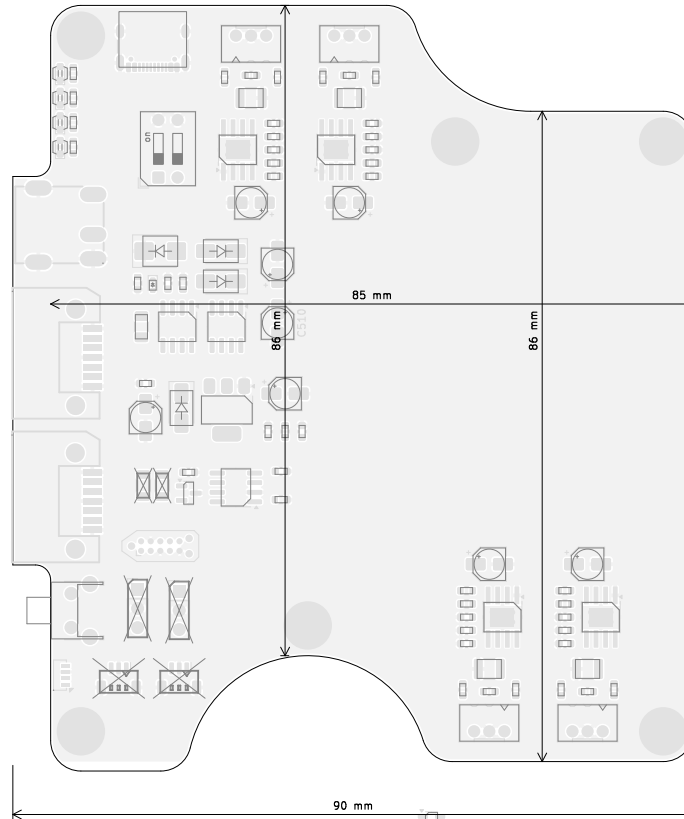


Stackup: JLC04121H-7628

Total thickness: 1.16mm
Note: external layer thicknesses are specified after plating

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



All dimensions are in millimeters unless otherwise specified.

1) FABRICATE PER IPC-6012A CLASS 2.

- DIMENSIONS OF CIRCUMSIZED RECTANGLE SHOWN ON THIS
DRAWING FOR REFERENCE ONLY.

- 3) SEE SEPARATE DRILL FILES WITH ".DRL" SUFFIX FOR HOLE LOCATIONS. 

SELECTED HOLE LOCATIONS SHOWN ON THIS DRAWING
FOR REFERENCE ONLY.

- 4) SURFACE FINISH: ENIG

- 5) SOLDERMASK ON BOTH SIDES OF THE BOARD SHALL BE LPI, COLOR GREEN.

- 6) SILK SCREEN LEGEND TO BE APPLIED PER LAYER STACKUP USING WHITE NON-CONDUCTIVE EPOXY INK.

- 7) ALL VIAS ARE TENTED ON BOTH SIDES UNLESS
SOLDERMASK OPENED IN GERBER.

- 8) VENDOR SHOULD FOLLOW ROHS COMPLIANT PROCESS AND Pb FREE FOR MANUFACTURING

- 9) PCB MATERIAL REQUIREMENTS:

- A. FLAMMABILITY RATING MUST MEET OR EXCEED UL94V-0 REQUIREMENTS.
- B. Tg 170 C OR EQUIVALENT.
- C. EQUIVALENT MATERIAL SHALL BE RoHS COMPLIANT, HALOGEN FREE AND APPROVED BY TRENDBIT.

- 10) DESIGN GEOMETRY MINIMUM FEATURE SIZES:

BOARD SIZE	90.000 × 101.250 mm
BOARD THICKNESS	1,160 mm
TRACE WIDTH	N/A mm
TRACE TO TRACE	0.100 mm
MIN. HOLE (PTH)	0.350 mm
MIN. HOLE (NPTH)	0.650 mm
ANNULAR RING	0.140 mm
COPPER TO HOLE	0.150 mm
COPPER TO EDGE	0.300 mm
HOLE TO HOLE	0.250 mm

- 11) REFER TO IMPEDANCE TABLE FOR IMPEDANCE CONTROL REQUIREMENTS.

