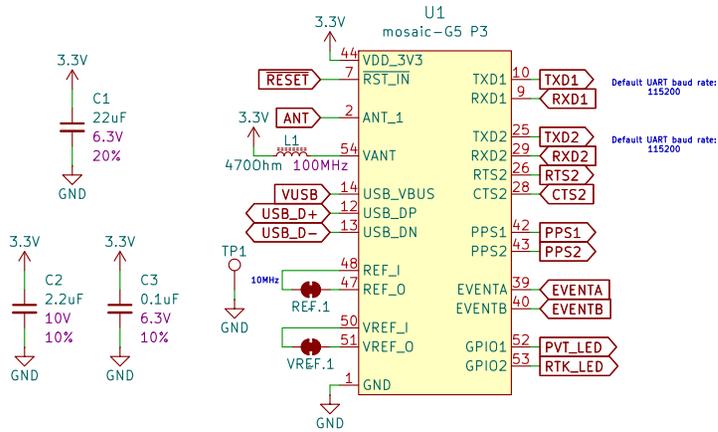
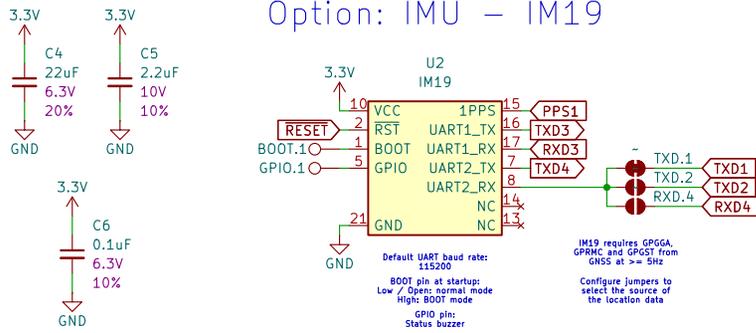


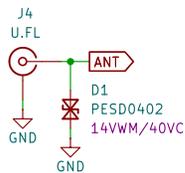
GNSS – mosaic-G5 P3



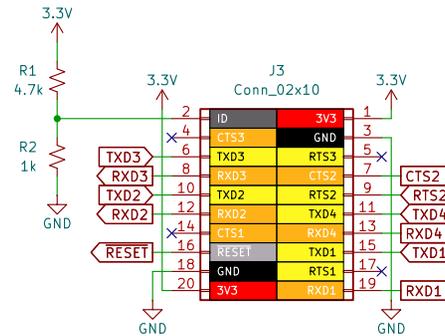
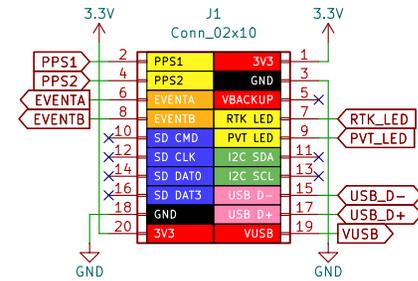
Option: IMU – IM19



Antenna



Connectors



Power +	GNSS Out
Power GND	GNSS In
PC	microSD
USB	ID (0-3.3V)
RMII	Aux

Legend: GNSS Flex

Microstrip (Coplanar Single Ended) 50Ω Calculation:
<https://lccpcb.com/pcb-impedance-calculator>
 Board thickness: 1.6mm, Layers: 4, Er: 4.4 (7628 Prepreg)
 Dielectric Thickness (Layer 1 to 2): 8.28mil/0.2104mm (J1C7628)
 Copper Thickness (1oz outer / 0.5oz inner): 1.38mil/0.035mm
 Polygon Isolation: 7mil/0.1778mm
 Trace Width: 11.1mil/0.2819mm

USB Track Impedance: Coplanar Differential Pair @ 90Ω
<https://lccpcb.com/pcb-impedance-calculator>
 Board thickness: 1.6mm, Layers: 4, Er: 4.4 (7628 Prepreg)
 Dielectric Thickness (Layer 1 to 2): 8.28mil/0.2104mm (J1C7628)
 Copper Thickness (1oz outer / 0.5oz inner): 1.38mil/0.035mm
 Polygon Isolation: 7mil/0.1778mm
 Trace Spacing: 9.07mil/0.2304mm
 Trace Width: 10.93mil/0.2776mm
 Trace center-to-center: 20.0mil/0.508mm



SPARKPNT



Designed by: P.C.

SparkFun Electronics

Sheet: /

File: mosaic-G5_P3_Tilt.kicad_sch

Title: SparkFun GNSS Flex Module – mosaic-G5 P3 & IM19

Size: USLetter Date: 2025-05-21

Rev: v10

KiCad E.D.A. 9.0.4

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