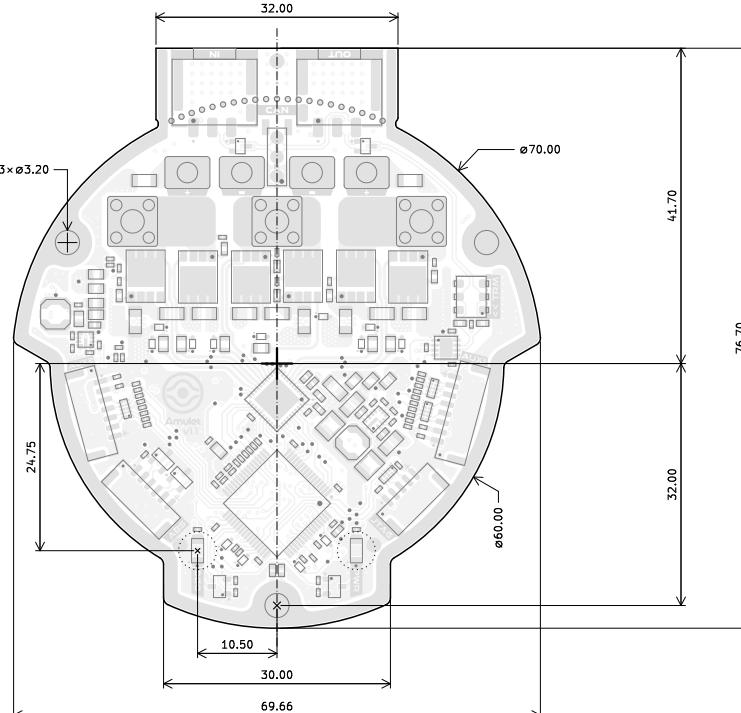


# Amulet Motion Controller Fabrication Document

## Top Fabrication (Scale 1:1)

Material	Layer	Thickness	Dielectric	Type	Gerber
	F.Paste			Paste Mask	
	F.Silkscreen		Direct Printing	Legend	GBR
	F.Mask	0.02mm	Solder Resist	Solder Mask	GBR
Copper	L1 (Sig. PWR)	0.07mm (2oz)		Signal	GBR
Prepreg	L2 (GND)	0.18mm	FR4_7628	Dielectric	
Copper	L3 (Sig. PWR)	0.035mm (1oz)		Plane	GBR
Core		0.4mm	FR4	Dielectric	
Copper	L4 (Sig. PWR)	0.035mm (1oz)		Signal	GBR
Core		0.4mm	FR4	Dielectric	
Copper	L5 (GND)	0.035mm (1oz)		Signal	GBR
Prepreg	L6 (Sig. PWR)	0.18mm	FR4_7628	Dielectric	
Copper	B.Mask	0.02mm	Solder Resist	Plane	GBR
	B.Silkscreen		Direct Printing	Solder Mask	GBR
	B.Paste			Legend	GBR
				Paste Mask	

Total thickness: 1.66mm  
Note: external layer thicknesses are specified after plating



### FABRICATION NOTES (UNLESS OTHERWISE SPECIFIED)

- OUTLINE DEFINED IN SEPARATE GERBER FILE WITH "Edge\_Cuts.GBR" SUFFIX.  
DIMENSIONS OF CIRCUMSIZEZED RECTANGLE SHOWN ON THIS DWG FOR REF ONLY.
- SEE SEPARATE DRILL FILES WITH ".DRL" SUFFIX FOR HOLE LOCATIONS.  
SELECTED HOLE LOCATIONS SHOWN ON THIS DWG FOR REF ONLY.
- IMPEDANCE CONTROL REQUIRED.  
Microstrip 100-Ohm Differential (L1 ref. L2)  
0.2032mm width, 0.28mm spacing
- CONFIRM TRACE WIDTHS AND SPACINGS.
- DESIGN GEOMETRY MINIMUM FEATURE SIZES:  