- 12) CONFIRM SPACE WIDTHS AND SPACINGS.

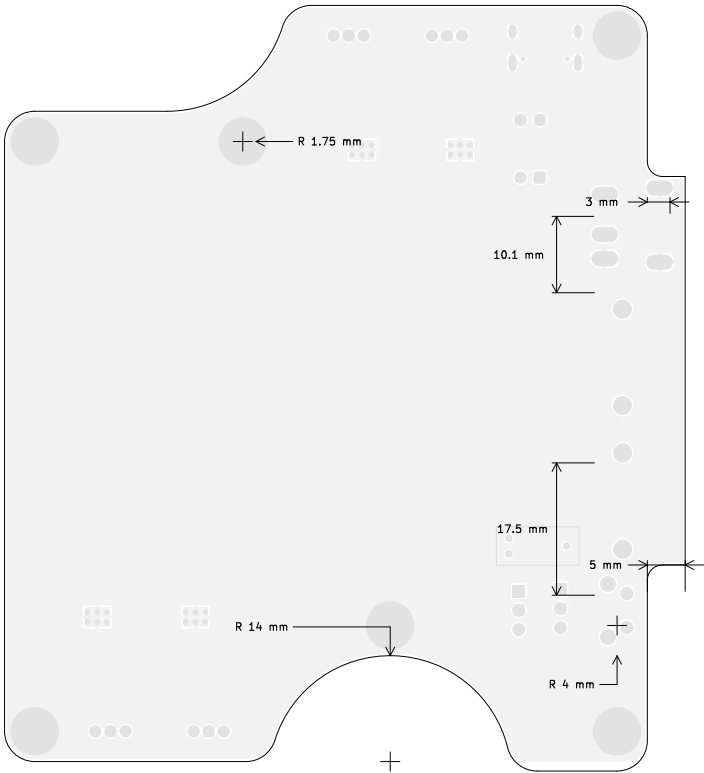
**TREND
BIT****Project: SMPBR**

Title:	Board: Pump_board
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Size: A4	Date: 2024-12-04	GIT hash: 71ab532	Rev: 1.0
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KiCad E.D.A. 9.0.1+1 + KiBot v1.8.5 Id: 1/10

Bottom Fabrication (Scale 1:1)



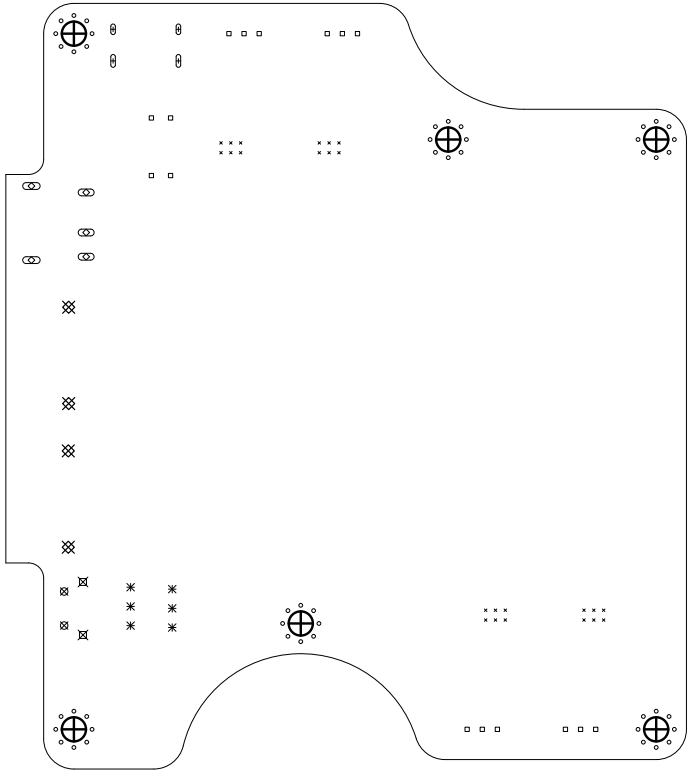
All dimensions are in millimeters unless otherwise specified.

