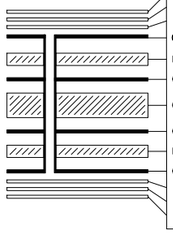
DEV FLIGHTCOMPUTER V1.0 Fabrication Document

Layer Stack Legend

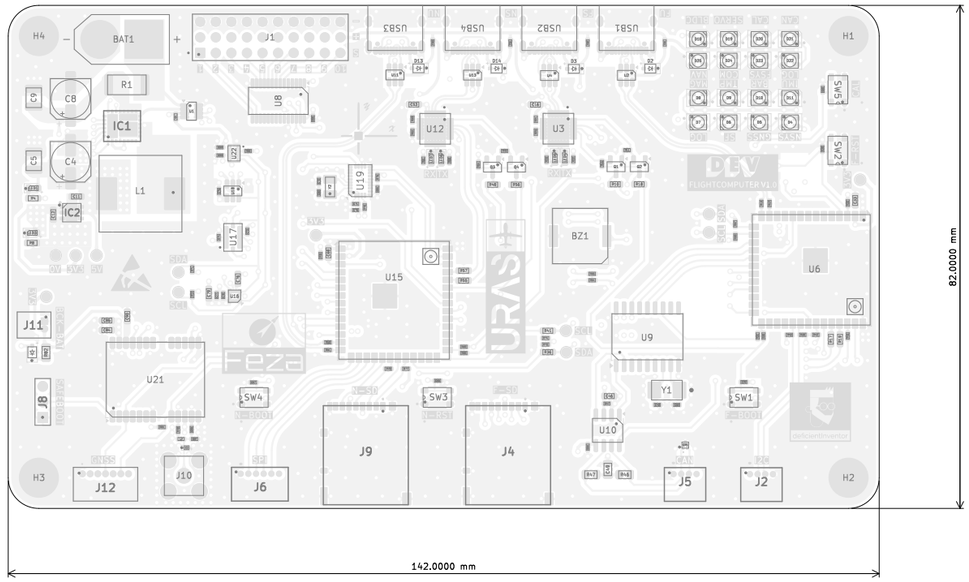


Material	Layer	Thickness	Dielectric Material	Type	Gerber
	F.Paste			Paste Mask	GBR
	F.Silkscreen			Legend	GBR
	F.Mask		Solder Resist	Solder Mask	GBR
Copper	**L1 (Sig)**	**0.035mm (1oz)**		**Signal**	**GBR**
Prepreg		0.196mm	FR-4	Dielectric	
Copper	**L2 (GND)**	**0.035mm (1oz)**		**Internal Plane**	**GBR**
Core		1.03mm	FR-4	Dielectric	
Copper	**L3 (PWR)**	**0.035mm (1oz)**		**Signal**	**GBR**
Prepreg		0.196mm	FR-4	Dielectric	
Copper	**L4 (Sig)**	**0.035mm (1oz)**		**Signal**	**GBR**
	B.Mask		Solder Resist	Solder Mask	GBR
	B.Silkscreen			Legend	GBR
	B.Paste			Paste Mask	GBR

Total thickness: 1.58mm – Finished PCB Thickness: 1.61mm +– 10%

Note: external layer thicknesses are specified after plating.

Top Fabrication (Scale 1:1)



FABRICATION NOTES (UNLESS OTHERWISE SPECIFIED)

1) OUTLINE DEFINED IN SEPARATE GERBER FILE WITH "Edge_Cuts.GBR" SUFFIX.

2) SEE SEPARATE DRILL FILES WITH ".DRL" SUFFIX FOR HOLE LOCATIONS. SELECTED HOLE LOCATIONS SHOWN ON THIS DWG FOR REF ONLY.

3) IMPEDANCE CONTROL REQUIRED.
   – Microstrip 90–Ohm Differential (L1 ref. L2)
     0.35mm width, 0.15mm gap
   – Microstrip 50–Ohm RF & other Signals (L1 ref. L2)
     0.327mm width

4) CONFIRM TRACE WIDTHS AND SPACINGS.