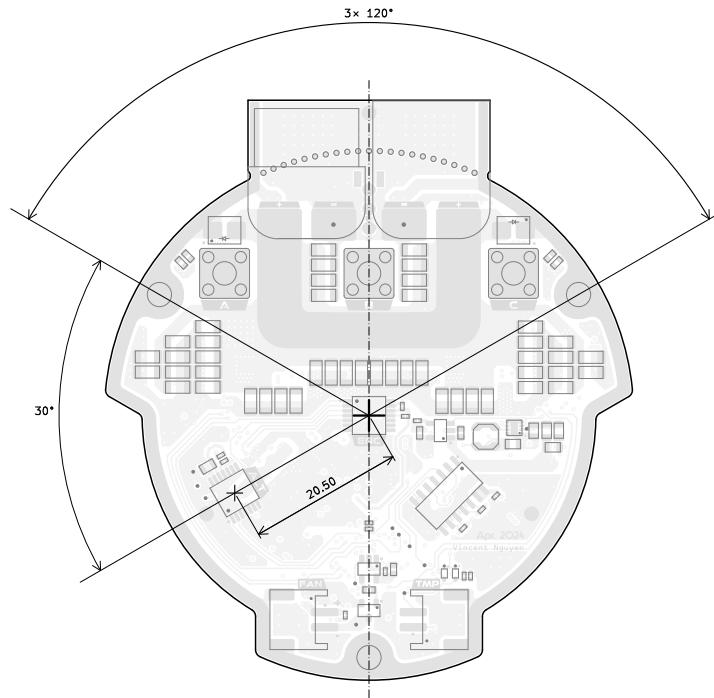
TRACE WIDTH	0.20 mm
TRACE TO TRACE	0.20 mm
MIN. HOLE (PTH)	0.25 mm
MIN. HOLE (NPTH)	0.70 mm
ANNULLAR RING	0.15 mm
COPPER TO HOLE	0.254 mm
COPPER TO EDGE	0.25 mm
HOLE TO HOLE	0.254 mm

All dimensions are in millimeters unless otherwise specified.

	Comments:	Company: EPFL Xplore Research ABC	Variant: Xplore NO_SNUBBER
	Board Name: <b>Amulet Motion Controller</b>	Project Name: <b>Chienpanzé</b>	
	Sheet Title: Top Fabrication	File Name: amulet_controller.kicad_pcb	Designer: Vincent Nguyen
	Sheet Path:	Reviewer:	Date: 2024-04-13 Revision: 1.1
		Size: A4	Sheet: 1 of 11

# Amulet Motion Controller Fabrication Document

**Bottom Fabrication (Scale 1:1)**



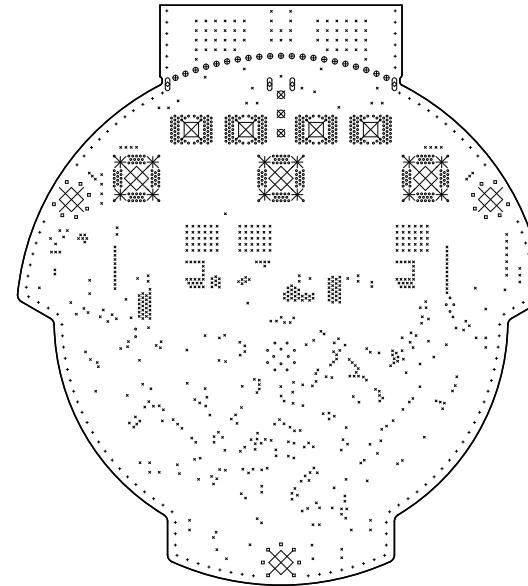
All dimensions are in millimeters unless otherwise specified.

	Comments:	Company: EPFL Xplore Research ABC	Variant: NO_SNUBBER
	Board Name: <b>Amulet Motion Controller</b>		Project Name: <b>Chienpanzé</b>
	Sheet Title: Bottom Fabrication	File Name: amulet_controller.kicad_pcb	Designer: Vincent Nguyen
	Sheet Path:	Reviewer:	Date: 2024-04-13      Revision: 1.1
			Size: <b>A4</b> Sheet: <b>2</b> of <b>11</b>

# Amulet Motion Controller Fabrication Document

## Drill Drawing (Top View) (Scale 1:1)

Symbol	Count	Hole Size	Plated
•	674	0.25mm	Plated
•	438	0.25mm	Plated
•	120	0.30mm	Plated
▫	21	0.50mm	Plated
◊	4 (slot)	0.60mm	Plated
☒	3	1.00mm	Plated
✳	12	1.50mm	Plated
☒	4	2.70mm	Plated
☒	6	3.20mm	Plated
●	21	0.70mm	Unplated