					
Designed for: TrendBit					
Designed by: Petr_Malanik					
Sheet:				Project: SMPBR	
File: pump_board.kicad_pcb					
Title:				Board: Pump_board	
Size: A4		Date: 2024-12-04		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
×	24	0,33mm (12,99mils)	PTH	Round	L1 (Sig) - L4 (Sig.)	Pad
○	48	0,50mm (19,69mils)	PTH	Round	L1 (Sig) - L4 (Sig.)	Pad
+	4	0,60mm (23,62mils)	PTH	Slot	L1 (Sig) - L4 (Sig.)	Pad
□	16	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 117						



Designed for: TrendBit
Designed by: Petr_Malaník

Sheet:
File: pump_board.kicad_pcb

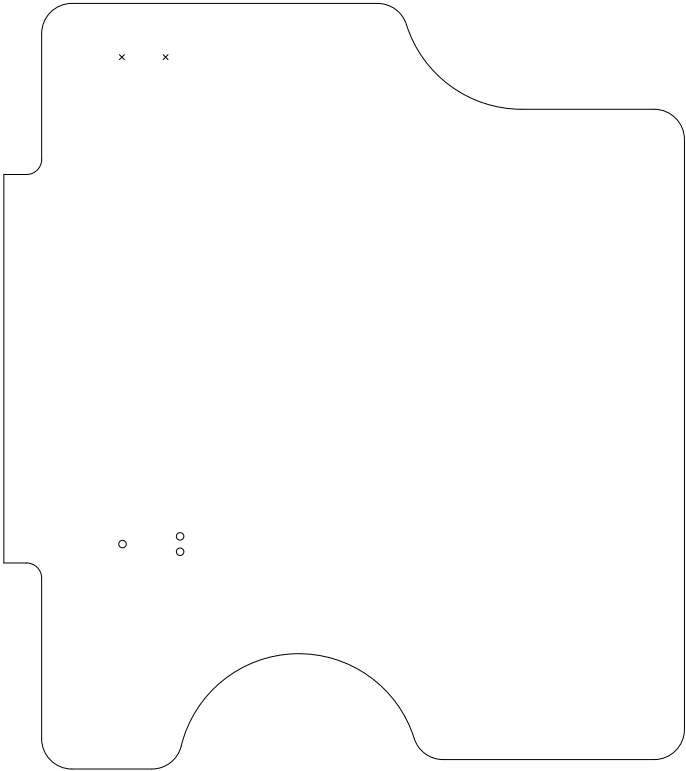
Project: SMPBR
Board: Pump_board

Title:			
Size: A4	Date: 2024-12-04	GIT hash: 71ab532	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						



