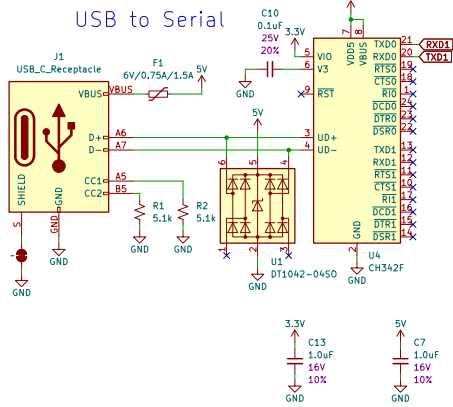
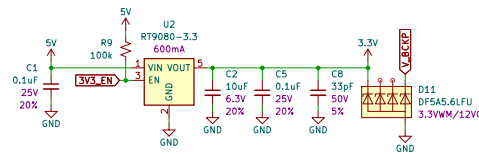


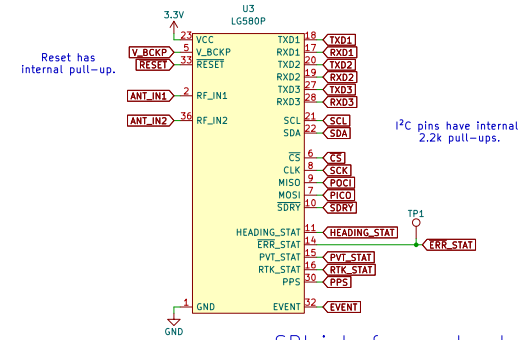
## USB to Serial



## Power

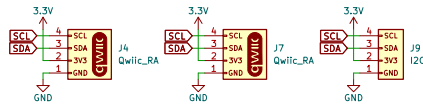


## LG580P Quadband GNSS Receiver



SPI interface not yet supported.  
Support coming in future firmware release.

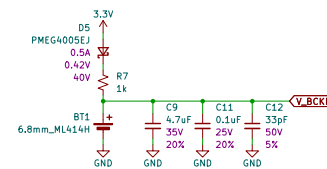
## I<sup>2</sup>C Connectors



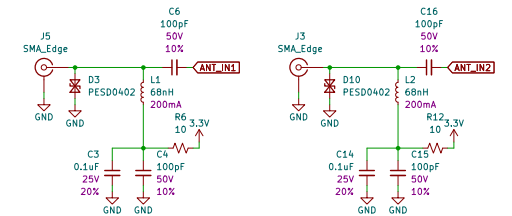
No external I<sup>2</sup>C pull-ups because  
LG580P has internal resistors.

I<sup>2</sup>C interface not yet supported.  
Support coming in future firmware release.

## Battery Backup

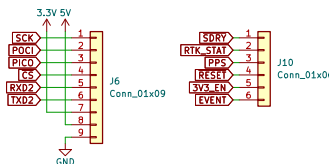


## RF Connectors

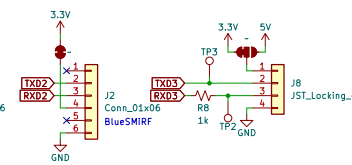


Coplanar 50Ω Waveguide Calculation:  
Copper Thickness (toz): 1.4mil/0.035mm  
Board thickness: 1.6mm  
Dielectric thickness (layer 1 to 2): 0.2mm  
Er: 4.6  
Polygon isolation: 8mil/0.2032mm  
RF Trace Width: 13.74mil/0.349mm  
<https://chemandy.com/calculators/coplanar-waveguide-with-ground-calculator.htm>

## External PTH Connectors

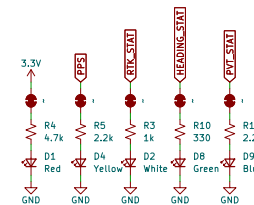


## Locking JST



Generally speaking the ports are used as follows:  
UART1 – Configure in and NMEA output over USB  
UART2 – RTCM correction input and NMEA output over Bluetooth  
UART3 – NMEA output to embedded system

## LEDs



Designed by: N. Seidle	Sheet: /	File: SparkFun_GNSS_LG580P.kicad_sch
		<b>Title: LG580P Quadband GNSS Receiver Breakout</b>
Size: USLedger	Date: 2025-01-21	Rev: v10
KiCad E.D.A. 9.0.4		Id: 1/1