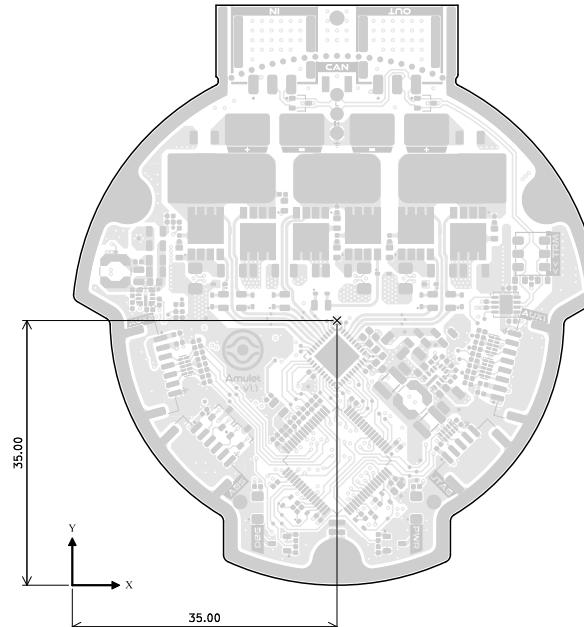


	Comments:	Company: EPFL Xplore Research ABC	Variant: NO_SNUBBER
	Board Name: <b>Amulet Motion Controller</b>		
	Sheet Title: Drill Map	File Name: amulet_controller.kicad_pcb	Designer: Vincent Nguyen
	Sheet Path:	Reviewer:	Date: 2024-04-13 Revision: 1.1
			Size: A4 Sheet: 3 of 11

# Amulet Motion Controller Fabrication Document

Ref.	Net	X	Y
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Top Test Points (Scale 1:1)



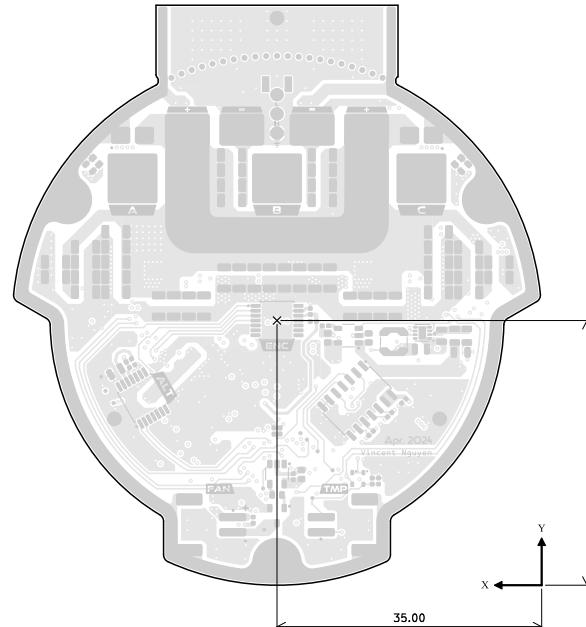
All dimensions are in millimeters unless otherwise specified.

	Comments:	Company: EPFL Xplore Research ABC	Variant: NO_SNUBBER	
	Board Name: <b>Amulet Motion Controller</b>	Project Name: <b>Chienpanzé</b>		
	Sheet Title: Top Test Points	File Name: amulet_controller.kicad_pcb	Designer: Vincent Nguyen	Date: 2024-04-13
Sheet Path:		Reviewer:	Size: <b>A4</b>	Sheet: <b>4</b> of <b>11</b>

# Amulet Motion Controller Fabrication Document

Ref.	Net	X	Y
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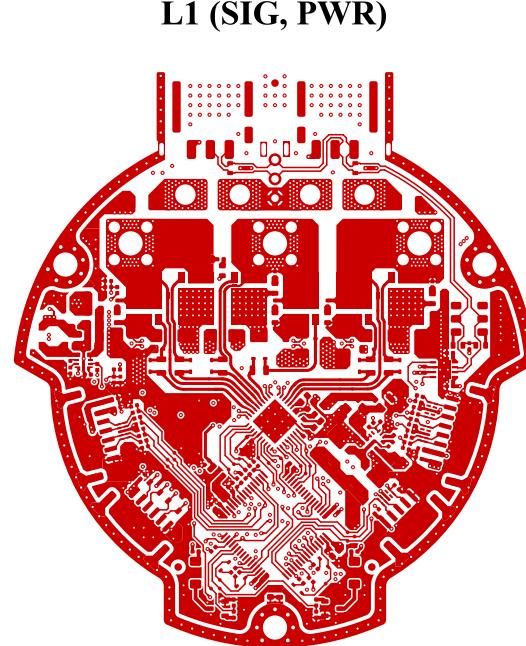
**Bottom Test Points (Scale 1:1)**



All dimensions are in millimeters unless otherwise specified.