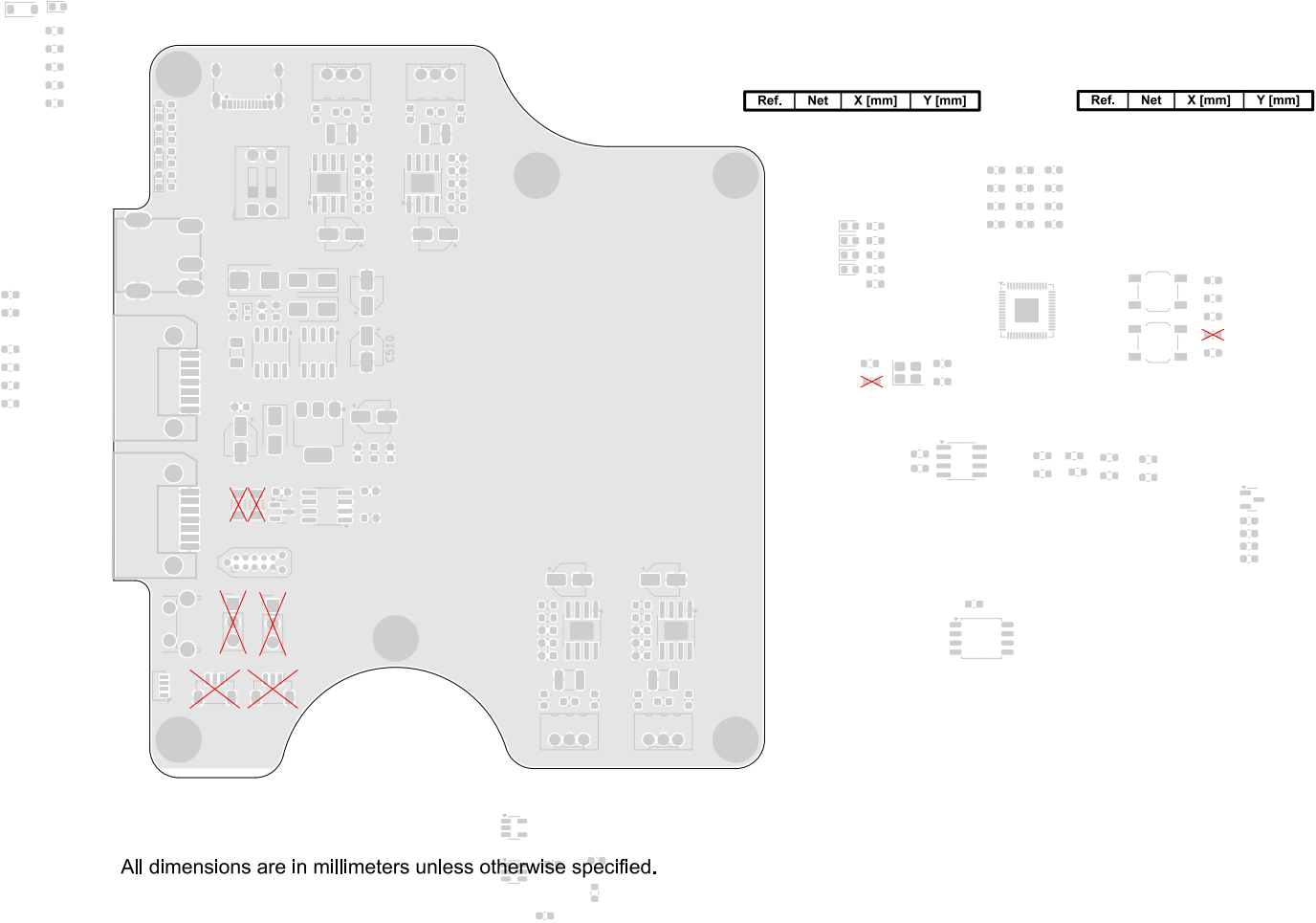
Designed for: TrendBit
Designed by: Petr_Malaník

Sheet:
File: pump_board.kicad_pcb


Project: SMPBR
Board: Pump_board

Title:			
Size: A4	Date: 2024-12-04	GIT hash: 71ab532	Rev: 1.0
KiCad E.D.A. 9.0.1+1 + KiBot v1.8.5			Id: 4/10