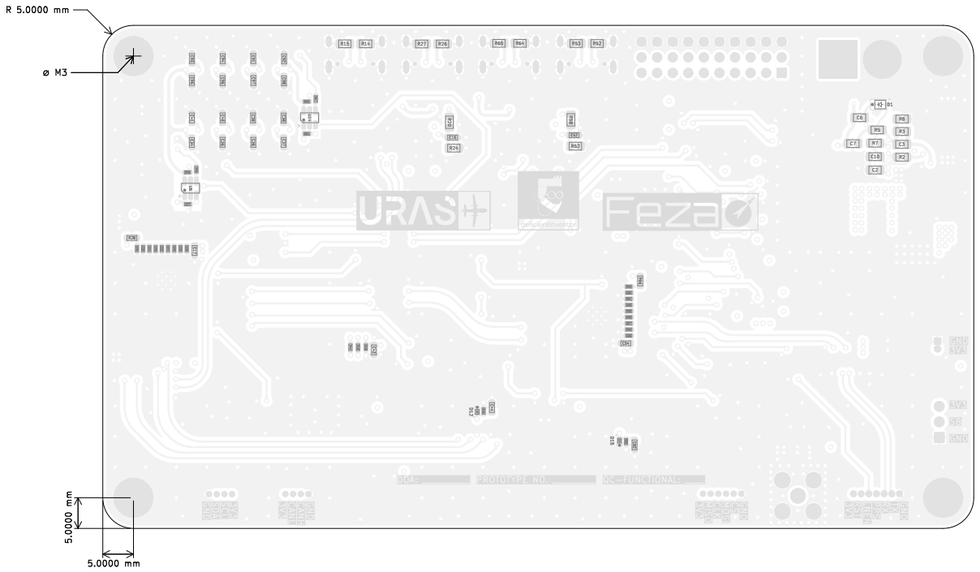
5) CONFIRM SOLDERMASK SPECIFICATIONS (ESPECIALLY FROM BMI088 & CP2102N)

All dimensions are in millimeters unless otherwise specified.

FEZA PCB - FABRICATION_TOP - Page 1/7		
Sheet: FABRICATION_TOP File: feza_fcu_pcb.kicad_pcb		
Title: FEZA DEV Flightcomputer V1.0		
Size: A3	Date: 2025-01-03	**Rev: V1.0**
KiCad E.D.A. 8.0.7		Id: 1 of 1

DEV FLIGHTCOMPUTER V1.0 Fabrication Document

Bottom Fabrication (Scale 1:1)

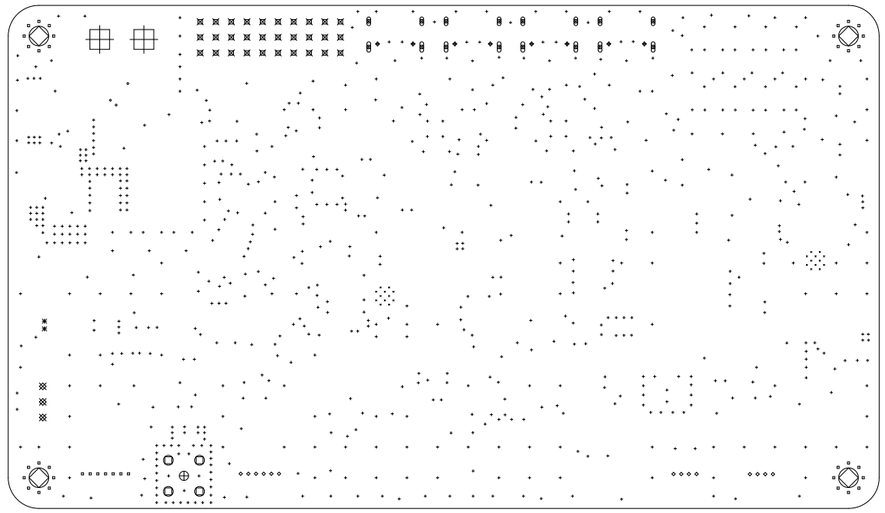


All dimensions are in millimeters unless otherwise specified.