	Comments:	Company: EPFL Xplore Research ABC	Variant: Xplore NO_SNUBBER
	Board Name: <b>Amulet Motion Controller</b>	Project Name: <b>Chienpanzé</b>	
	Sheet Title: Bottom Test Points	File Name: amulet_controller.kicad_pcb	Designer: Vincent Nguyen
	Sheet Path:	Reviewer:	Date: 2024-04-13 Revision: 1.1
			Size: A4 Sheet: 5 of 11

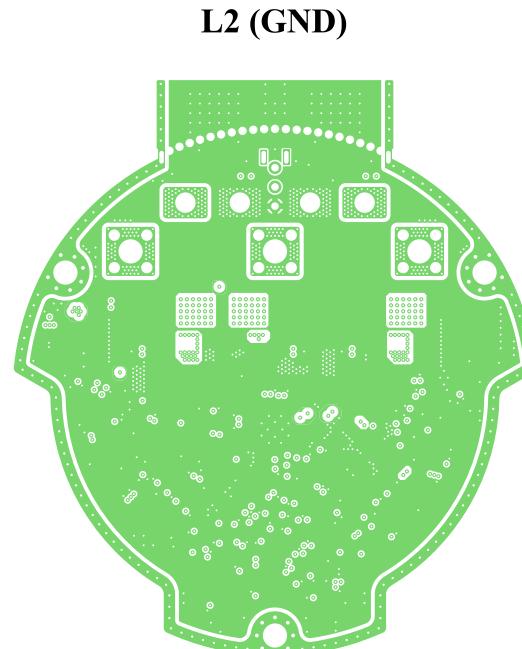
# Amulet Motion Controller Fabrication Document



**L1 (SIG, PWR)**

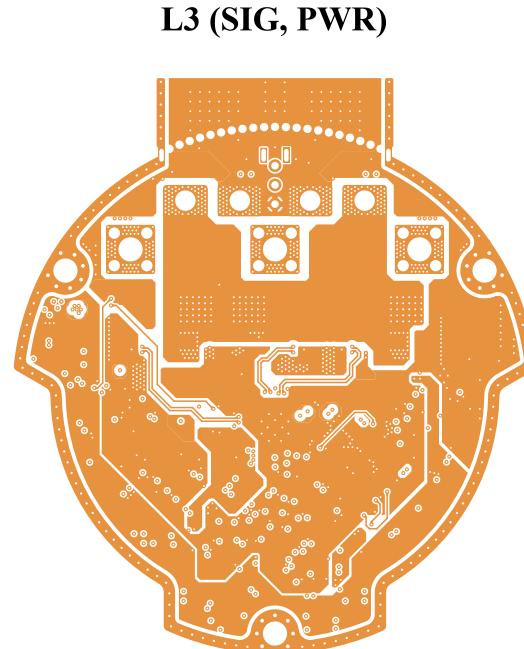
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	Board Name: <b>Amulet Motion Controller</b>	Project Name: <b>Chienpanzé</b>	
	Sheet Title: F.Cu	File Name: amulet_controller.kicad_pcb	Designer: Vincent Nguyen
	Sheet Path:	Reviewer:	Date: 2024-04-13 Revision: 1.1
			Size: A4 Sheet: 6 of 11

# Amulet Motion Controller Fabrication Document



	Comments:	Company: EPFL Xplore Research ABC	Variant: NO_SNUBBER
	Board Name: <b>Amulet Motion Controller</b>	Project Name: <b>Chienpanzé</b>	
	Sheet Title: In1.Cu	File Name: amulet_controller.kicad_pcb	Designer: Vincent Nguyen
	Sheet Path:	Reviewer:	Date: 2024-04-13 Revision: 1.1
			Size: A4 Sheet: 7 of 11

# Amulet Motion Controller Fabrication Document

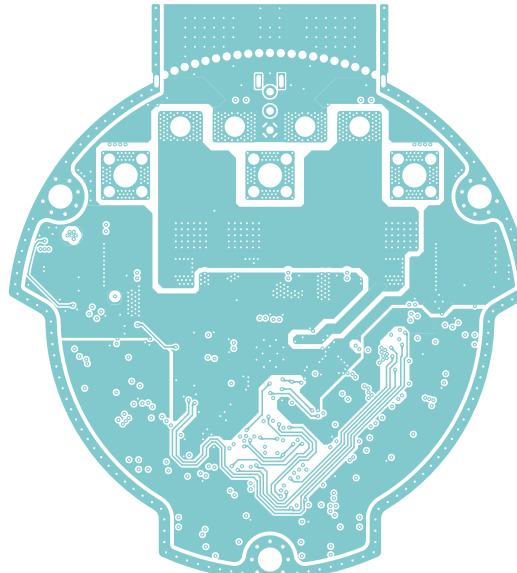


L3 (SIG, PWR)