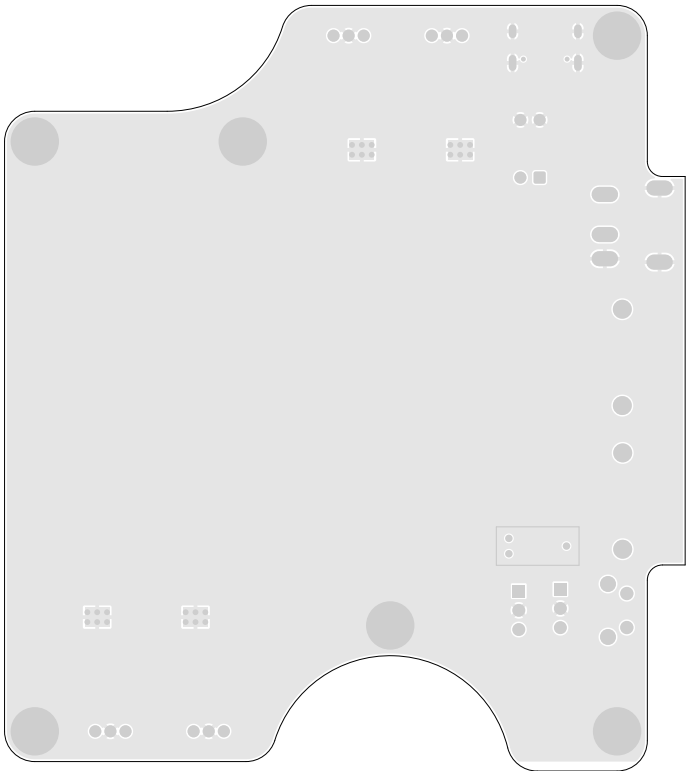
Top Test Points (Scale 1:1)



All dimensions are in millimeters unless otherwise specified.

<div>Designed for: TrendBit</div> <div>Designed by: Petr_Malanik</div> <div>Sheet:</div> <div>File: pump_board.kicad_pcb</div> <div>Title:</div>				