

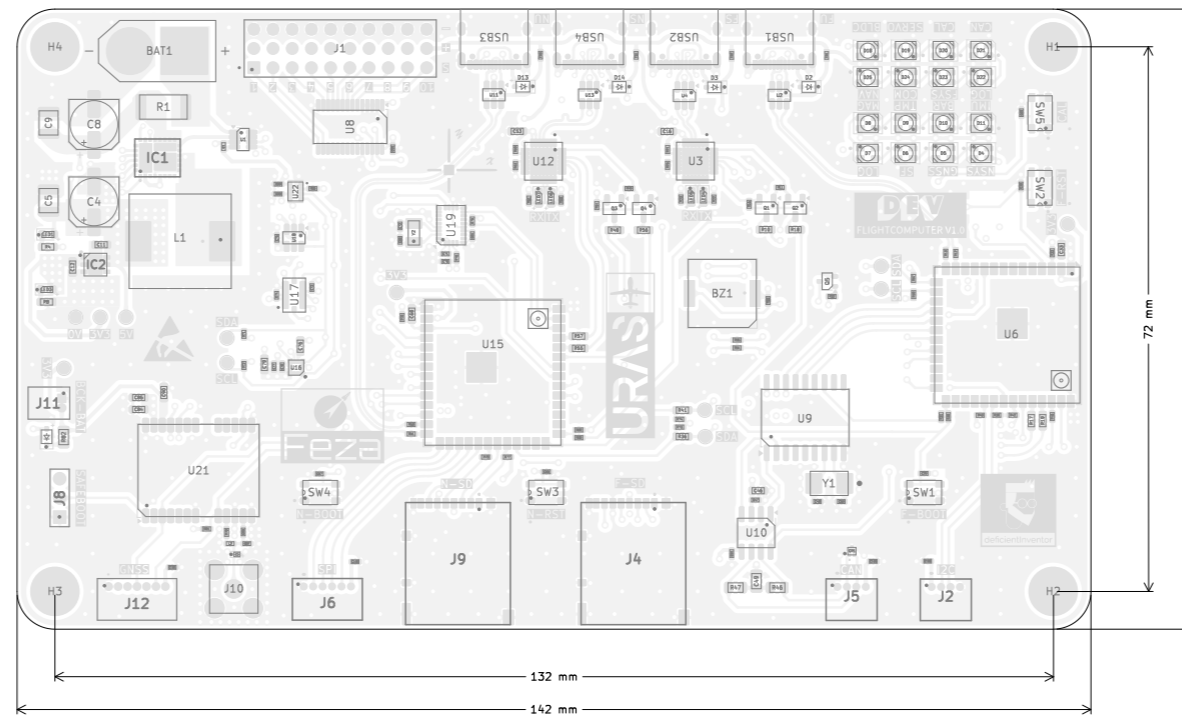
DEV FLIGHTCOMPUTER V1.0 Fabrication Document

Top Fabrication (Scale 1:1)

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.



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 Signals (L1 ref. L2)
 - 0.327mm width
 - Coplanar wave guide w/ ground plane 50-Ohm RF (L1 ref. L2)
 - 0.37mm width, 0.6mm spacing
- 4) CONFIRM TRACE WIDTHS AND SPACINGS (ESPECIALLY FOR RF & USB TRACES)
- 5) CONFIRM SOLDERMASK SPECIFICATIONS (ESPECIALLY FROM BMI088 & CP2102N)

All dimensions are in millimeters unless otherwise specified.



DEV FLIGHTCOMPUTER V1.0 Fabrication Document

Bottom Fabrication (Scale 1:1)



All dimensions are in millimeters unless otherwise specified.

