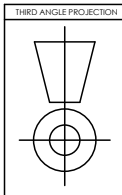


PCB Details


1. Minimum Trace/Space: 10/10 mil
2. Stackup: See Page 4
3. Dimensions: 5in x 3in
4. Via Types: Through
5. Hole tolerances are  $\pm 3\text{mil}$  unless otherwise noted
6. Epoxy fill and planarize vias of the following sizes:  
N/A

Requirements

7. ELECTRICAL TEST:  
Vendor to perform Electrical Test against provided netlist file.
8. PANELIZATION:  
Vendor to panelize design as 1-up array
9. HANDLING TABS:  
Vendor to add 2 handling tabs to panelized array along indicated edges.  
Handling tabs shall be 0.5" in width.  
Handling tabs shall include 2x 0.125in tooling holes and 2x 0.31in fiducials
10. VENDOR LOGO:  
Vendor may add their logo on silkscreen at indicated location.
11. THIEVING:  
Vendor shall not add thieving within the PCB outline. Vendor may add thieving as required to the handling tabs to meet manufacturability requirements.
12. SERIALIZATION:  
Vendor to add serial numbers to each board at indicated location.  
Serial Number shall be of the following format: YYWWNNNN  
YY - 2-digit year of manufacture  
WW - 2-digit week of manufacture  
NNNN - 4-digit serial number within manufacturing lot.



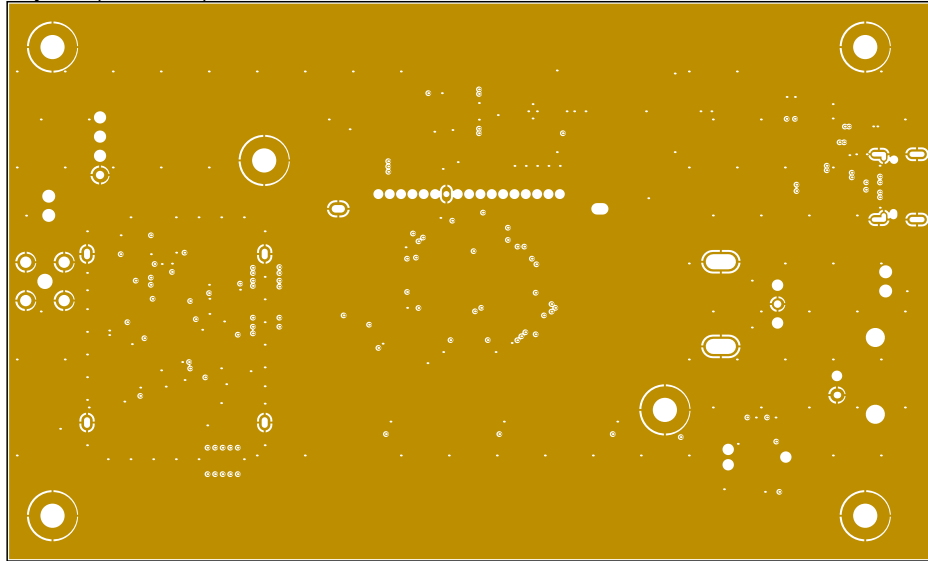
APPROVALS		DATE
ENGINEER:	Alexander Davis	9/16/2024
PART NO:	FL-0004	REV: <b>A</b>
VARIANT:	[No Variations]	



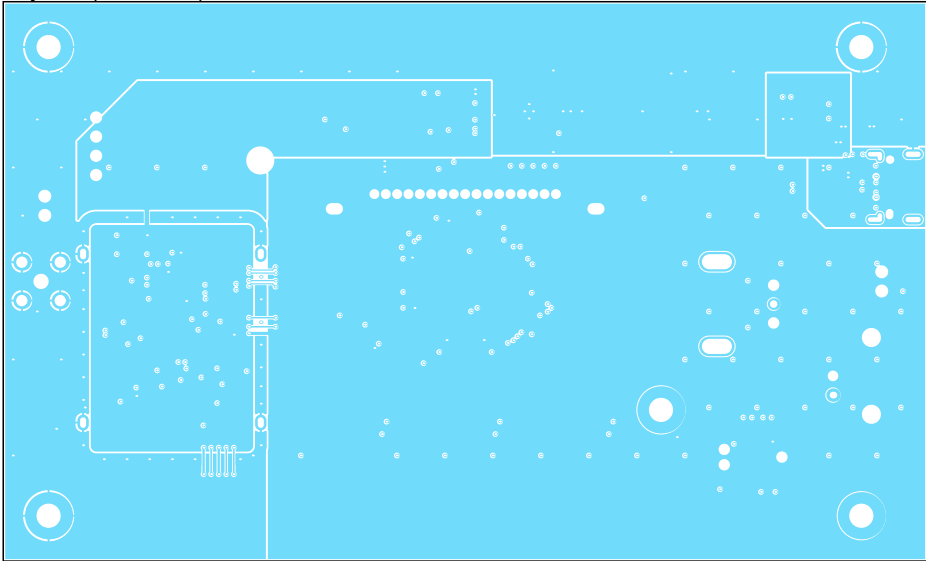
8921 E. Summer Trail  
Tucson, AZ 85749  
Tucson, AZ 85749  
www.flycatcherlabs.com

