Fabrication Notes

Stackup:

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

Order 1:	Name Top	Matrl Copper	Signal		Thk(mm) 0.035	CuWgt(oz 1oz
		2116	Prepreg	4.5	0.12	
2:	Route2	Copper			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

- Impedence Control

 One 500 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

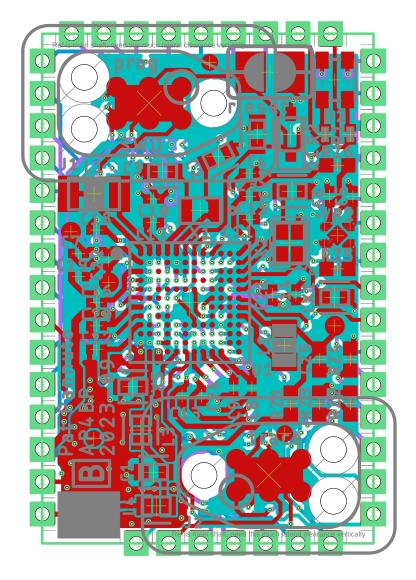
Trace U1-L3-L4-S4-P15(Castellation)

XXX IGNORE FOR REV-K ; UNUSED XXX

- One 900 differential pair USB PHY
 Routed as edge-coupled external
 Conductor Width = 6 mil
 Conductor Width = 6 mil
 Conductor Spacing = 12 mil
 Conductor Feight = 4.725 mil [0.12mm]
 Ers4.5
 Rodeled Zdiff ~= 90.05 \(\Omega\$

Traces U1-P20,P21(Castellations)

XXX IGNORE FOR REV-K ; UNUSED XXX



 $9/17/23\ 20:02\ f=8.96\ /var/folders/_t/61hmf1293xq508hf1ksgyp900000gn/T/Neutron/ElectronFileOutput/18306/brd-9185a734-3ab3-493f-a500-42efd72fcbd7/Apollo4-BluePlus (20) above the contraction of the con$

Fabrication Notes

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

	Name			Dielec	Thk(mm)	
1:	Top		Signal			1oz
		2116	Prepreg		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

- Impedence Control

 One 500 trace for 2.4 GHz (Bluetooth)

 Routed as coplanar wave, params:

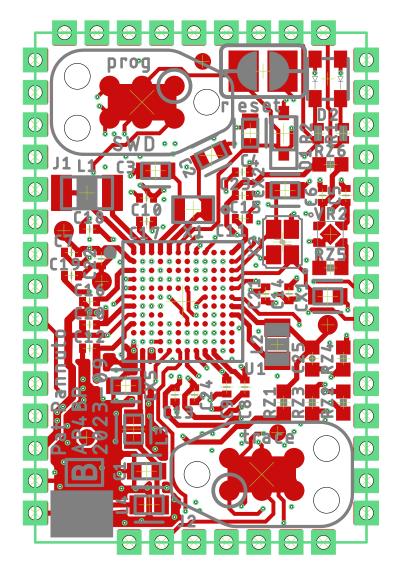
 Conductor Width = 8 mil

 Conductor Height = 4.725 mil [0.12mm]

 Er=4.5

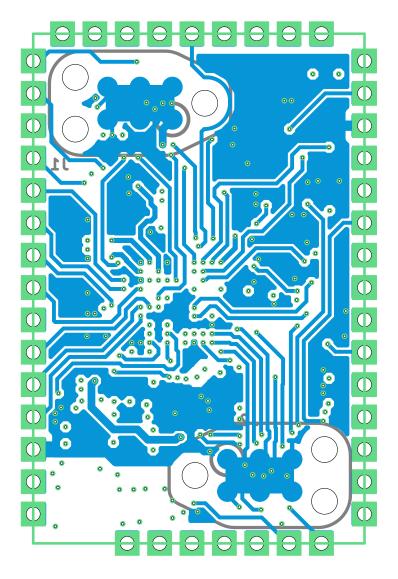
 Modeled Z ~= 50.1 Ω

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



XXX IGNORE FOR REV-K; UNUSED XXX
One 900 differential pair USB PHY
- Routed as edge-coupled external
- Conductor Width = 6 mil
- Conductor Width = 6 mil
- Conductor Spacing = 12 mil
- Conductor Height = 4.725 mil [0.12mm]
- Er=4.5
- Modeled Zdiff = 90.05 \(\Omega\$
Traces U1-P20,P21(Castellations)

XXX IGNORE FOR REV-K ; UNUSED XXX



 $9/17/23\ 20:03\ f=8.96\ / var/folders/_t/61hmf1293xq508hf1ksgyp900000gn/T/Neutron/ElectronFileOutput/18306/brd-9185a734-3ab3-493f-a500-42efd72fcbd7/Apollo4-BluePlus (20) and (20) are the control of t$