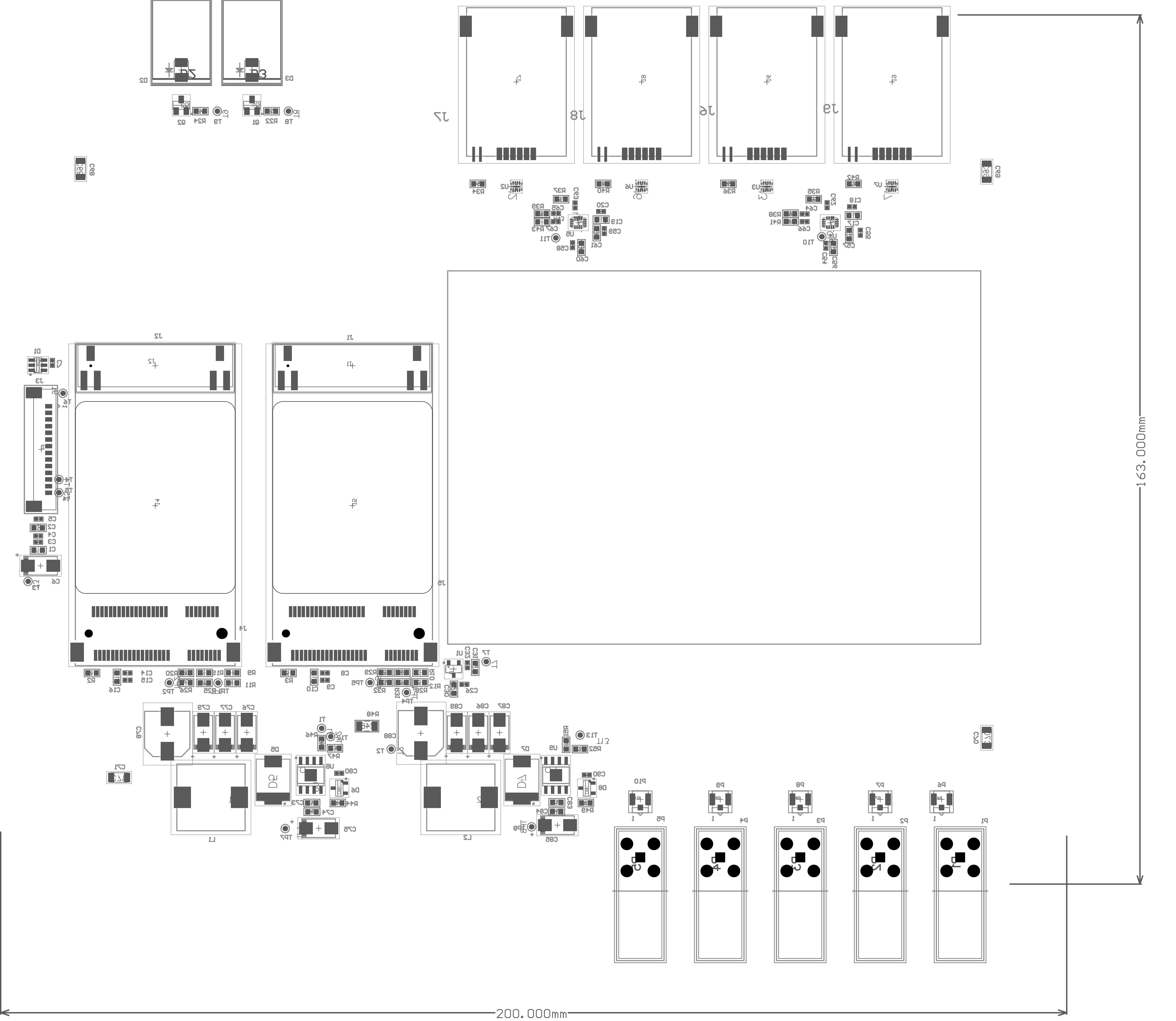
17. THIS BOARD VIA'S ARE SHOULD COVER WITH SOLDERMASK

MODEM_AUX_REV_01



4-Layer Stack Up Detail : MODEM_AUX_REV_01 Board

Layer Name	Prepreg/Laminate	Thickness Mil
Top Layer	Copper Foil	1.35
Dielectric	Prepreg(2116-100u)	4
Signal1	Copper Foil	1.35
Dielectric	Laminate(4x7628-760u)	30
	Laminate(3x7628-510u)	20
Signal2	Copper Foil	1.35
Dielectric	Prepreg(2116-100u)	4
Bottom Layer	Copper Foil	1.35
Total Thickness		63.4 mils
TOTAL BOARD THICKNESS IN MM:		1.6mm +0.2/-0.2mm



FABRICATION NOTES:

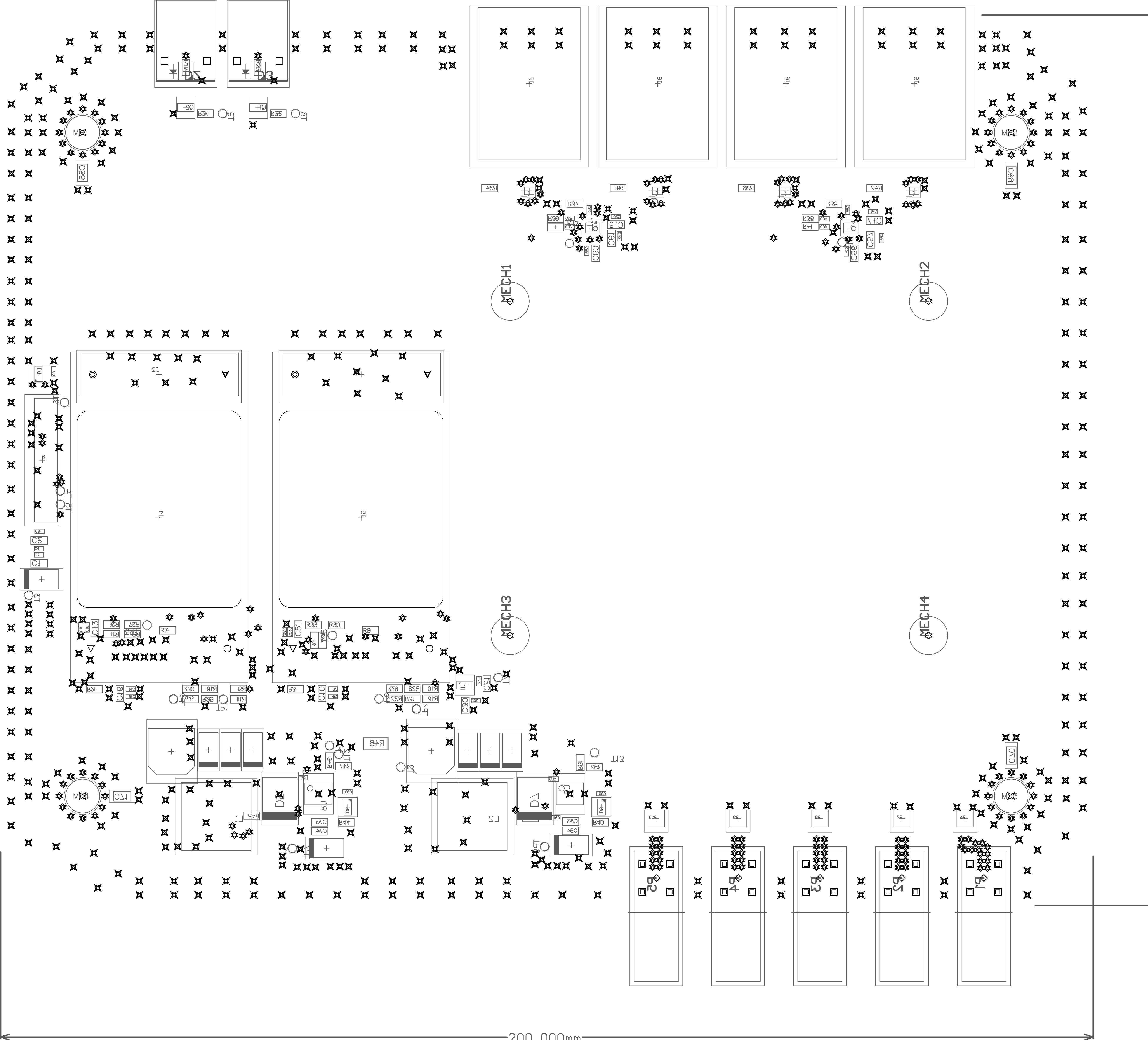
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3. FINISH:SMOBC,SURFACE FINISH:ENIG
LAMINATION :140 TO 180 Tg ,ROHS COMPLIANT.
4. COPPER CLAD 35u ON BOTH SIDES.
5. SOLDER MASK(GREEN) & LEGENT(WHITE) ON BOTH SIDES
6. GENERAL TOLERANCE :+/-0.1MM.
7. PCB DIMENSION:200 MM(L) X 163 MM(W).
8. MINIMUM TRACE WIDTH IS 0.127 MM, MINIMUM PAD TO PAD SPACING=0.15MM.
9. MINIMUM DRILL SIZE 0.305 MM,MINIMUM PAD TO DRILL SPACING=0.135MM.
10. NO OF LAYERS: 4.
L1-TOP LAYER.
L2.SIGNAL1.
L3-SIGNAL2.
L2.BOTTOM LAYER .
11. UL- REQUIREMENTS -YES.
12. SUPPLEMENTARY PATTERN IS NOT ALLOWED.
13. SURFACE PROTECTION IS PB-FREE.
14. THIS BOARD IS ROHS COMPLIANT.
15. SILK SCREEN PRINTING :YES,COLOUR:WHITE.
16. THIS BOARD IS IMPEDANCE MATCHING (90 Ohm,50 Ohm).

