

Fabrication Notes

Stackup

Designed for CircuitHub std 4-Layer 1.6mm stackup:

	Er	H(mm)	[mil]	Wg(oz)
1 Top Copper	Sig(GND)	0.035	[1.4]	1
2 In1	7630 Prepreg	4.7	0.2 [7.9]	
	Copper Plane(GND)	0.035	[1.4]	1
3 In2	[Fr-4?] Core	4.6	1.03 [40.6]	
	Copper Plane(PWR)	0.035	[1.4]	1
4 Bot	7630 Prepreg	4.7	0.2 [7.9]	
	Copper Sig(GND)	0.035	[1.4]	1

Impedance Control

50Ω for Ultra Wideband RF [5~8 GHz]
- Controlled traces run from U2-S2-{-A1,-A2,-S4-A3}

50Ω for Bluetooth RF [2.4 GHz]
- Controlled traces run from XA1-A4

All modeled as Coplanar waveguide.
SaturnPCB Calculator Configuration:
W=14 mil (0.356 mm)
H= 7.87mil
G=10 mil
[W/H=1.779 < 2, √]
Er 4.7 is high end for 7630 materials
4.7 -> 49.9 Ω
4.6 -> 50.4 Ω
reasonable hedge

Panelization

Any OK.
OK to leave mouse bite tabs any edge.

