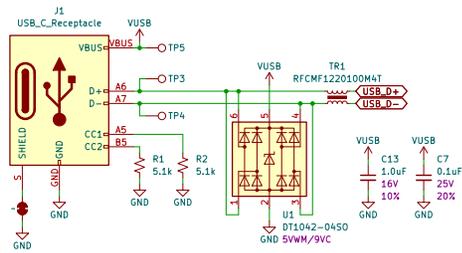
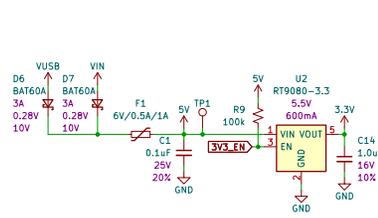


USB

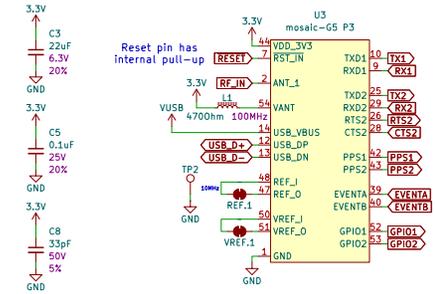


USB Track Impedance: Coplanar Differential Ref-900
<https://cpcb.com/pcb-impedance-calculator>
 Board Thickness: 1.6mm, Layers: 4, Er: 4.4 (FR28 Prepreg)
 Dielectric Thickness (Layer: 1 to 2): 0.28mm/0.21mm (L1/1628)
 Copper Thickness (Laz outer / 0.5oz inner): 1.38mil/0.035mm
 Polysim Isolation: 7mil/0.1778mm
 Trace Spacing: 9.07mil/0.230mm
 Trace Width: 51.03mil/0.2778mm
 Trace center-to-center: 20.0mil/0.508mm

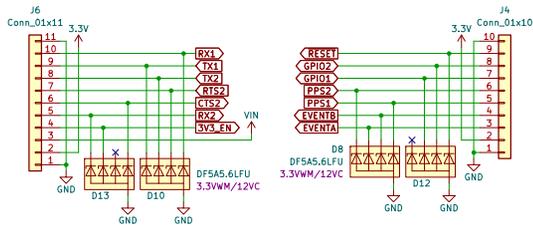
Power



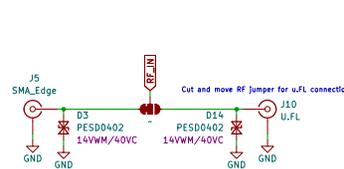
mosaic-G5 P3 GNSS Receiver



External PTH Connectors

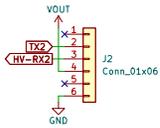


Antenna Connector

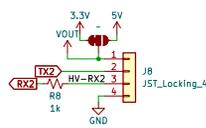


Microstrip (Coplanar Single Ended) SOD Calculation:
<https://cpcb.com/pcb-impedance-calculator>
 Board Thickness: 1.6mm, Layers: 4, Er: 4.4 (FR28 Prepreg)
 Dielectric Thickness (Layer: 1 to 2): 0.28mm/0.210mm (L1/1628)
 Copper Thickness (Laz outer / 0.5oz inner): 1.38mil/0.035mm
 Polysim Isolation: 7mil/0.1778mm
 Trace Width: 11.1mil/0.2819mm

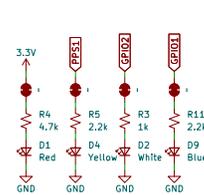
BlueSMiRF



Locking JST



LEDs






Designed by: P.C.
 SparkFun Electronics
 Sheet: /
 File: SparkFun_GNSS_mosaic-G5_P3.kicad_sch
Title: mosaic-G5 P3 Allband GNSS Receiver Breakout
 Size: USLedger Date: 2025-04-23 Rev: v01
 KiCad E.D.A. 9.0.4 Id: 1/1