Layers	50 OHMS	90 OHMS
TOP LAYER		Trace Width=0.127MM Trace Spacing=0.133MM Differential Pair
BOTTOM LAYER	Trace Width=0.178MM Single ended	Trace Width=0.127MM Trace Spacing=0.133MM Differential Pair

17. THIS BOARD VIA'S ARE SHOULD COVER WITH SOLDERMASK

4-Layer Stack Up Detail : MODEM_AUX_REV_01 Board

Layer Name	Prepreg/Laminate	Thickness Mil
Top Layer	Copper Foil	1.35
Dielectric	Prepreg(2116-100u)	4
Signal1	Copper Foil	1.35
Dielectric	Laminate(4x7628-760u)	30
Signal2	Laminate(3x7628-510u)	20
Dielectric	Copper Foil	1.35
Bottom Layer	Prepreg(2116-100u)	4
	Copper Foil	1.35
Total Thickness		63.4 mils
TOTAL BOARD THICKNESS IN MM:		1.6mm +0.2/-0.2mm



FABRICATION NOTES:

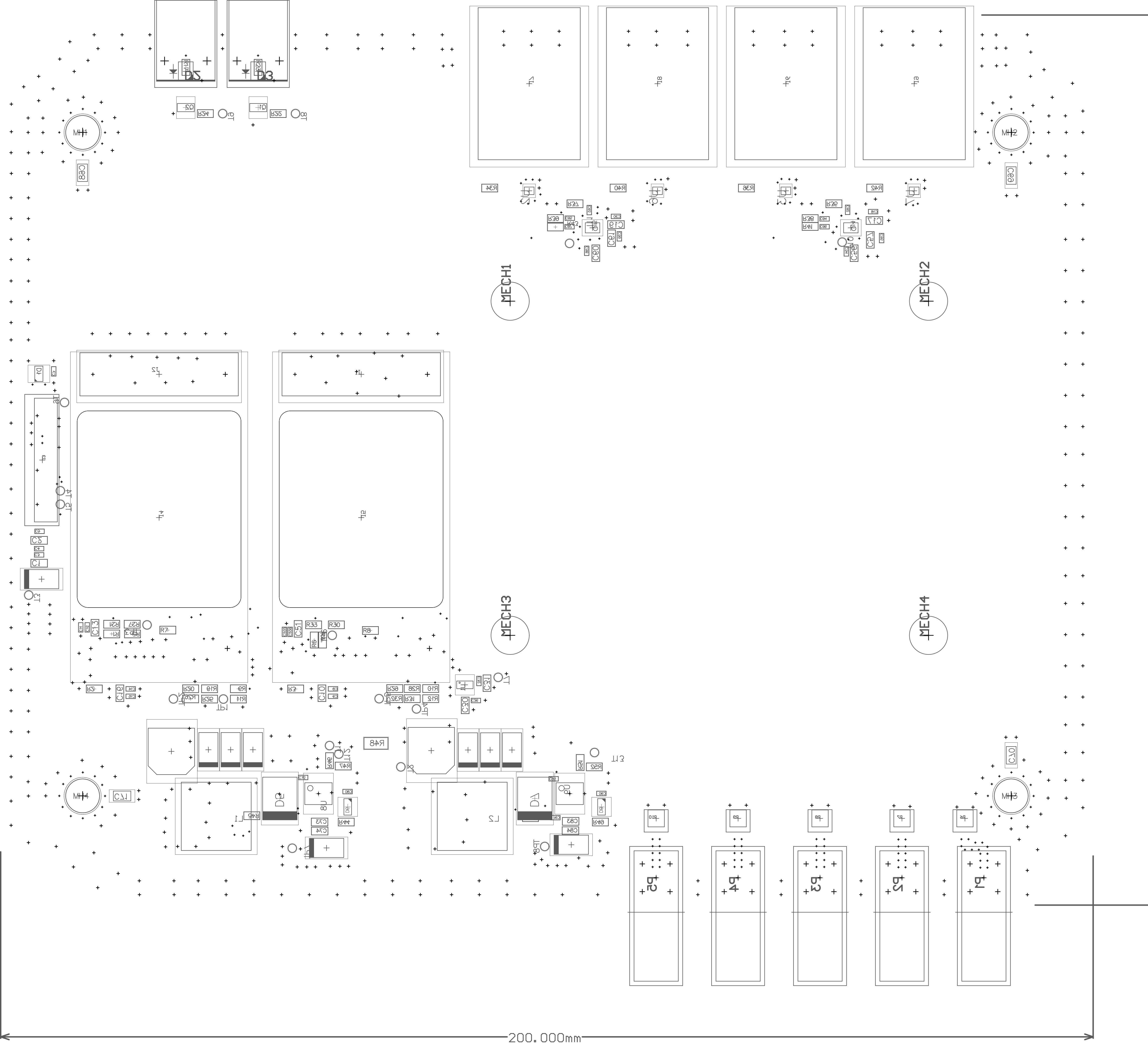
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THICKNESS:1.6 MM, GRADE:FR4(TOL, +/-10%)
3. FINISH:SMOBC, SURFACE FINISH:ENIG
LAMINATION :140 TO 180 Tg , ROHS COMPLIANT.
4. COPPER CLAD 35u ON BOTH SIDES.
5. SOLDER MASK(GREEN) & LEGENT(WHITE) ON BOTH SIDES
6. GENERAL TOLERANCE :+/-0.1MM.
7. PCB DIMENSION:200 MM(L) X 163 MM(W).
8. MINIMUM TRACE WIDTH IS 0.127 MM, MINIMUM PAD TO PAD SPACING=0.15MM.
9. MINIMUM DRILL SIZE 0.305 MM,MINIMUM PAD TO DRILL SPACING=0.135MM.
10. NO OF LAYERS:4.
L1-TOP LAYER.
L2.SIGNAL1.
L3-SIGNAL2.
L2.BOTTOM LAYER .
11. UL- REQUIREMENTS -YES.
12. SUPPLEMENTARY PATTERN IS NOT ALLOWED.
13. SURFACE PROTECTION IS PB-FREE.
14. THIS BOARD IS ROHS COMPLIANT.
15. SILK SCREEN PRINTING :YES, COLOUR:WHITE.
16. THIS BOARD IS IMPEDANCE MATCHING (90 Ohm,50 Ohm).

