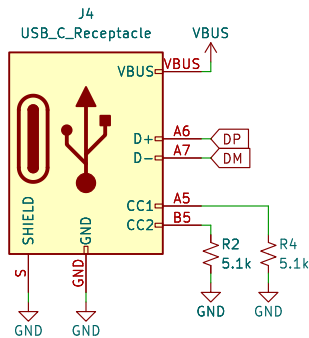
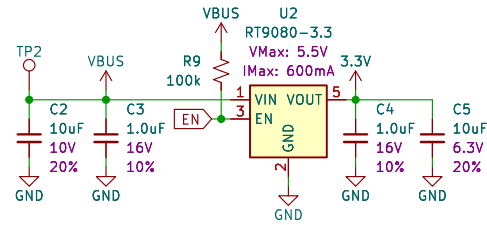


## USB

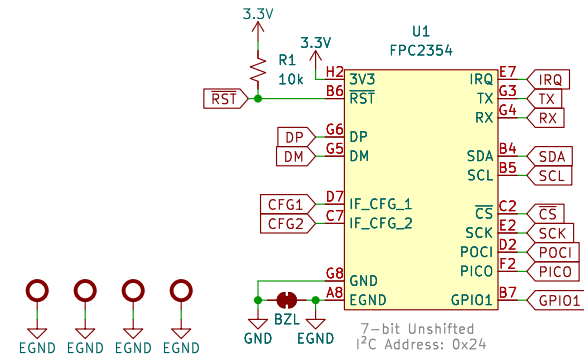


USB Track Impedance: Coplanar Differential Pair @ 90Ω  
<https://jlcpcb.com/pcb-impedance-calculator>  
 Board Thickness: 1.6mm  
 Layers: 4  
 Er: 4.4 (7628 Prepreg)  
 Dielectric Thickness (Layer 1 to 2): 8.28mil/0.21mm (JLC7628)  
 Copper Thickness (1oz outer / 0.5oz inner): 1.38mil/0.035mm  
 Polygon Isolation: 7mil/0.1778mm  
 Trace Spacing: 8mil/0.2032mm  
 Trace Width: 10.3mil/0.2616mm

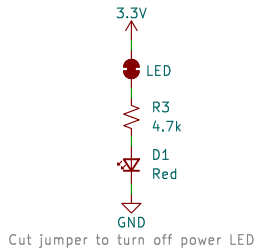
## Voltage Regulation



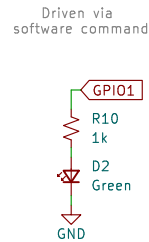
## Fingerprint Sensor



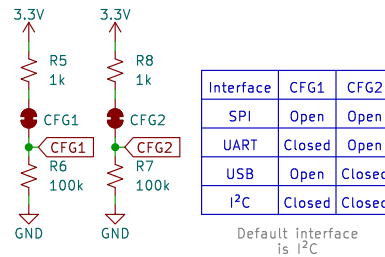
## Power LED



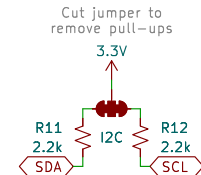
## Scan LED



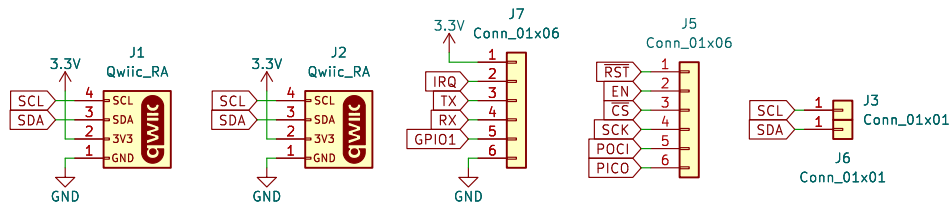
## Interface Selection



## I2C Pull-Ups



## Connectors



Design by: N. Seidle  
**SparkFun Electronics**

Sheet: /  
 File: SparkFun\_Qwiic\_Fingerprint\_Sensor\_FPC2534.kicad\_sch

**Title: SparkFun Qwiic Fingerprint Sensor FPC2534**

Size: USLetter Date: 2025-08-29  
 KiCad E.D.A. 9.0.2

Rev: v11  
 Id: 1/1