

Figure 1 is a schematic diagram of the PCB layout. It shows a complex circuit board with various components like resistors, capacitors, and integrated circuits. Dimensions are indicated: 90 mm for the overall width, 85 mm for the top section, and 86 mm for the bottom section.

Stackup: JLC04121H-7628

Impedance Table

Transmission Line	Impedance [ohms]	Tolerance [ohms]	Layer	Trace Width [mm]	Gap [mm]	Ref. Layers
USB	90	±10 %	L1	0.17	0.275	L2

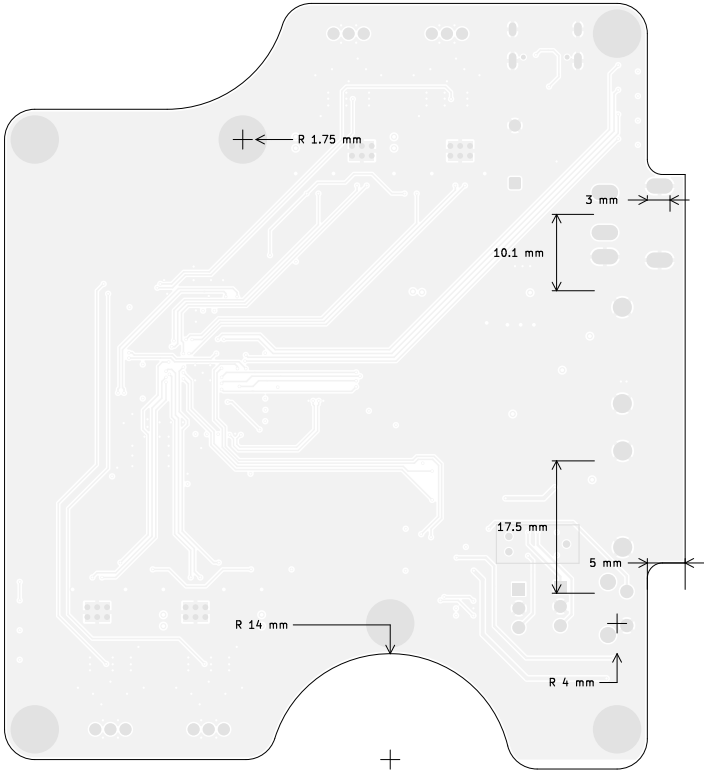
BOARD SIZE	90.000 x 101.250 mm
BOARD THICKNESS	1.160 mm
TRACE WIDTH	0.170 mm
TRACE TO TRACE	-0.000 mm
MIN. HOLE (PTH)	0.300 mm
MIN. HOLE (NPTH)	0.650 mm
ANNULAR RING	0.075 mm
COPPER TO HOLE	0.150 mm
COPPER TO EDGE	0.300 mm
HOLE TO HOLE	0.250 mm

12) CONFIRM SPACE WIDTHS AND SPACINGS.


KiCad E.D.A. 9.0.1+1 + KiBot v1.8.5	Id: 1/10
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Bottom Fabrication (Scale 1:1)



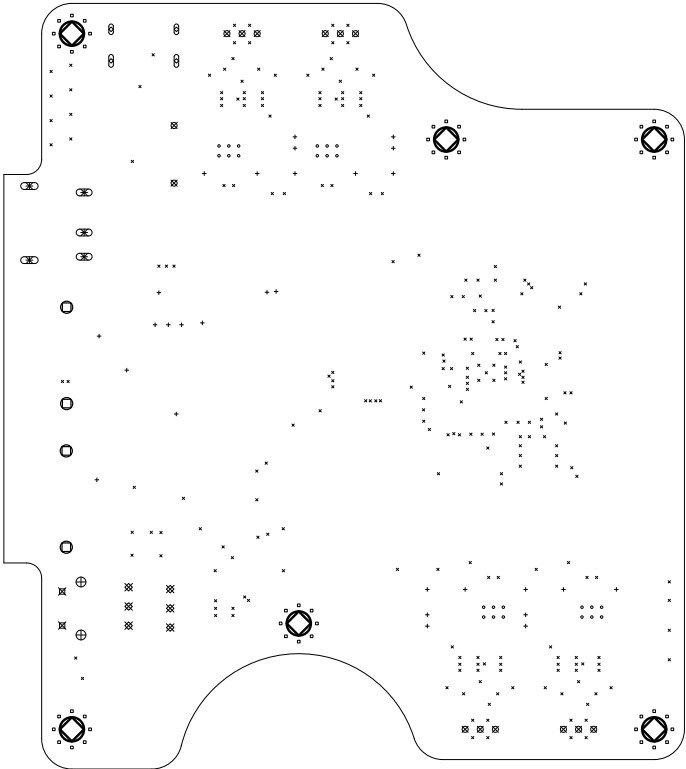
All dimensions are in millimeters unless otherwise specified.