Layers	50 OHMS	90 OHMS
TOP LAYER		Trace Width=0.127MM Trace Spacing=0.133MM Differential Pair
BOTTOM LAYER	Trace Width=0.178MM Single ended	Trace Width=0.127MM Trace Spacing=0.133MM Differential Pair

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4-Layer Stack Up Detail : MODEM_AUX_REV_01 Board		
Layer Name	Prepreg/Laminate	Thickness mils
Top Layer	Copper Foil	1.35
Dielectric	Prepreg(2116-100u)	4
Signal1	Copper Foil	1.35
Dielectric	Laminate(4x7628-760u)	30
	Laminate(3x7628-510u)	20
Signal2	Copper Foil	1.35
Dielectric	Prepreg(2116-100u)	4
Bottom Layer	Copper Foil	1.35
Total Thickness		63.4 mils
TOTAL BOARD THICKNESS IN MM: 1.6mm +0.2/-0.2mm		

Symbol	Count	Hole Size	Plated	Hole Type	Drill Layer Pair	Via/Pad	Pad Shape	Technology
○	2	1.080mm (42.52mil)	NPTH	Round	Top Layer - Bottom Layer	Pad	Rounded	Drilled
▽	2	1.143mm (45.00mil)	PTH	Round	Top Layer - Bottom Layer	Pad	Rounded	Drilled
▼	2	1.580mm (62.20mil)	NPTH	Round	Top Layer - Bottom Layer	Pad	Rounded	Drilled
○	2	1.727mm (68.00mil)	PTH	Round	Top Layer - Bottom Layer	Pad	Rounded	Drilled
□	4	2.900mm (114.17mil)	NPTH	Round	Top Layer - Bottom Layer	Pad	Rounded	Drilled
✗	4	3.200mm (125.98mil)	PTH	Round	Top Layer - Bottom Layer	Pad	Rounded	Drilled
❖	4	3.500mm (137.80mil)	NPTH	Round	Top Layer - Bottom Layer	Pad	Rounded	Drilled
◇	5	1.240mm (48.82mil)	PTH	Round	Top Layer - Bottom Layer	Pad	Rounded	Drilled
■	20	1.750mm (68.90mil)	PTH	Round	Top Layer - Bottom Layer	Pad	Rounded	Drilled
✖	190	0.305mm (12.00mil)	PTH	Round	Top Layer - Bottom Layer	Via	Rounded	Drilled
✗	511	0.508mm (20.00mil)	PTH	Round	Top Layer - Bottom Layer	Via	Rounded	Drilled
746 Total								



FABRICATION NOTES:

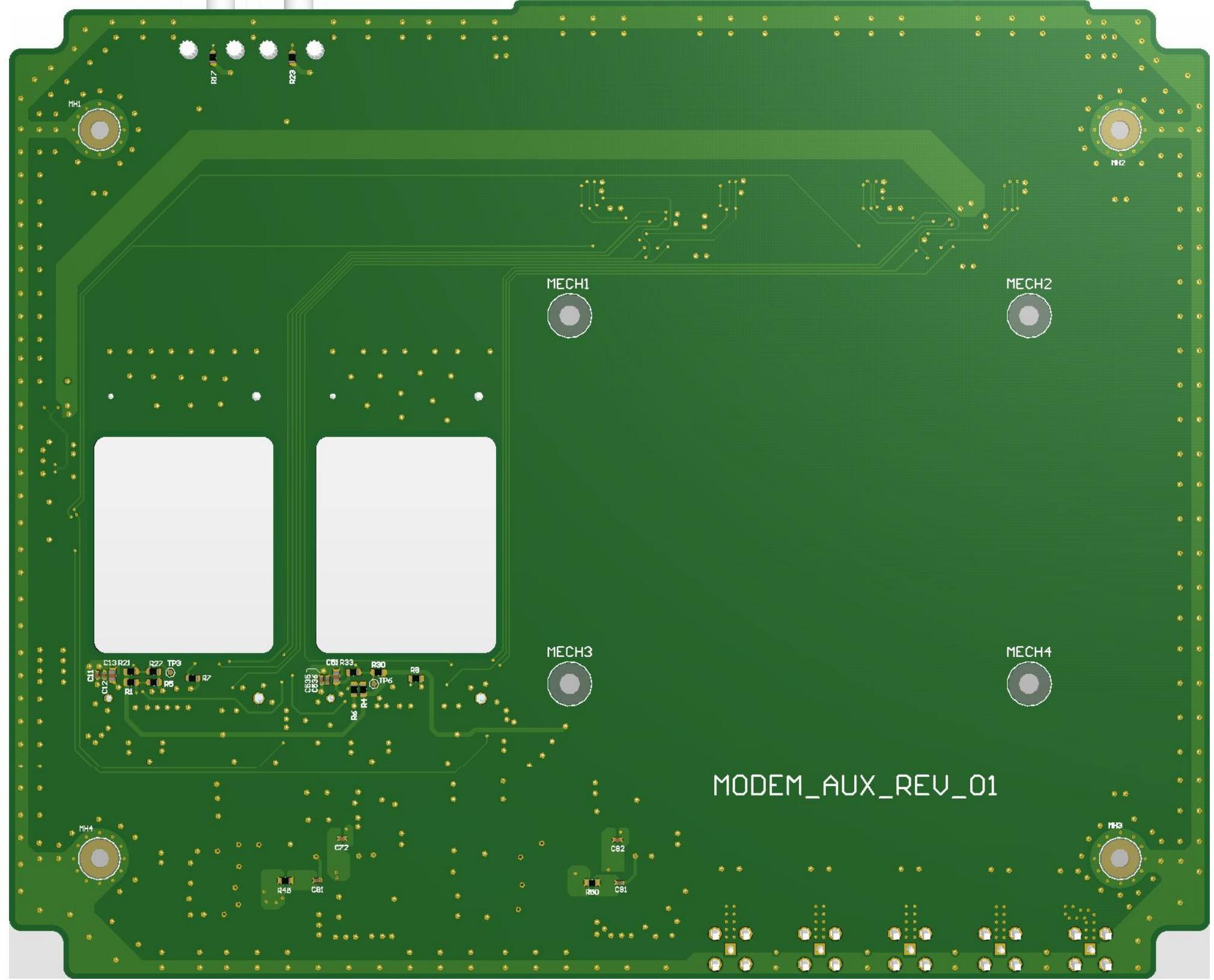
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LAMINATION :140 TO 180 Tg ,ROHS COMPLIANT.
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5. SOLDER MASK(GREEN) & LEGENT(WHITE) ON BOTH SIDES
6. GENERAL TOLERANCE :+/-0.1MM.
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10. NO OF LAYERS:4.
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L3-SIGNAL2,
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Layers	50 OHMS	90 OHMS
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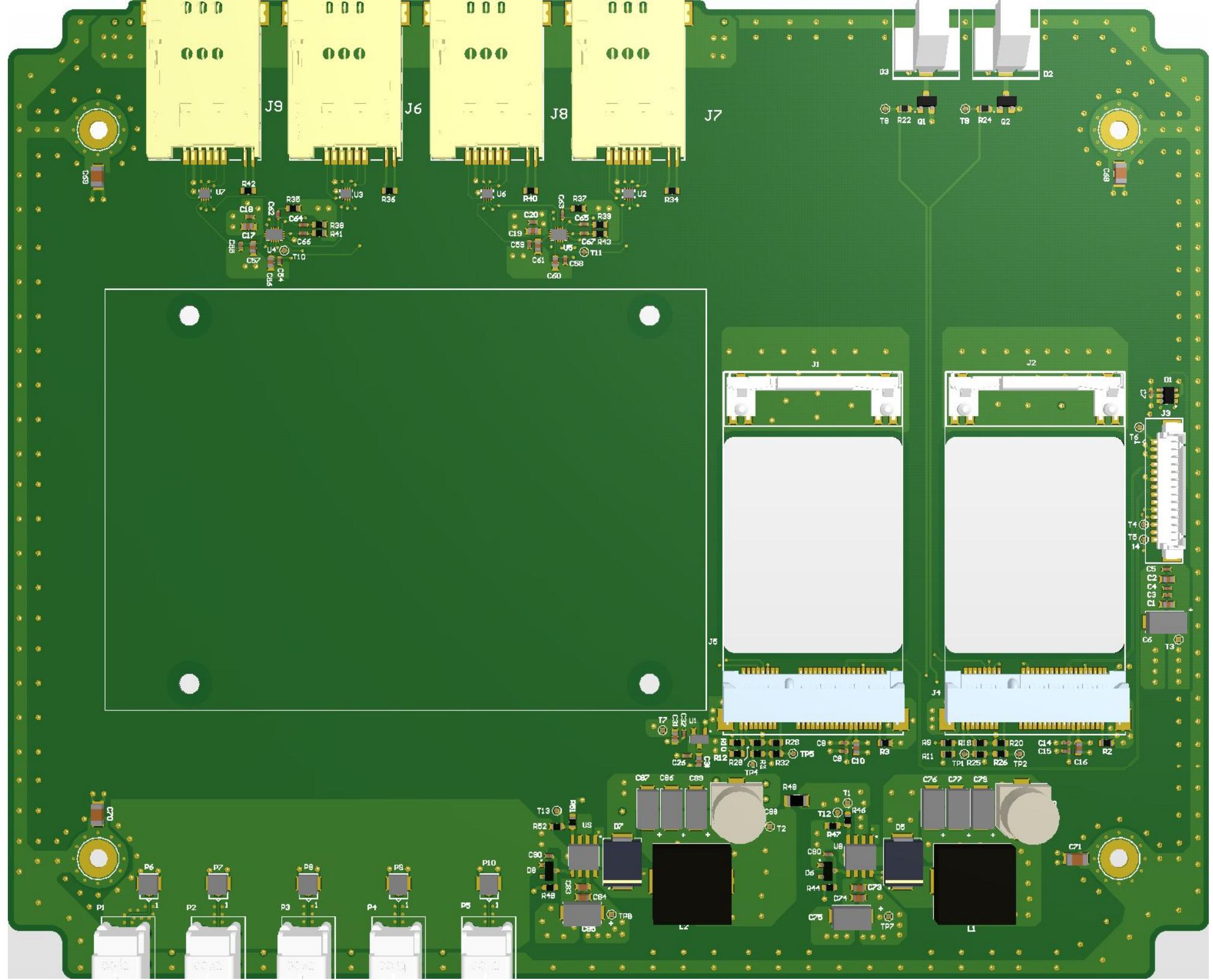
17. THIS BOARD VIA'S ARE SHOULD COVER WITH SOLDERMASK