<div></div> <div>Project: SMPBR</div> <div>Board: Pump_board</div>			
Size: A4		Date: 2024-12-04		GIT hash: 71ab532		Rev: 1.0	
KiCad E.D.A. 9.0.1+1 + KiBot v1.8.5						Id: 5/10	

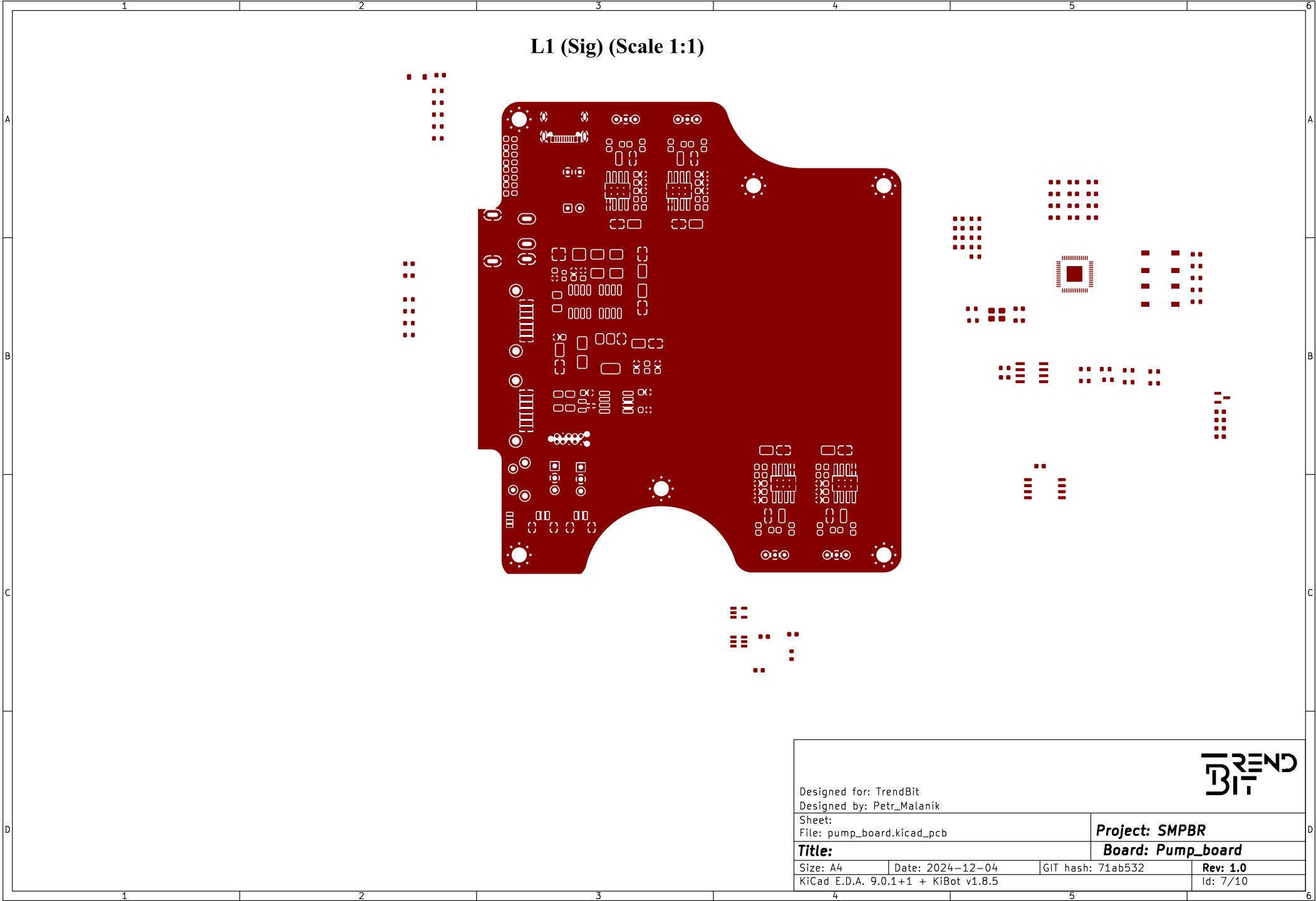
Bottom Test Points (Scale 1:1)



