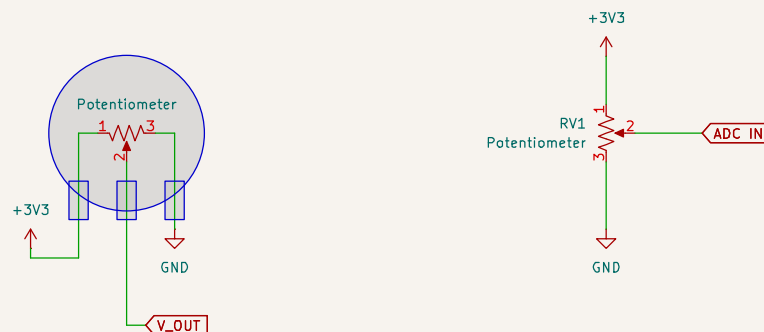
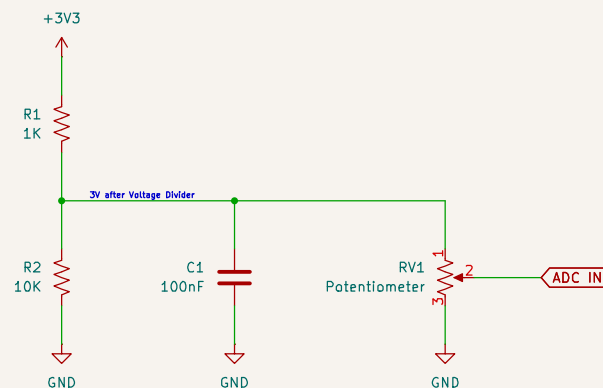


POTENTIOMETER



- Potentiometers or "Pots" allow for manual control over voltage level
- In essence, its a Voltage Divider that outputs scaled voltage within the range of volatæg applied to pins 1 and 3.
- For example, pin 2 will output between 0v and 3V3 depending on pot position.

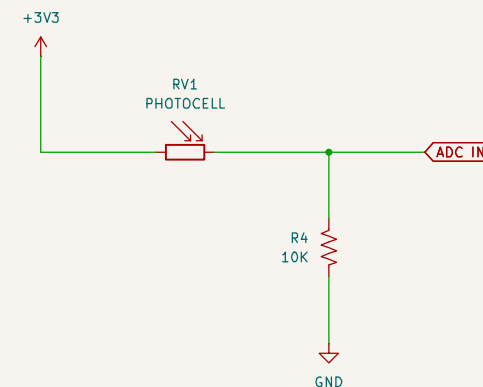
POTENTIOMETER – Adjusted Voltage Range and Decoupling Capacitor



- In this circuit, maximum voltage output of pot is reduced to 3V to avoid nonlinear range on ESP32 ADC.
- Optional Decoupling Capacitor added between output voltage of pot and Ground to reduce voltage ripple and "smooth" out signal

Light-Dependent Resistor (LDR) / PHOTOCELL

A PhotoCell is a light-dependent resistor:
 - as light levels increase, resistance decreases...
 ...which results in a higher voltage level read on ADC.



Sheet: /
 File: ADC.kicad_sch

Title: ADC: Potentiometer & PhotoCell

Size: A4

Date:

KiCad E.D.A. 9.0.0

Rev:

Id: 1/1