4-Layer Stack Up Detail : MODEM_AUX_REV_01 Board

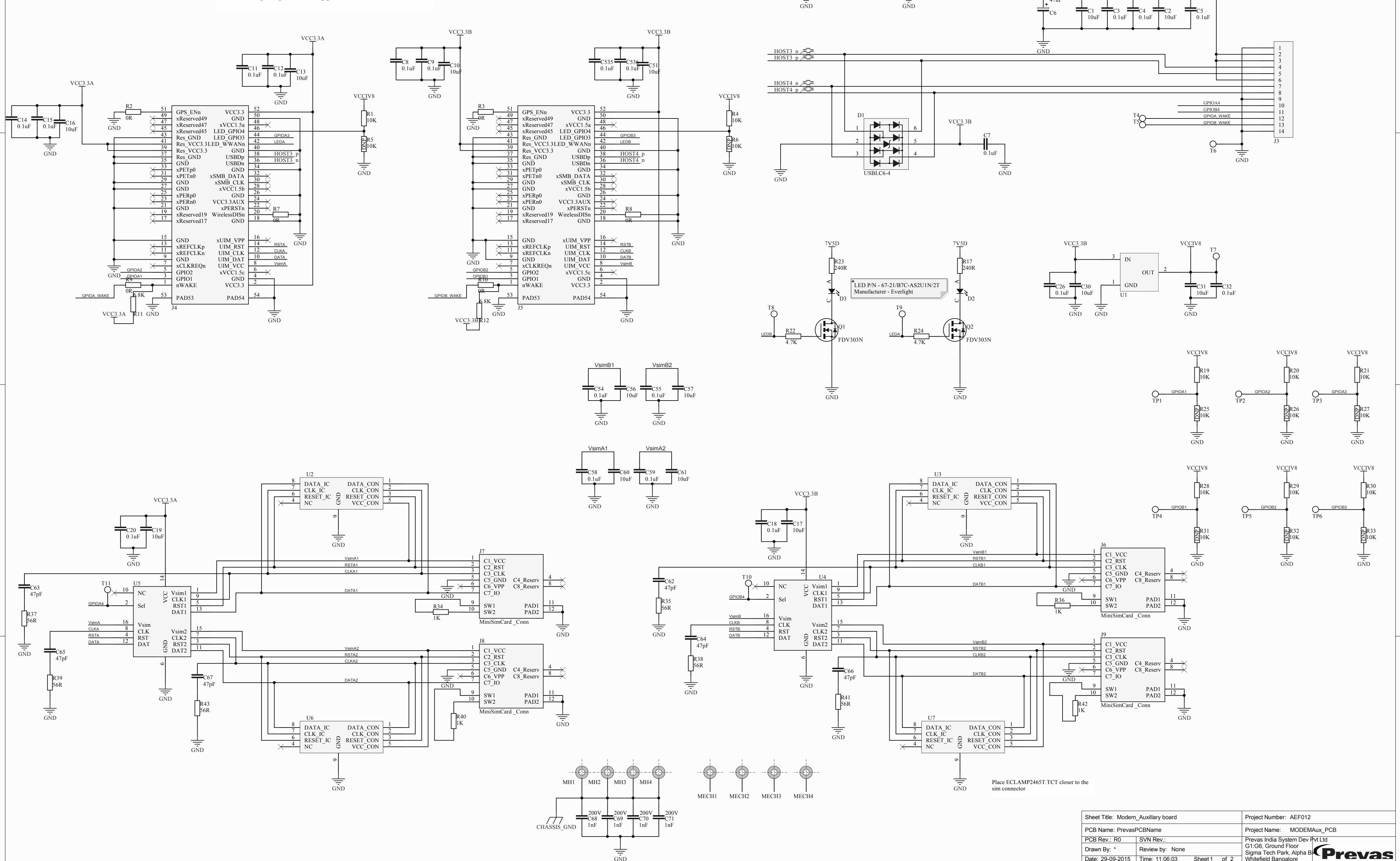
Layer Name	Prepreg/Laminate	Thickness mils
Top Layer	Copper Foil	1.35
Dielectric	Prepreg(2116-100u)	4
Signal1	Copper Foil	1.35
Dielectric	Laminate(4x7628-760u)	30
	Laminate(3x7628-510u)	20
Signal2	Copper Foil	1.35
Dielectric	Prepreg(2116-100u)	4
Bottom Layer	Copper Foil	1.35
Total Thickness		63.4 mils