	Comments:	Company: EPFL Xplore Research ABC	Variant: NO_SNUBBER
	Board Name: <b>Amulet Motion Controller</b>	Project Name: <b>Chienpanzé</b>	
	Sheet Title: In2.Cu	File Name: amulet_controller.kicad_pcb	Designer: Vincent Nguyen
	Sheet Path:	Reviewer:	Date: 2024-04-13 Revision: 1.1
			Size: A4 Sheet: 8 of 11

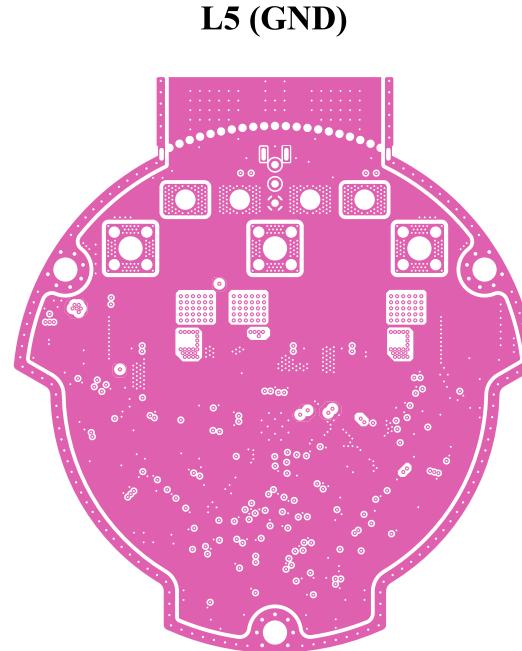
# Amulet Motion Controller Fabrication Document

L4 (SIG, PWR)



	Comments:	Company: EPFL Xplore Research ABC	Variant: NO_SNUBBER
	Board Name: <b>Amulet Motion Controller</b>	Project Name: <b>Chienpanzé</b>	
	Sheet Title: In3.Cu	File Name: amulet_controller.kicad_pcb	Designer: Vincent Nguyen
	Sheet Path:	Reviewer:	Date: 2024-04-13 Revision: 1.1
			Size: A4 Sheet: 9 of 11

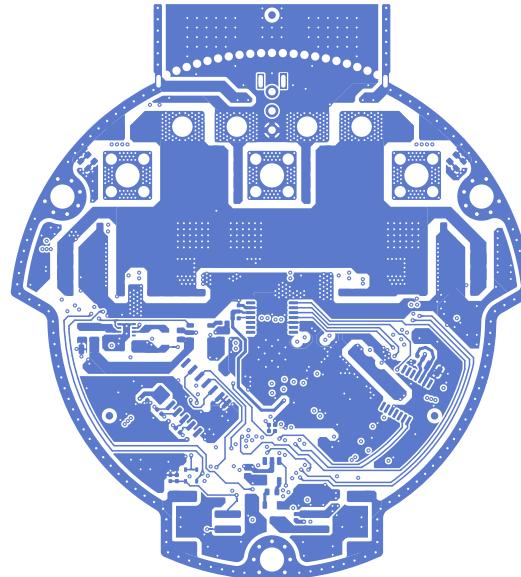
# Amulet Motion Controller Fabrication Document



	Comments:	Company: EPFL Xplore Research ABC	Variant: NO_SNUBBER
	Board Name: <b>Amulet Motion Controller</b>	Project Name: <b>Chienpanzé</b>	
	Sheet Title: In4.Cu	File Name: amulet_controller.kicad_pcb	Designer: Vincent Nguyen
	Sheet Path:	Reviewer:	Date: 2024-04-13 Revision: 1.1
			Size: <b>A4</b> Sheet: <b>10</b> of <b>11</b>

# Amulet Motion Controller Fabrication Document

L6 (SIG, PWR)



	Comments:	Company: EPFL Xplore Research ABC	Variant: NO_SNUBBER
	Board Name: <b>Amulet Motion Controller</b>	Project Name: <b>Chienpanzé</b>	
	Sheet Title: B.Cu	File Name: amulet_controller.kicad_pcb	Designer: Vincent Nguyen
	Sheet Path:	Reviewer:	Date: 2024-04-13 Revision: 1.1
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