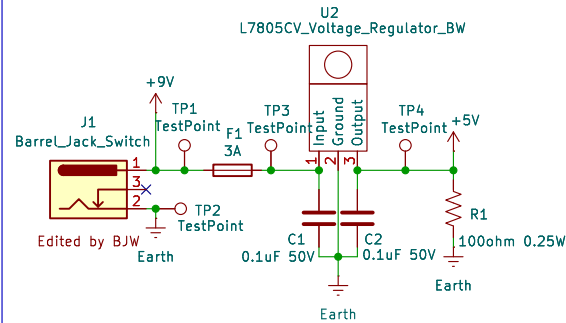


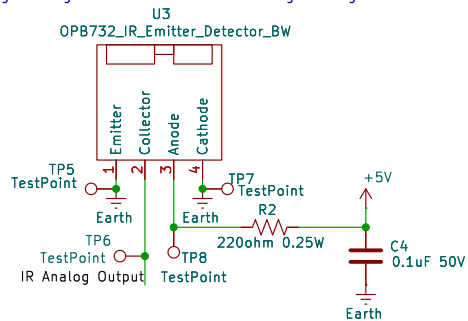
## Power

Barrel jack port outputs 9V 3A connected to a fuse in case too much power is outputted. That connects to a voltage regulator that outputs 5V and 1.5A current.



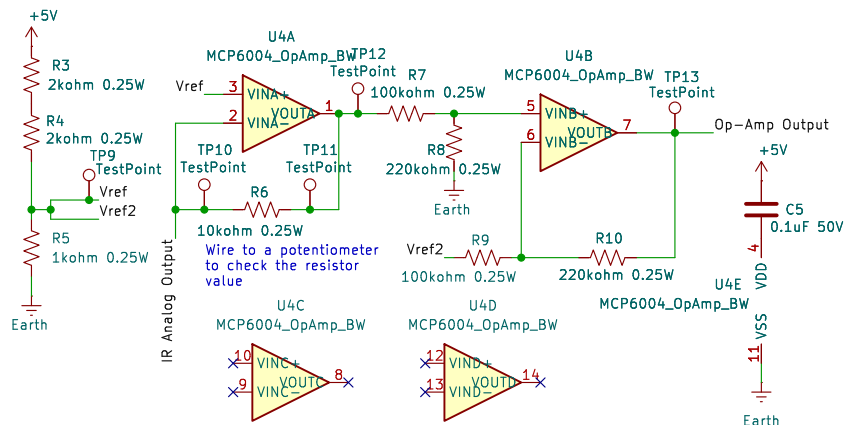
## IR Emitter / Detector

IR Emitter/Detector Sends out an analog output at the collector, and the Anode of the LED goes to a resistor and power. The Emitter goes to ground and the Cathode also goes to ground.



## Op-Amp

The op-amp takes the analog output from the sensor's Collector, which then gets amplified and outputs to the microcontroller



## Microcontroller