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

<div>Designed for: TrendBit</div> <div>Designed by: Petr_Malanik</div>				<div>TREND BIT</div>	
<div>Sheet:</div> <div>File: pump_board.kicad_pcb</div>				<div>Project: SMPBR</div>	
<div>Title:</div>				<div>Board: Pump_board</div>	
<div>Size: A4</div>		<div>Date: 2024-12-04</div>		<div>GIT hash: 71ab532</div>	
<div>KiCad E.D.A. 9.0.1+1 + KiBot v1.8.5</div>				<div>Rev: 1.0</div> <div>Id: 6/10</div>	



Designed for: TrendBit
Designed by: Petr_Malaník

Sheet:
File: pump_board.kicad_pcb

Title:

Project: SMPBR

Board: Pump_board

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

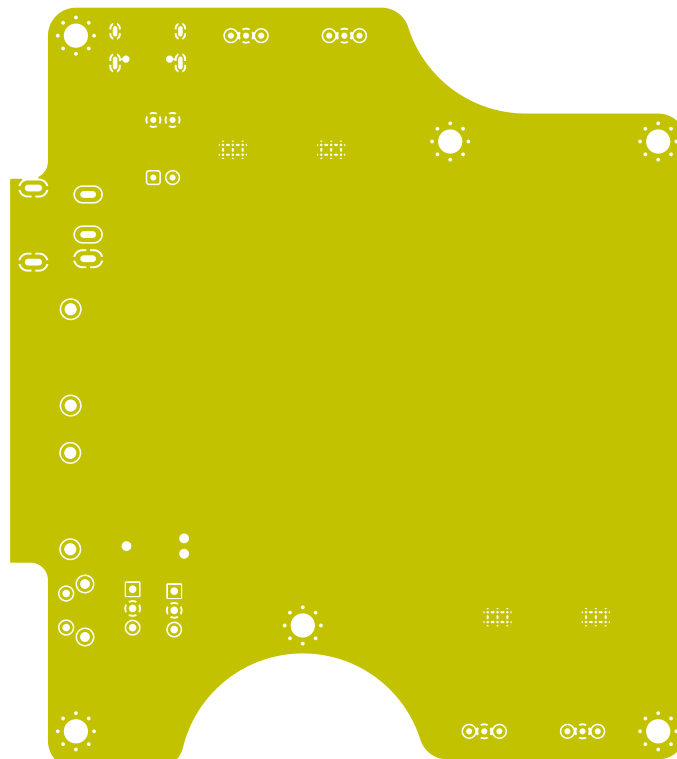
GIT hash: 71ab532

Rev: 1.0

Id: 7/10

TREND
BIT

L2 (GND) (Scale 1:1)



Designed for: TrendBit
Designed by: Petr_Malaník

Sheet:
File: pump_board.kicad_pcb

Title:

Project: SMPBR

Board: Pump_board

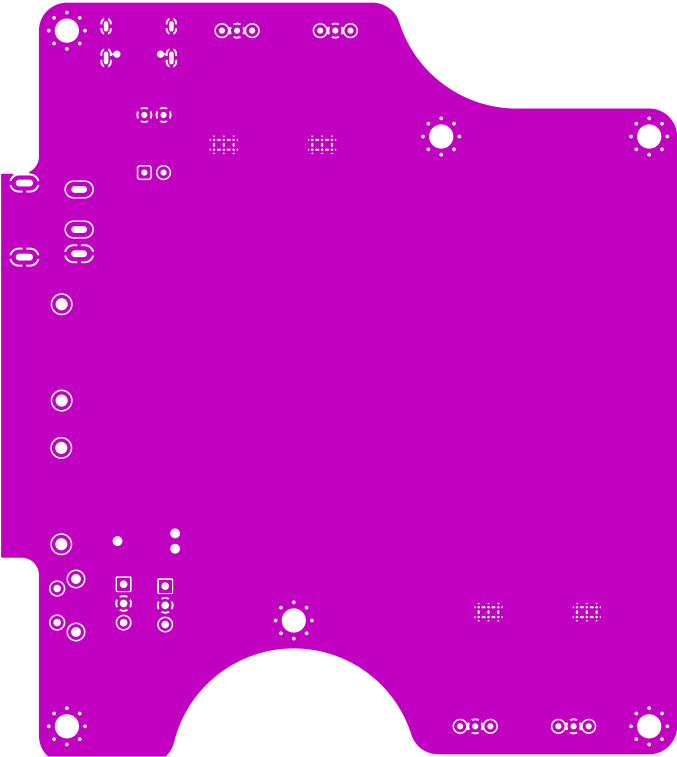
Size: A4
KiCad E.D.A. 9.0.1+1 + KiBot v1.8.5

Date: 2024-12-04
GIT hash: 71ab532

Rev: 1.0
Id: 8/10

TREND
BIT

L3 (PWR) (Scale 1:1)