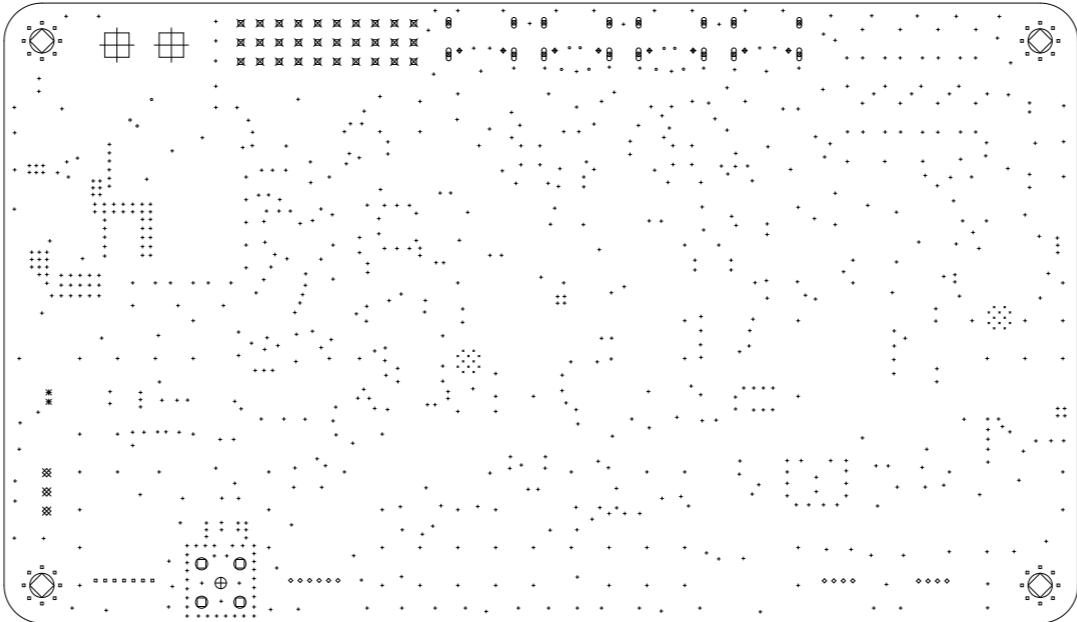
FEZA PCB - FABRICATION_BOT - Page 2/7



| | | |
|--------------------------------------------|------------------|-----------|
| Sheet: FABRICATION_BOT | | |
| File: feza_fcu_pcb.kicad_pcb | | |
| Title: FEZA DEV Flightcomputer V1.0 | | |
| Size: A3 | Date: 2025-01-03 | Rev: V1.1 |
| KiCad E.D.A. 8.0.7 | Id: 1 of 1 | |



DEV FLIGHTCOMPUTER V1.0 Fabrication Document

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



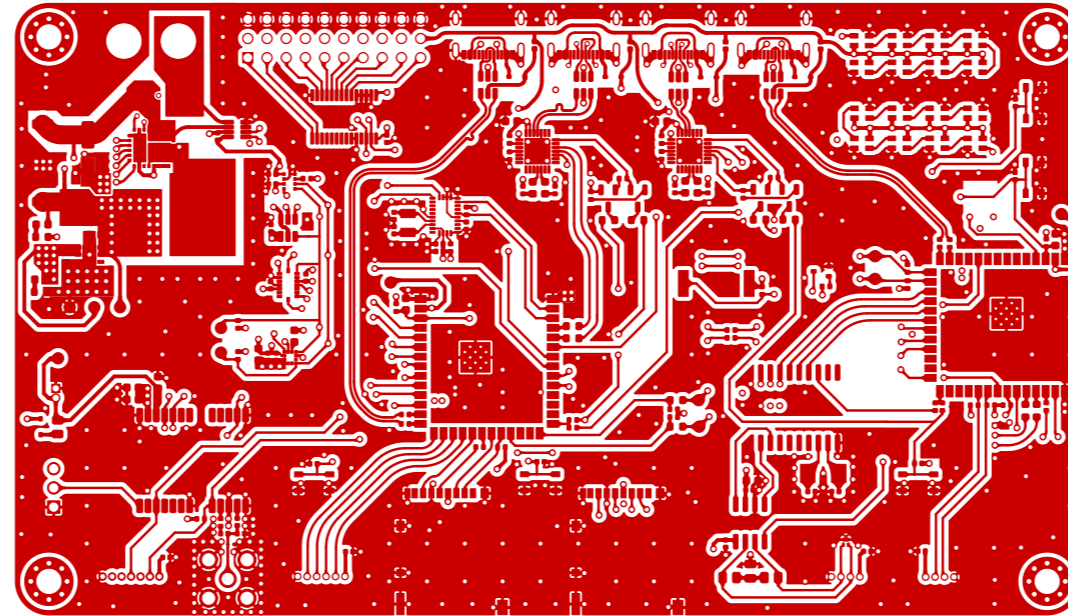
Drill Map

| Symbol | Count | Hole Size | Plated |
|--------|-----------|-----------|----------|
| . | 24 | 0.20mm | Plated |
| · | 11 | 0.30mm | Plated |
| · | 768 | 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 |