Designed for: TrendBit Designed by: Petr_Malaník					
Sheet: File: pump_board.kicad_pcb				Project: SMPBR	
Title:				Board: Pump_board	
Size: A4	Date: 2024-12-04	GIT hash: 2f720a5		Rev: 1.0	
KiCad E.D.A. 9.0.1+1 + KiBot v1.8.5				Id: 2/10	

Drill Drawing L1 - L4 (Scale 1:1)

Drill Table

Symbol	Count	Hole Size	Plated	Hole Shape	Drill Layer Pair	Hole Type
×	250	0,30mm (11,81mils)	PTH	Round	L1 (Sig.) - L4 (Sig.)	Via
○	24	0,33mm (12,99mils)	PTH	Round	L1 (Sig.) - L4 (Sig.)	Pad
+	29	0,50mm (19,69mils)	PTH	Round	L1 (Sig.) - L4 (Sig.)	Via
□	48	0,50mm (19,69mils)	PTH	Round	L1 (Sig.) - L4 (Sig.)	Pad
◇	4	0,60mm (23,62mils)	PTH	Slot	L1 (Sig.) - L4 (Sig.)	Pad
⊗	14	0,80mm (31,50mils)	PTH	Round	L1 (Sig.) - L4 (Sig.)	Pad
✱	5	0,90mm (35,43mils)	PTH	Slot	L1 (Sig.) - L4 (Sig.)	Pad
⊠	2	0,99mm (38,98mils)	PTH	Round	L1 (Sig.) - L4 (Sig.)	Pad
⊗	6	1,00mm (39,37mils)	PTH	Round	L1 (Sig.) - L4 (Sig.)	Pad
⊕	2	1,30mm (51,18mils)	PTH	Round	L1 (Sig.) - L4 (Sig.)	Pad
○	4	1,60mm (62,99mils)	PTH	Round	L1 (Sig.) - L4 (Sig.)	Pad
○	6	3,20mm (125,98mils)	PTH	Round	L1 (Sig.) - L4 (Sig.)	Pad
Total 394						



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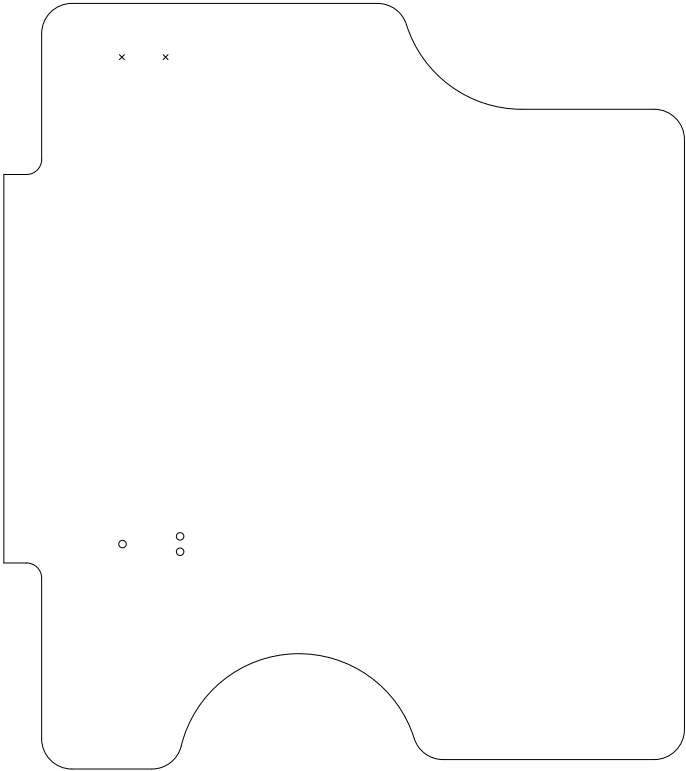
Project: SMPBR
Board: Pump_board

