

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
		2116	Prepreg	4.5	0.12	
2:	Route2	Copper	Ground		0.035	1oz
		FR4	Core	4.6	0.23	
3:	Route15	Copper	Pwr/Gnd		0.12	1oz
		2116	Prepreg	4.5	0.12	
4:	Bottom	Copper	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

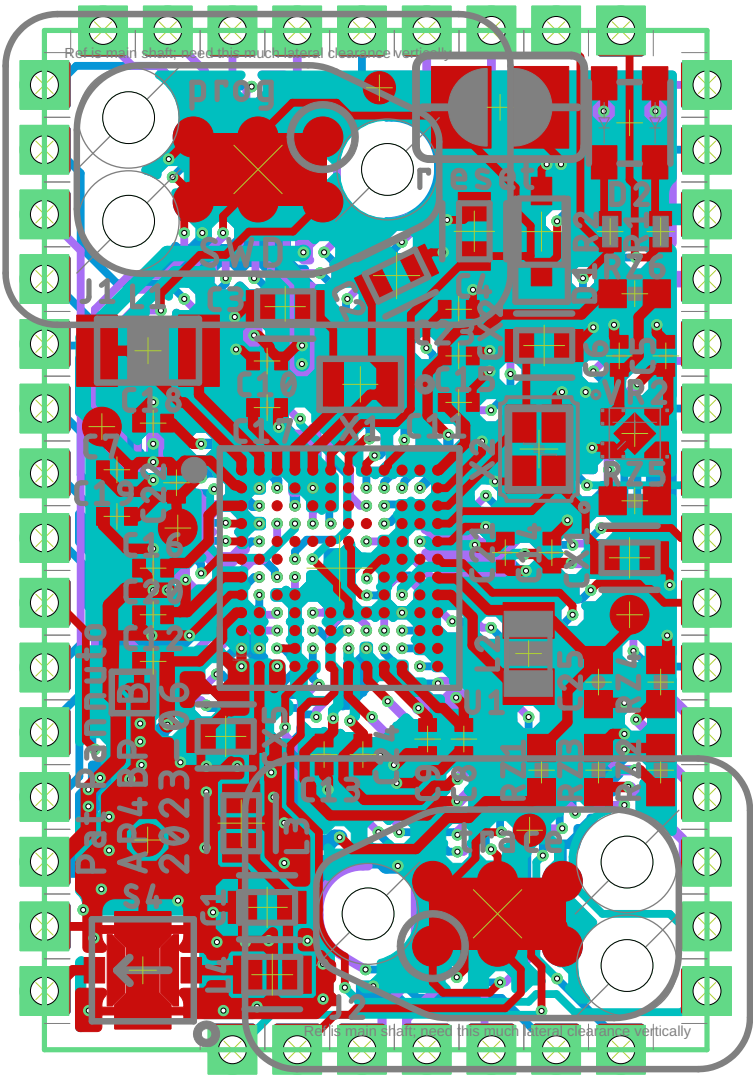
Trace U1-L3-L4-S4-P15(Castellation)