| | | | |
|------------------------------------------------------|------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| FEZA PCB - DRILL_DRAWING - Page 3/7 | |  |  |
| Sheet: DRILL_DRAWING File: feza_fcu_pcb.kicad_pcb | | | |
| Title: FEZA DEV Flightcomputer V1.0 | | | |
| Size: A3 | Date: 2025-01-03 | Rev: V1.1 | |
| KiCad E.D.A. 8.0.7 | | Id: 1 of 1 | |

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L1 (SIG)



FEZA PCB - L1 - Page 4/7



Sheet: L1
File: feza_fcu_pcb.kicad_pcb

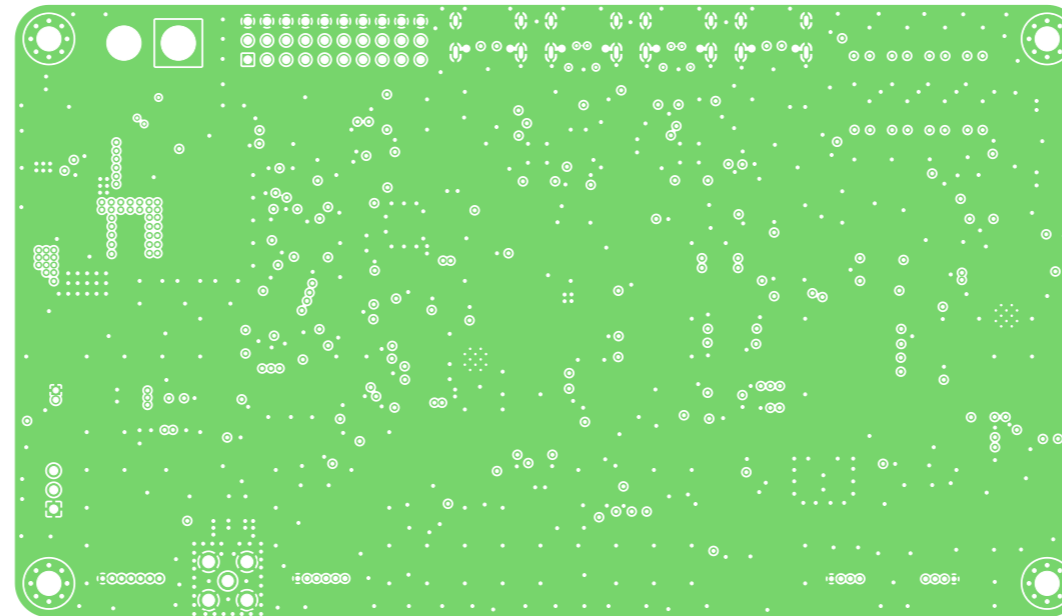
Title: FEZA DEV Flightcomputer V1.0

Size: A3 Date: 2025-01-03
KiCad E.D.A. 8.0.7

Rev: V1.1
Id: 1 of 1

DEV FLIGHTCOMPUTER V1.0 Fabrication Document

L2 (GND)