TITLE: Power Rail Probe		SIZE: <b>B</b>
Designed For: Public Release		
©2024 Flycatcher Labs - All Rights Reserved		
SCALE:	FILE NAME: Fabrication.PCBDwf	SHEET: 1 OF 4

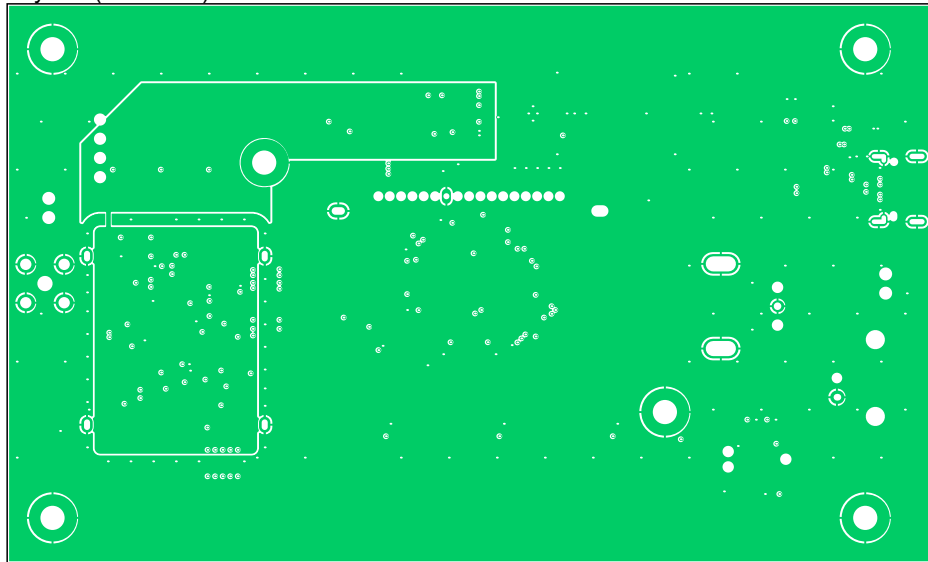
Layer 2 (Scale 1:1)



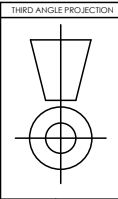
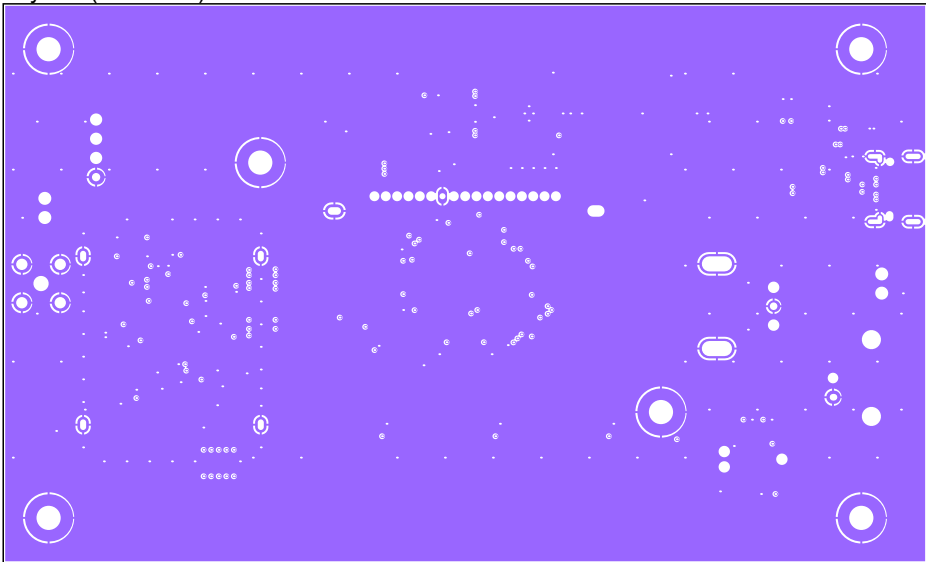
Layer 3 (Scale 1:1)




