3.3V from Esp

Load cell

Loose

V_out

V^-_{in} V^+_{in}

Loose

Lwhite case

R↓

When pushed   R↓   R↑

PIN CONFIGURATION

Top View   R_G   8-Pin DIP, SO-8

| | | | | |
| R_G | 1 | | 8 | R_G |
| V⁻_IN | 2 | | 7 | V+ | — 3.3V
| V⁺_IN | 3 | | 6 | V_O | — ADC
| V− | 4 | | 5 | Ref | 0.1V

Wheatstone Bridge

0.1µF

3.3

0.1V

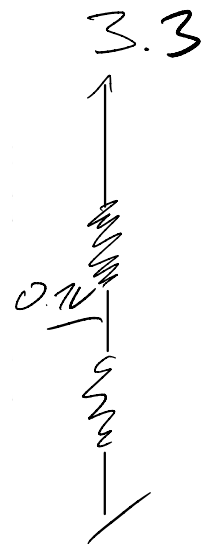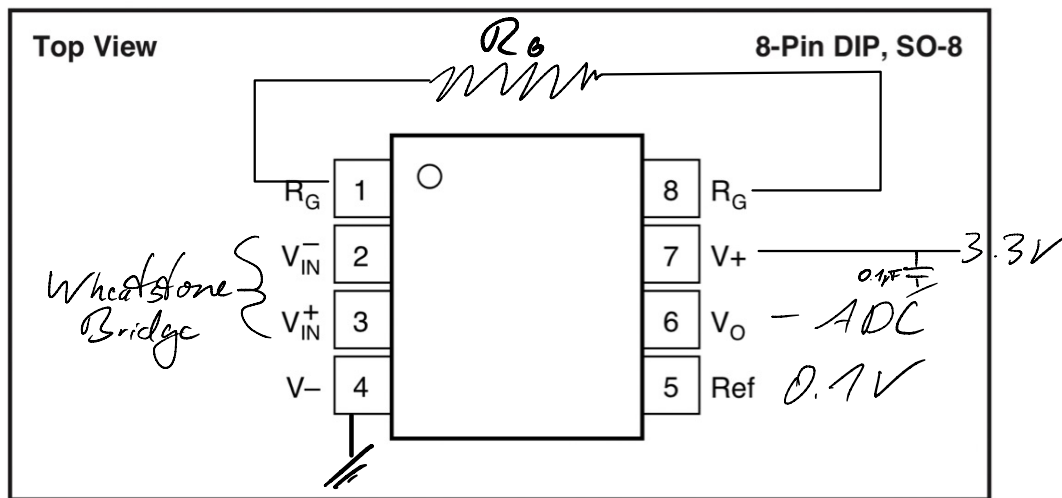## ADC Attenuation

Vref is the reference voltage used internally by ESP32 ADCs for measuring the input voltage. The ESP32 ADCs can measure analog voltages from 0 V to Vref. Among different chips, the Vref varies, the median is 1.1 V. In order to convert voltages larger than Vref, input voltages can be attenuated before being input to the ADCs. There are 4 available attenuation options, the higher the attenuation is, the higher the measurable input voltage could be.

Attenuation	Measurable input voltage range
ADC_ATTEN_DB_0	100 mV ~ 950 mV
ADC_ATTEN_DB_2_5	100 mV ~ 1250 mV
ADC_ATTEN_DB_6	150 mV ~ 1750 mV
ADC_ATTEN_DB_12	150 mV ~ 2450 mV