

# Fabrication Notes

## Stackup:

Designed for CircuitHub Std Fab: 4-Layer, 0.6mm

Order	Name	Matrl	Dscrpt	Dielec	Thk(mm)	CuWgt(oz)
1:	Top	Copper	Signal	0.035	1oz	
2:	Route2	Copper	Prepreg	4.5	0.12	
3:	Route15	Copper	Ground	4.6	0.035	1oz
4:	Bottom	Copper	Pwr/Gnd	4.5	0.12	
		2116	Prepreg	4.5	0.12	1oz
		2116	Sig/Gnd		0.035	1oz

## Impedance Control

One 50Ω trace for 2.4 GHz (Bluetooth)  
- Routed as coplanar wave, params:  
- Conductor Width = 8 mil  
- Conductor Height = 4.725 mil [0.12mm]  
- Er=4.5  
- Modeled Z ≈ 50.1 Ω

Trace U1-L3-L4-S4-P15(Castellation)

XXX IGNORE FOR REV-K ; UNUSED XXX

One 90Ω differential pair USB PHY  
- Routed as edge-coupled external  
- Conductor Width = 6 mil  
- Conductor Spacing = 12 mil  
- Conductor Height = 4.725 mil [0.12mm]  
- Er=4.5  
- Modeled Zdiff ≈ 90.05 Ω

Traces U1-P20,P21(Castellations)

XXX IGNORE FOR REV-K ; UNUSED XXX