Layer 4 (Scale 1:1)



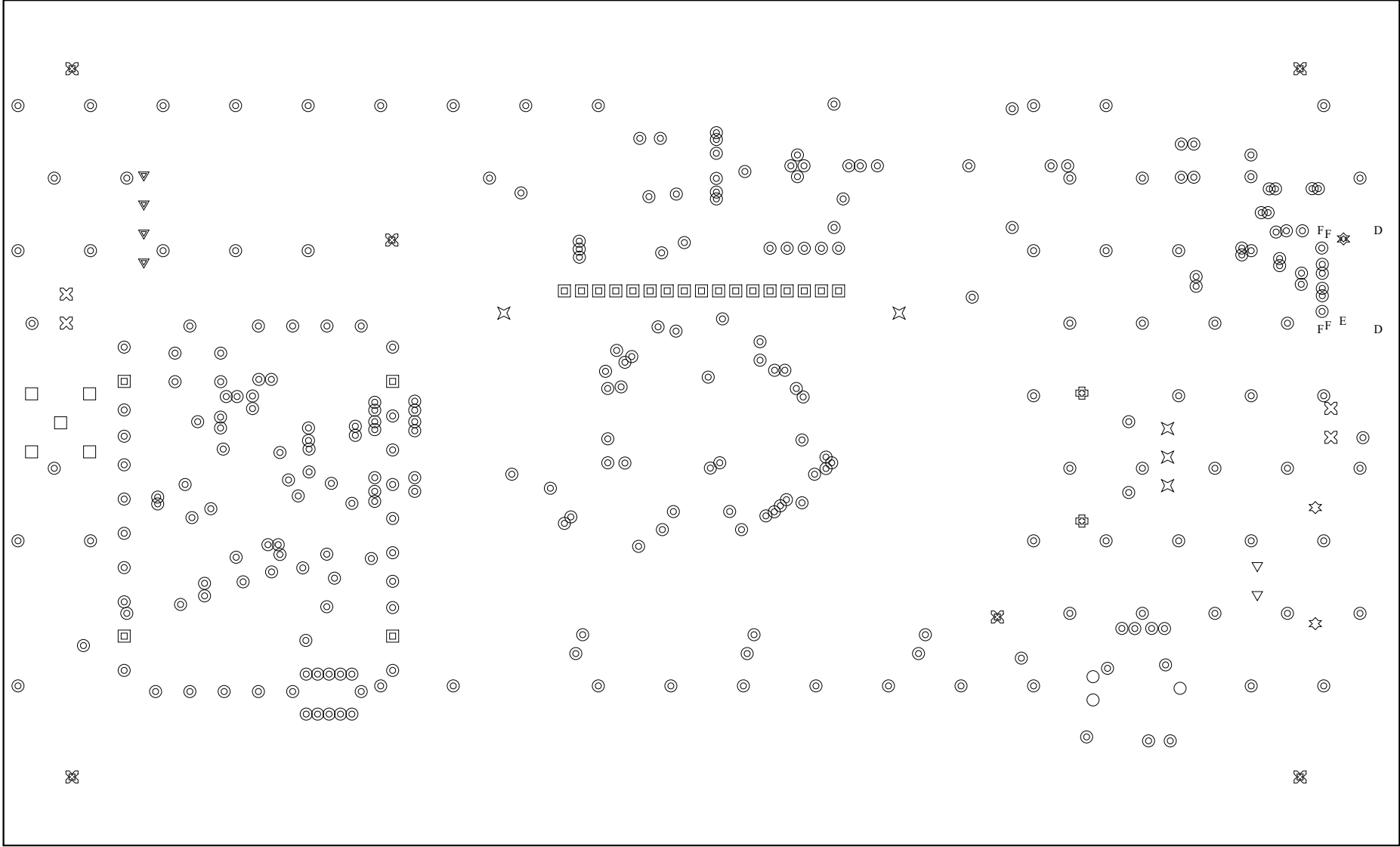
Layer 5 (Scale 1:1)



		<div> <b>Flycatcher</b></div>		8921 E. Summer Trail Tucson, AZ 85749 Tucson, AZ 85749 www.flycatcherlabs.com	
APPROVALS		DATE		TITLE:	
ENGINEER: Alexander Davis		9/16/2024		Power Rail Probe	
PART NO: FL-0004		REV: <b>A</b>		Designed For: Public Release	
VARIANT: [No Variations]		©2024 Flycatcher Labs - All Rights Reserved			
SCALE:		FILE NAME:		Fabrication.PCBDwf	
				SHEET: 2 OF 4	