TOTAL BOARD THICKNESS IN MM:		1.6mm +0.2/-0.2mm



MODEM_AUX_REV_01



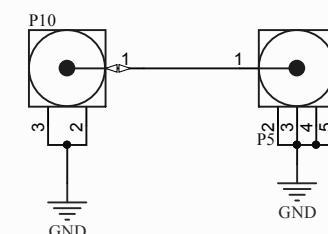
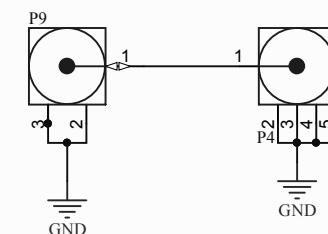
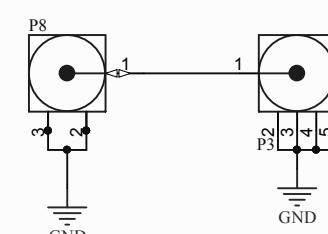
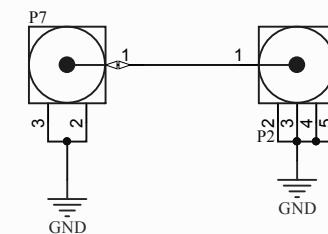
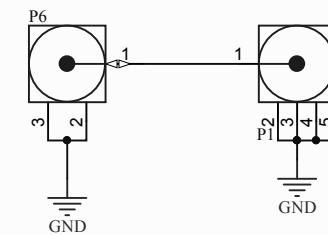
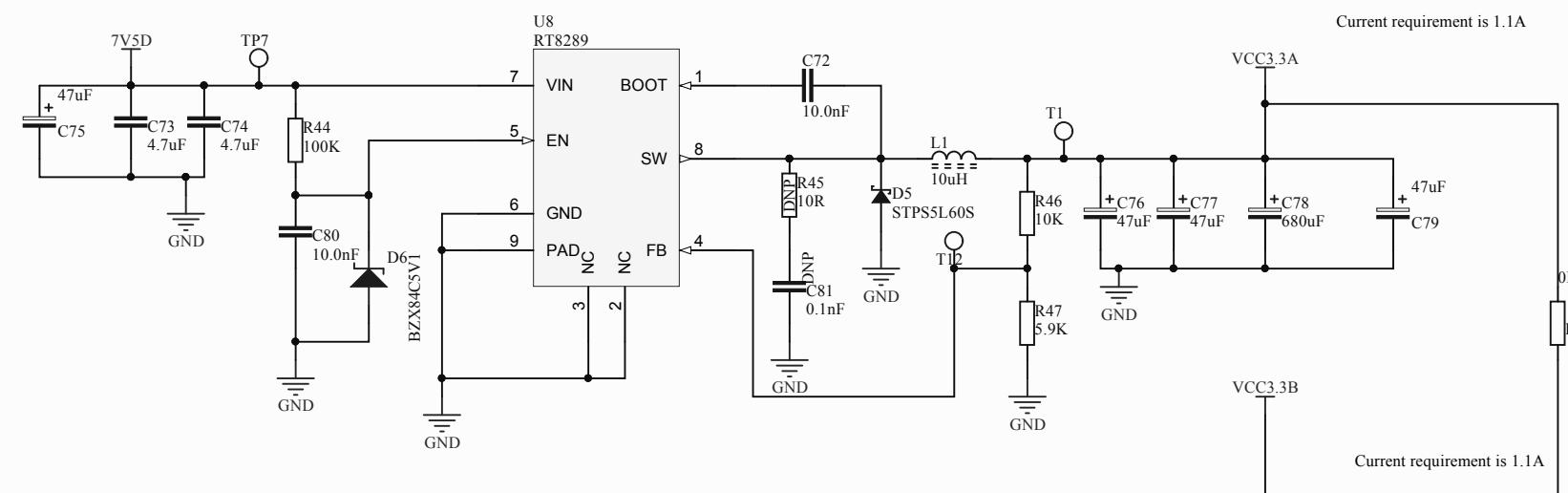
Need to check the onboard SMA antenna's feasibility while designing PCB if applicable