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



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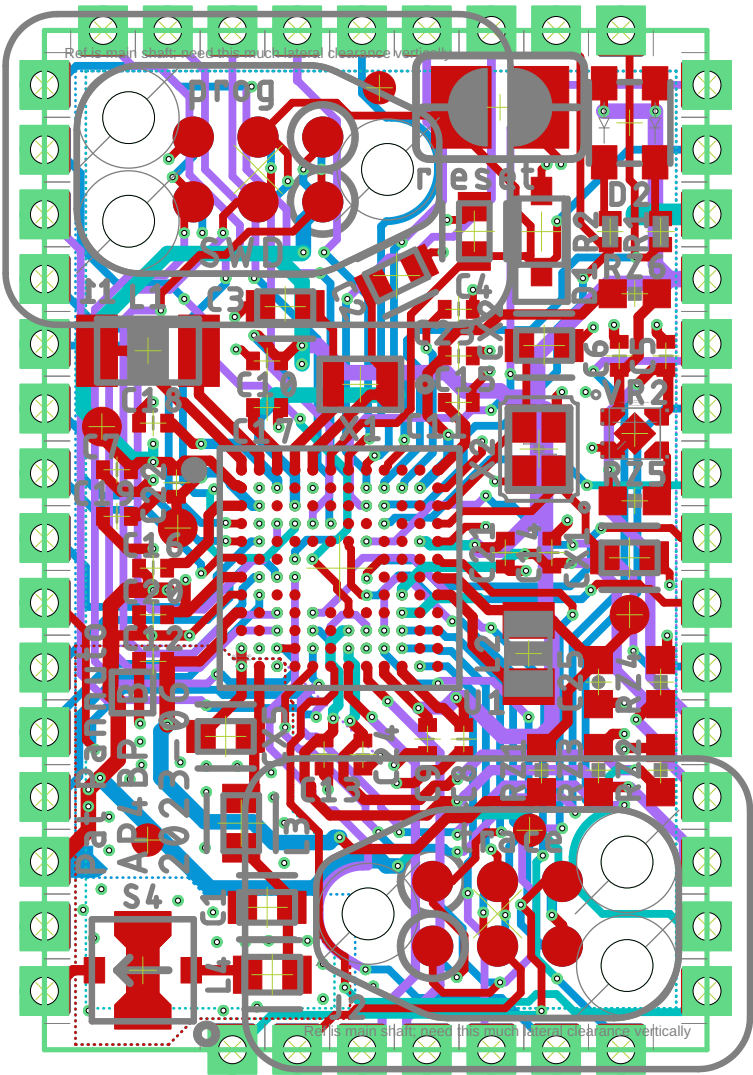
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Traces U1-P20,P21(Castellations)

XXX IGNORE FOR REV-K ; UNUSED XXX



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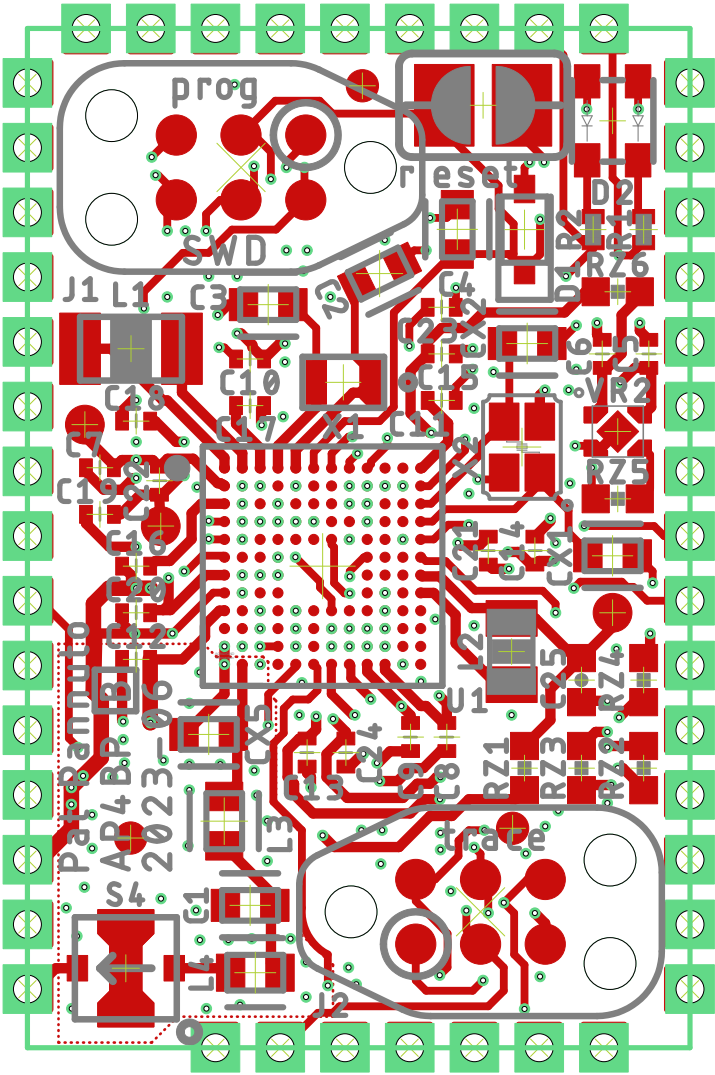
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- $\epsilon_r=4.5$
- Modeled Zdiff $\approx 90.05 \Omega$

Traces U1-P20,P21(Castellations)

XXX IGNORE FOR REV-K ; UNUSED XXX