Title:
Size: A4 Date: 2024-12-04 GIT hash: 2f720a5 Rev: 1.0
KiCad E.D.A. 9.0.1+1 + KiBot v1.8.5 Id: 3/10

Drill Drawing L1 - L4 (Scale 1:1)

Drill Table

Symbol	Count	Hole Size	Plated	Hole Shape	Drill Layer Pair	Hole Type
×	2	0,65mm (25,59mils)	NPTH	Round	L1 (Sig.) - L4 (Sig.)	Mechanical
○	3	0,99mm (39,00mils)	NPTH	Round	L1 (Sig.) - L4 (Sig.)	Mechanical
Total 5						



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Sheet:
File: pump_board.kicad_pcb

Project: SMPBR
Board: Pump_board

Title:			
Size: A4	Date: 2024-12-04	GIT hash: 2f720a5	Rev: 1.0
KiCad E.D.A. 9.0.1+1 + KiBot v1.8.5			Id: 4/10


Top Test Points (Scale 1:1)



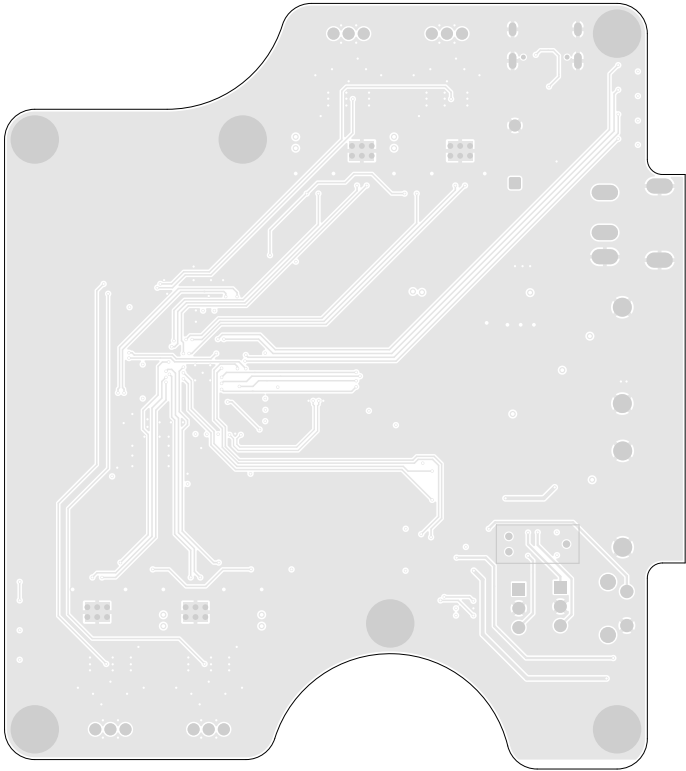
Ref.	Net	X [mm]	Y [mm]
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Ref.	Net	X [mm]	Y [mm]
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All dimensions are in millimeters unless otherwise specified.

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Sheet: File: pump_board.kicad_pcb			Project: SMPBR	
Title:			Board: Pump_board	
Size: A4	Date: 2024-12-04	GIT hash: 2f720a5		Rev: 1.0
KiCad E.D.A. 9.0.1+1 + KiBot v1.8.5			Id: 5/10	

Bottom Test Points (Scale 1:1)