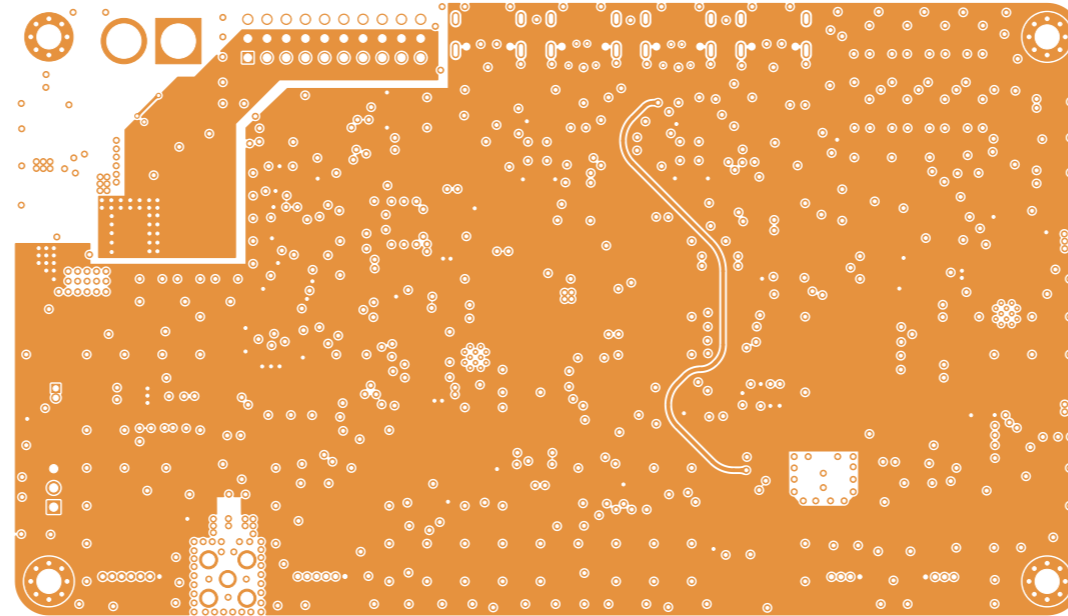
FEZA PCB - L2 - Page 5/7



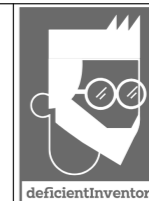
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| Title: FEZA DEV Flightcomputer V1.0 | | Rev: V1.1 | |
| Size: A3 | Date: 2025-01-03 | Id: 1 of 1 | |
| KiCad E.D.A. 8.0.7 | | | |

DEV FLIGHTCOMPUTER V1.0 Fabrication Document

L3 (PWR)



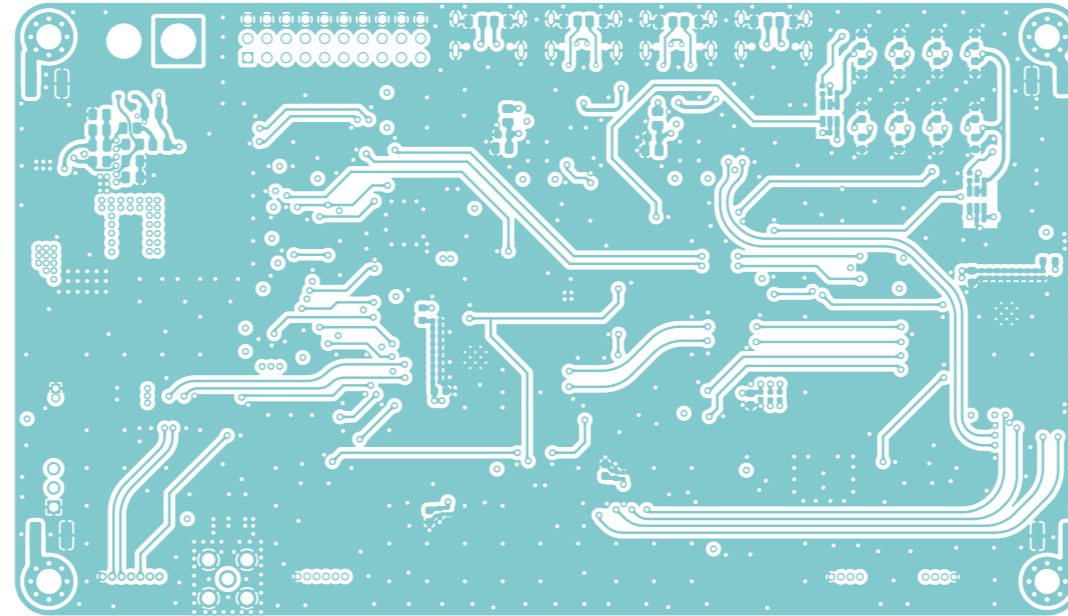
FEZA PCB - L3 - Page 6/7



| | | | |
|--------------------------------------------|------------------|------------------------------|--|
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| Title: FEZA DEV Flightcomputer V1.0 | | Rev: V1.1 | |
| Size: A3 | Date: 2025-01-03 | Id: 1 of 1 | |
| KiCad E.D.A. 8.0.7 | | | |

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