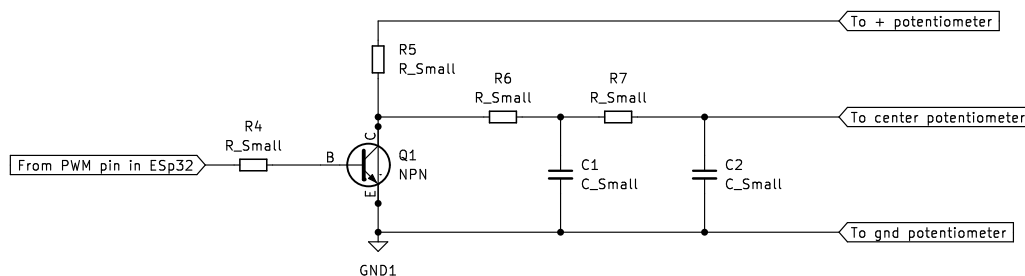


Input goes to an OP (I used a LM358 but you may use another one in voltage follower. If the signal is too small you may always change it to a truly amplifying step.

Output goes to an optocoupler that helps adapt input voltage to 3.3 volts needed for the ESP32.

A small rc filter in the input removes the dc part. In my case input voltage is a 5v signal superimposed to the 12v.

Will give you values for resistor because I had to use a trial and error and I am not in the boat but is somewhat small (200 or 300 ohms. The idea is to have a reasonable signal.



Output filter is a 2 stage RC qith 10k resistors and 10nf capacitors. Ground of the ESP32 should be the same as the ground side of the input for the potentiometer in the motor controller.

Once again any NPN transistor will work.

I tried to power the ESP32 from the 5v from the potentiometer pins in the Motor controller and was unable so user a 5v supply.

IOIn my case center frequency was 3000Hz and not 3400Hz. Check with an oscilloscope.

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