FEZA PCB - FABRICATION_BOT - Page 2/7	deficientInventor / Feza
Sheet: FABRICATION_BOT File: feza_fcu_pcb.kicad_pcb	
Title: FEZA DEV Flightcomputer V1.0	
Size: A3 / Date: 2025-01-03	**Rev: V1.0**
KiCad E.D.A. 8.0.7	Id: 1 of 1

DEV FLIGHTCOMPUTER V1.0 Fabrication Document

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



Drill Map

Symbol	Count	Hole Size	Plated
·	24	0.20mm	Plated
·	3	0.30mm	Plated
·	779	0.40mm	Plated
▫	39	0.50mm	Plated
◇	14	0.55mm	Plated
▪	16 (slot)	0.60mm	Plated
◆	8	0.65mm	Unplated
✕	2	0.70mm	Plated
⊠	30	1.02mm	Plated
※	3	1.10mm	Plated
⊕	1	1.50mm	Plated
○	4	1.60mm	Plated
◇	4	3.20mm	Plated
⊞	2	4.55mm	Plated

Sheet: DRILL_DRAWING
File: feza_fcu_pcb.kicad_pcb

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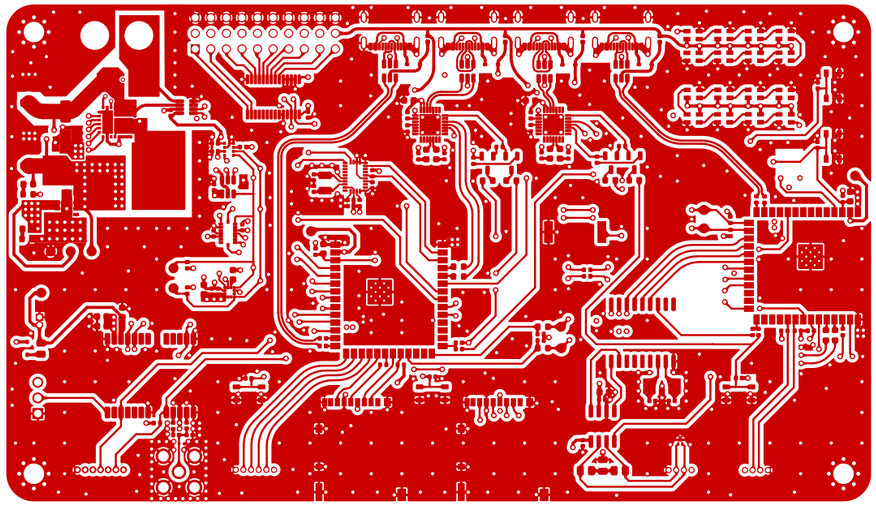
Size: A3	Date: 2025-01-03	**Rev: V1.0**
KiCad E.D.A. 8.0.7		Id: 1 of 1

DEV FLIGHTCOMPUTER V1.0 Fabrication Document

L1 (SIG)



FEZA PCB - L1 - Page 4/7

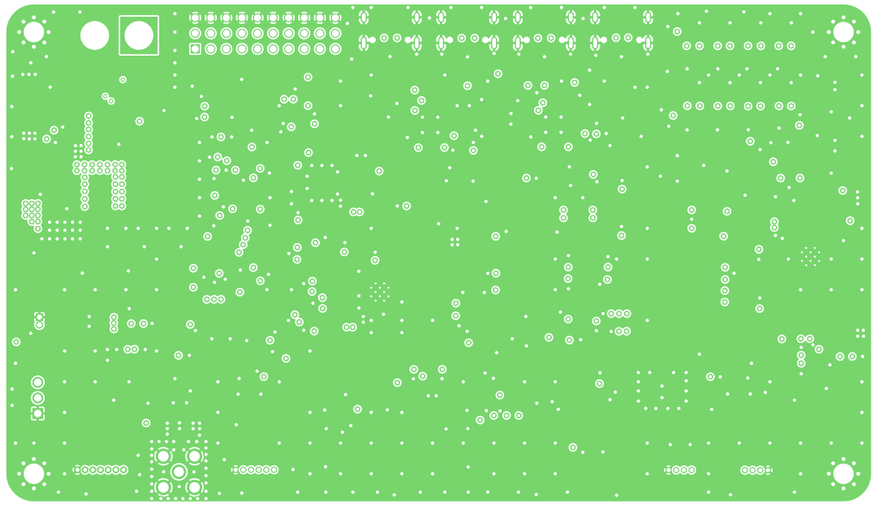
Sheet: L1
File: feza_fcu_pcb.kicad_pcb

Title: FEZA DEV Flightcomputer V1.0

Size: A3	Date: 2025-01-03	**Rev: V1.0**
KiCad E.D.A. 8.0.7		Id: 1 of 1

DEV FLIGHTCOMPUTER V1.0 Fabrication Document

L2 (GND)