Drill Drawing View



Drill Table

Symbol	Count	Hole Size	Plated	Hole Tolerance
⊙	291	10.00mil(0.25mm)	Plated	
E	1	19.69mil(0.50mm)	Non-Plated	
✱	1	23.62mil(0.60mm)	Non-Plated	
F	4	23.62mil(0.60mm)	Plated	
D	2	27.56mil(0.70mm)	Plated	
▣	21	31.50mil(0.80mm)	Plated	
▽	2	35.00mil(0.89mm)	Plated	
○	3	39.00mil(0.99mm)	Non-Plated	
✧	5	39.37mil(1.00mm)	Plated	
▼	4	43.31mil(1.10mm)	Plated	+0.00mil(0.00mm)/-9.84mil(0.25mm)
✕	4	47.24mil(1.20mm)	Non-Plated	
▢	5	59.06mil(1.50mm)	Plated	
⊞	2	78.74mil(2.00mm)	Plated	
☆	2	79.00mil(2.01mm)	Plated	
✖	6	125.98mil(3.20mm)	Plated	

THIRD ANGLE PROJECTION

APPROVALS		DATE	TITLE:	
ENGINEER:	Alexander Davis	9/16/2024	Power Rail Probe	
PART NO:	FL-0004	REV:	A	SIZE: B
VARIANT:		©2024 Flycatcher Labs - All Rights Reserved		
[No Variations]		SCALE:	FILE NAME: Fabrication.PCBDwf	SHEET: 3 OF 4

8921 E. Summer Trail  
Tucson, AZ 85749  
Tucson, AZ 85749  
www.flycatcherlabs.com

Layer Stack Legend

Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Top Overlay			Legend	GTO
Surface Material	Top Solder	1.00mil	Solder Resist	Solder Mask	GTS
Nickel, Gold	Top Surface Finish	0.16mil		Surface Finish	
Copper	Top Layer	1.70mil		Signal	GTL
Prepreg		4.36mil	FR408	Dielectric	
CF-004	Layer 2	0.69mil		Signal	G1
Core		4.00mil	FR408	Dielectric	
CF-004	Layer 3	0.69mil		Signal	G2
Prepreg		36.44mil	PP-006	Dielectric	
CF-004	Layer 4	0.69mil		Signal	G3
Core		4.00mil	FR408	Dielectric	
CF-004	Layer 5	0.69mil		Signal	G4
Prepreg		4.36mil	FR408	Dielectric	
Copper	Bottom Layer	1.70mil		Signal	GBL
Nickel, Gold	Bottom Surface Finish	0.16mil		Surface Finish	
Surface Material	Bottom Solder	1.00mil	Solder Resist	Solder Mask	GBS
	Bottom Overlay			Legend	GBO

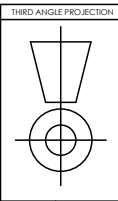
Total thickness: 61.63mil

Stackup Information

13. Surface Finish: ENIG  
14. Soldermask Color: Blue  
15. Silkscreen Color: White  
16. Thickness tolerance: ±10%

Transmission Line Structure Table

Impedance Id	Transmission Line	Target Impedance	Trace layer	Reference layers	Clearance	Target Tolerance
1	Coated Microstrip	50	Top Layer	Layer 2	5.00mil	10%
2	Coated Coplanar Waveguide With Ground	50	Top Layer	Layer 2	6.00mil	10%
3	Edge-Coupled Coated Microstrip	90	Top Layer	Layer 2	5.00mil	10%
4	Offset Stripline	50	Layer 3	Layer 2,Layer 5	0.00mil	10%
5	Offset Stripline	50	Layer 4	Layer 2,Layer 5	0.00mil	10%
6	Coated Microstrip	50	Bottom Layer	Layer 5	5.00mil	10%
7	Coated Coplanar Waveguide With Ground	50	Bottom Layer	Layer 5	6.00mil	10%
8	Edge-Coupled Coated Microstrip	90	Bottom Layer	Layer 5	5.00mil	10%



APPROVALS		DATE
ENGINEER:	Alexander Davis	9/16/2024
PART NO:	FL-0004	REV: <b>A</b>
VARIANT:	[No Variations]	



8921 E. Summer Trail  
Tucson, AZ 85749  
Tucson, AZ 85749  
www.flycatcherlabs.com

TITLE:		Power Rail Probe	
DESIGNED FOR:		Public Release	
SCALE:		FILE NAME:	Fabrication.PCBDwf
SHEET:		4	OF 4