Ref.	Net	X [mm]	Y [mm]
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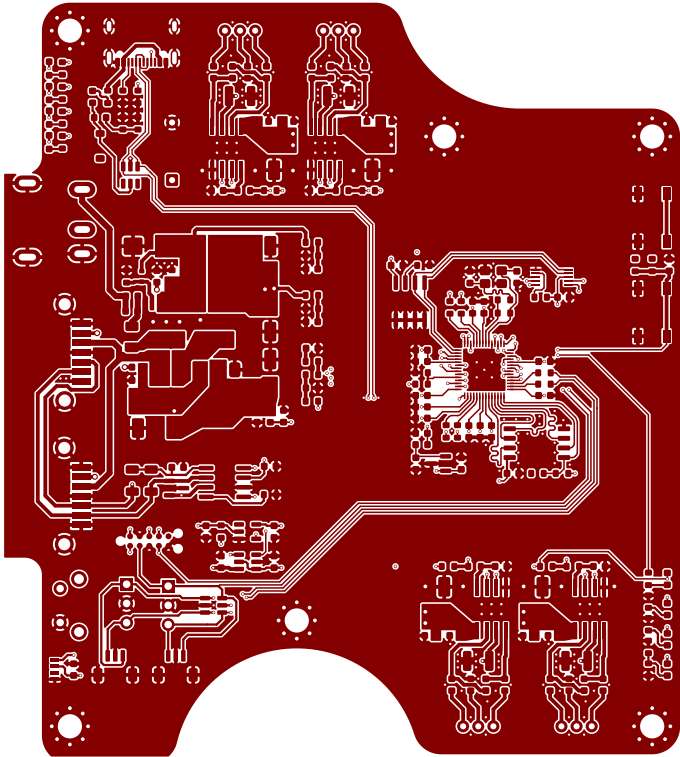
All dimensions are in millimeters unless otherwise specified.

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Title:			Board: Pump_board	
Size: A4	Date: 2024-12-04	GIT hash: 2f720a5		Rev: 1.0
KiCad E.D.A. 9.0.1+1 + KiBot v1.8.5			Id: 6/10	

L1 (Sig) (Scale 1:1)

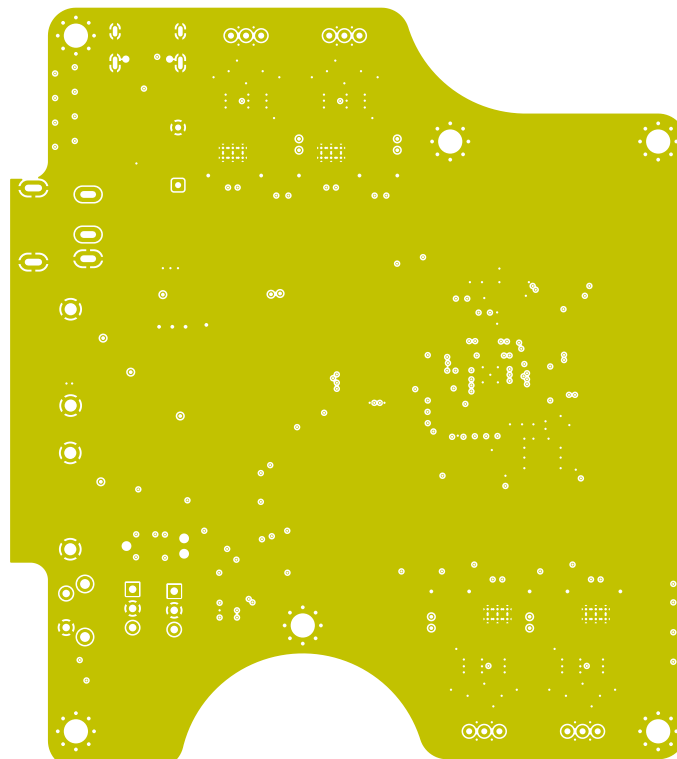


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File: pump_board.kicad_pcb



Title:			Project: SMPBR	
			Board: Pump_board	
Size: A4	Date: 2024-12-04	GIT hash: 2f720a5	Rev: 1.0	
KiCad E.D.A. 9.0.1+1 + KiBot v1.8.5			Id: 7/10	

L2 (GND) (Scale 1:1)



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Sheet:
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Title:

Project: SMPBR

Board: Pump_board

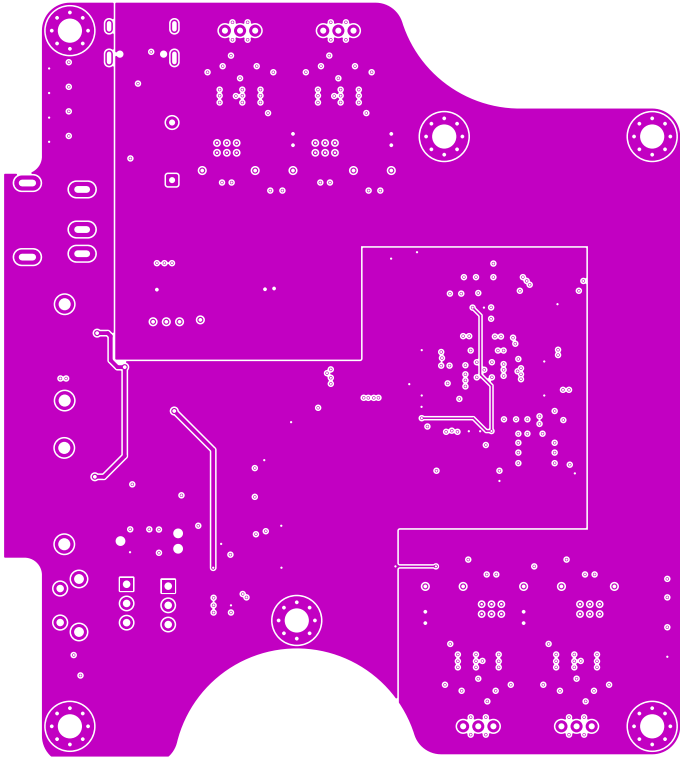
Size: A4
KiCad E.D.A. 9.0.1+1 + KiBot v1.8.5

Date: 2024-12-04
GIT hash: 2f720a5

Rev: 1.0
Id: 8/10

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L3 (PWR) (Scale 1:1)



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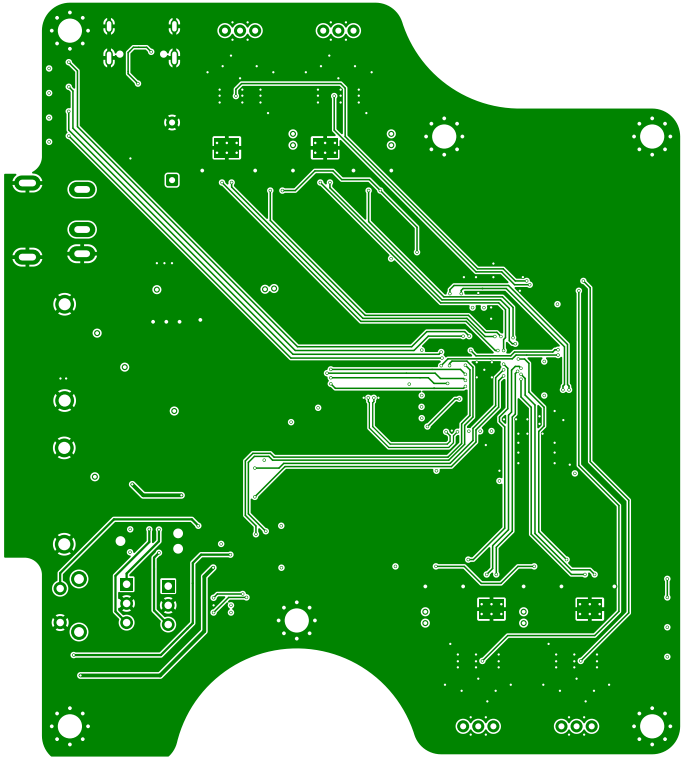
Sheet:
File: pump_board.kicad_pcb

Project: SMPBR
Board: Pump_board

Size: A4	Date: 2024-12-04	GIT hash: 2f720a5	Rev: 1.0
KiCad E.D.A. 9.0.1+1 + KiBot v1.8.5			Id: 9/10



L4 (Sig.) (Scale 1:1)



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Sheet:
File: pump_board.kicad_pcb

Project: SMPBR
Board: Pump_board

Size: A4
Date: 2024-12-04
KiCad E.D.A. 9.0.1+1 + KiBot v1.8.5

GIT hash: 2f720a5
Rev: 1.0
Id: 10/10