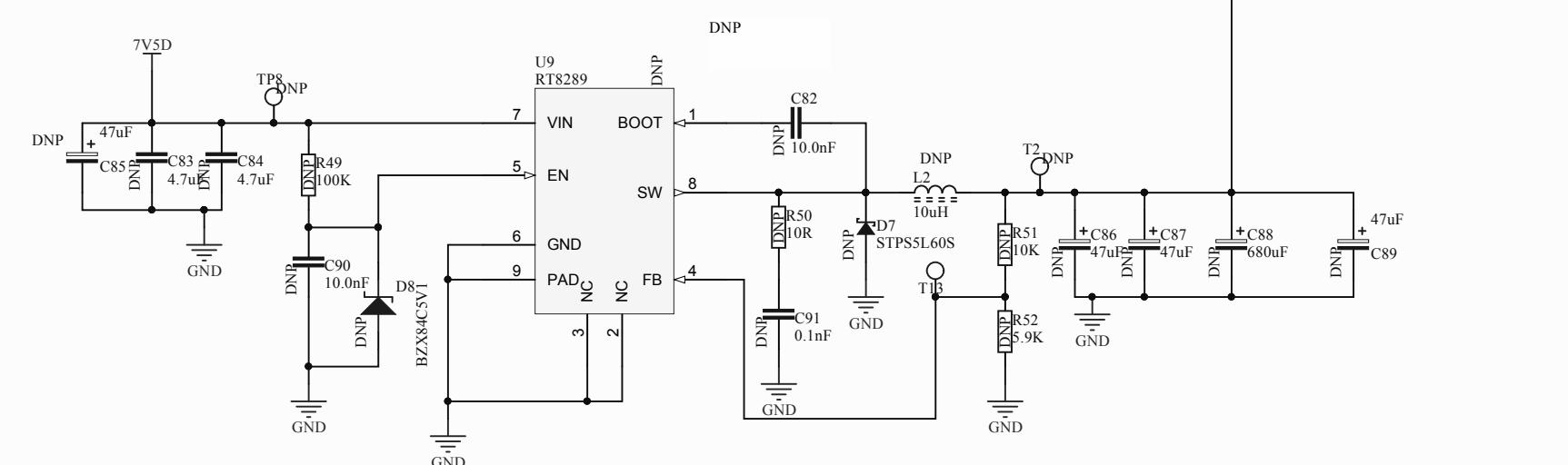
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PCB Name: PrevasPCBName	Project Name: MODEMAux_PCB
PCB Rev.: R0	SVN Rev.: Prevas India System Dev Pvt Ltd
Drawn By: *	Review by: None
Date: 29-09-2015	Time: 11:06:03
File: Modem_Auxiliary board.SchDoc	Sheet 1 of 2

Custom pads are required in place of SMA antenna's TPs in order to solder the pig tail wire from the uFL connector

A



B



C

Sheet Title: *	Project Number: AEF012
PCB Name: PrevasPCBName	Project Name: MODEMAux_PCB
PCB Rev.: R0	SVN Rev.:
Drawn By: *	Review by: None
Date: 29-09-2015	Time: 11:06:04 Sheet * of *
File: Sierra Modem Power Supply.SchDoc	Prevas India System Dev Pvt Ltd G1:G6, Ground Floor Sigma Tech Park, Alpha B Whitefield Bangalore www.Prevas.com