FEZA PCB - L2 - Page 5/7

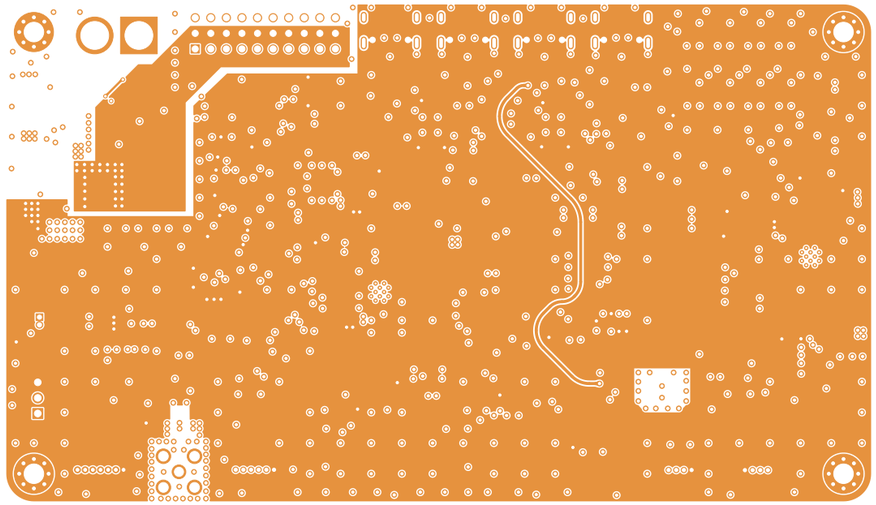
Sheet: L2
File: feza_fcu_pcb.kicad_pcb

Title: FEZA DEV Flightcomputer V1.0

Size: A3	Date: 2025-01-03	**Rev: V1.0**
KiCad E.D.A. 8.0.7		Id: 1 of 1

DEV FLIGHTCOMPUTER V1.0 Fabrication Document

L3 (PWR)



FEZA PCB - L3 - Page 6/7

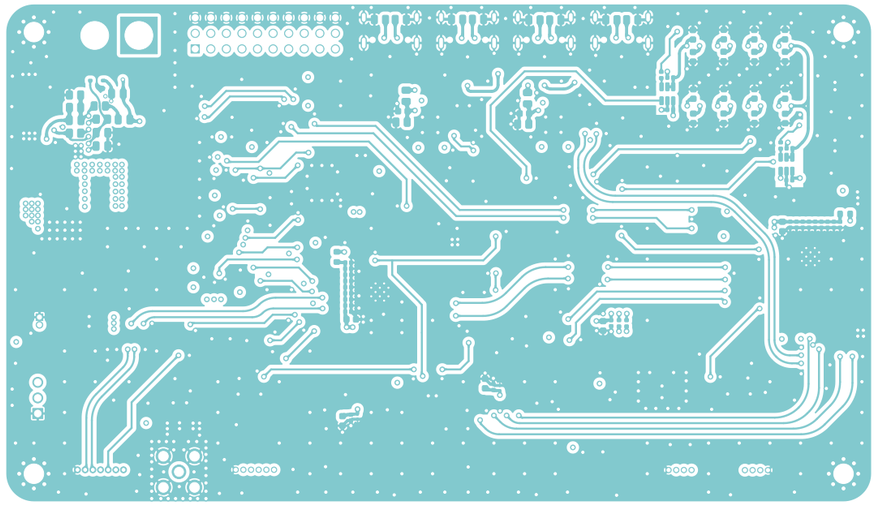
Sheet: L3
File: feza_fcu_pcb.kicad_pcb

Title: FEZA DEV Flightcomputer V1.0

Size: A3	Date: 2025-01-03	**Rev: V1.0**
KiCad E.D.A. 8.0.7		Id: 1 of 1

DEV FLIGHTCOMPUTER V1.0 Fabrication Document

L4 (SIG)



FEZA PCB - L4 - Page 7/7

Sheet: L4
File: feza_fcu_pcb.kicad_pcb

Title: FEZA DEV Flightcomputer V1.0

Size: A3	Date: 2025-01-03	**Rev: V1.0**
KiCad E.D.A. 8.0.7		Id: 1 of 1