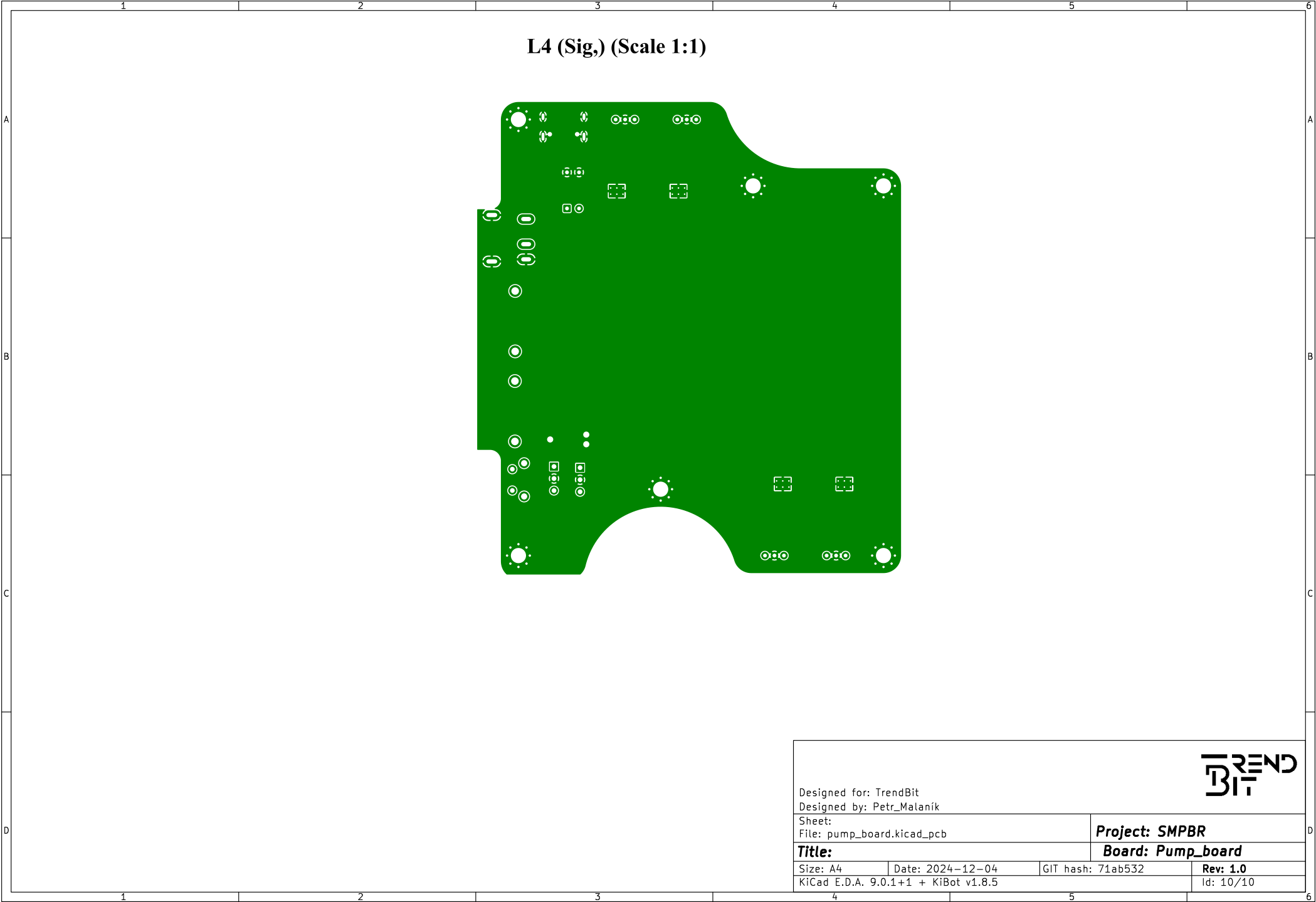
Designed for: TrendBit
Designed by: Petr_Malaník




Sheet:
File: pump_board.kicad_pcb

Project: SMPBR
Board: Pump_board

Title:	Size: A4	Date: 2024-12-04	GIT hash: 71ab532	Rev: 1.0
	KiCad E.D.A. 9.0.1+1 + KiBot v1.8.5			Id: 9/10



<div>Designed for: TrendBit</div> <div>Designed by: Petr_Malanik</div> <div>Sheet:</div> <div>File: pump_board.kicad_pcb</div>				<div></div> <div>Project: SMPBR</div>	
<div>Title:</div>				<div>Board: Pump_board</div>	
<div>Size: A4</div>	<div>Date: 2024-12-04</div>	<div>GIT hash: 71ab532</div>		<div>Rev: 1.0</div>	
<div>KiCad E.D.A. 9.0.1+1 + KiBot v1.8.5</div>				<div>Id: 10/10</div>	