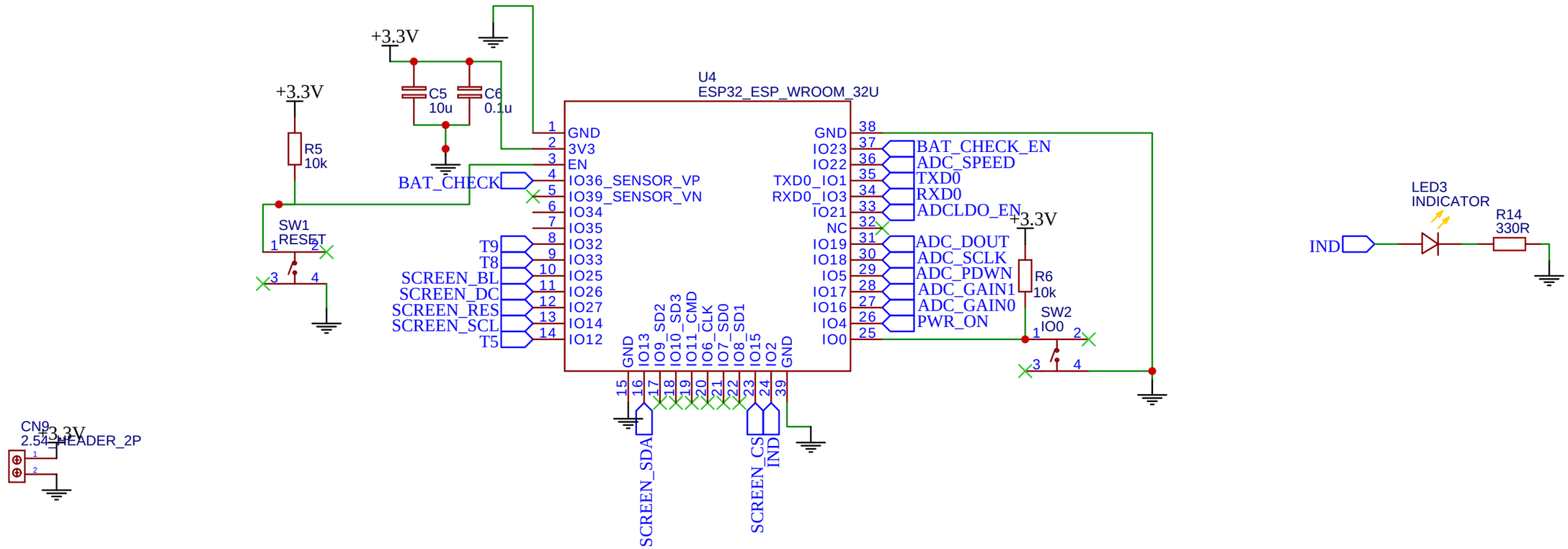
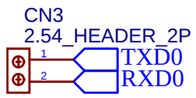
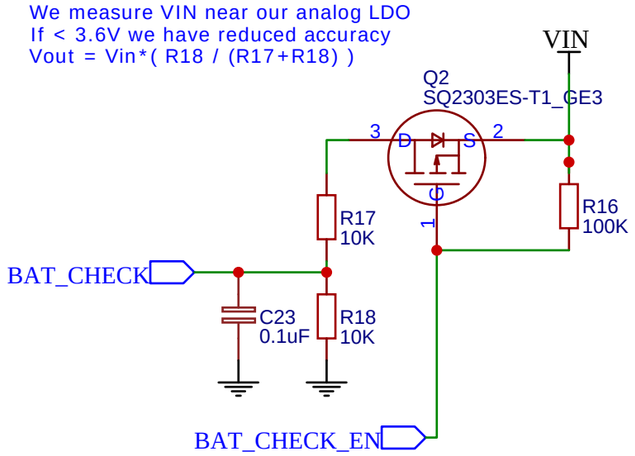



## Serial output



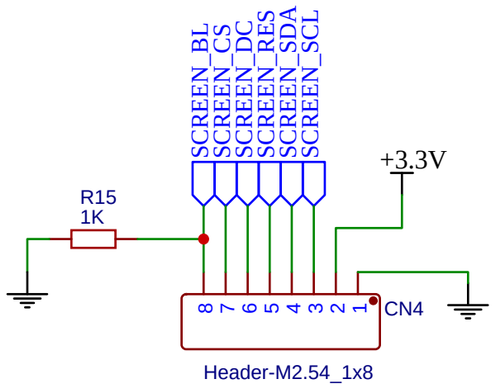

## Input V measurement

We measure VIN near our analog LDO
If < 3.6V we have reduced accuracy
Vout = Vin*( R18 / (R17+R18) )



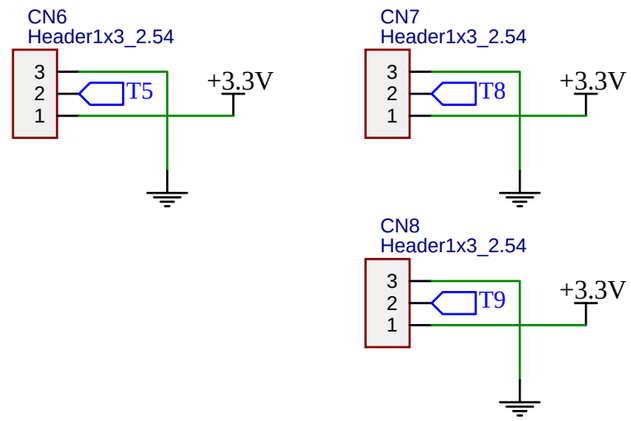

Merci !
https://hallard.me/
https://github.com/hallard/Battery-Voltage-Measure

## OLED/IPS SPI (HSPI) connector




Pin compatible with most cheap SSD1306(OLED),SSD1331(OLED),ST7735S(TFT).
If you have a different pinout, use a cable.

## External button connectors




Pin compatible with most cheap TTP223 touch modules.

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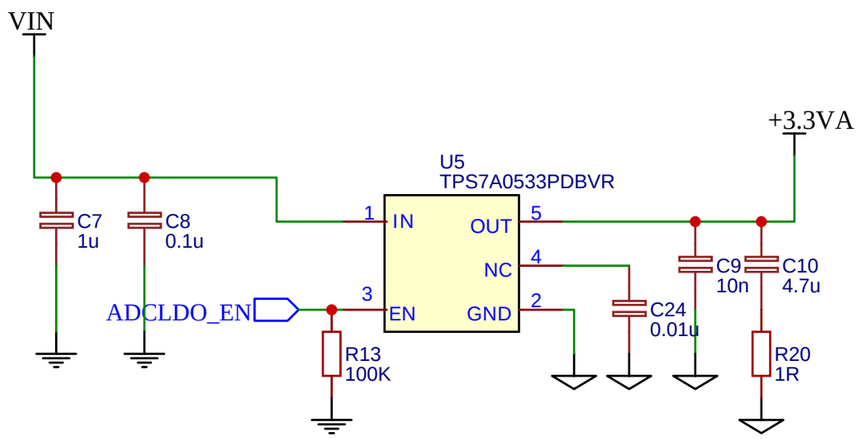
## Analog +3.3V LDO




R20 is optional in order to improve output stability if you use low-ESR MLCC.

Check the datasheet of your LDO and decide the needed value.

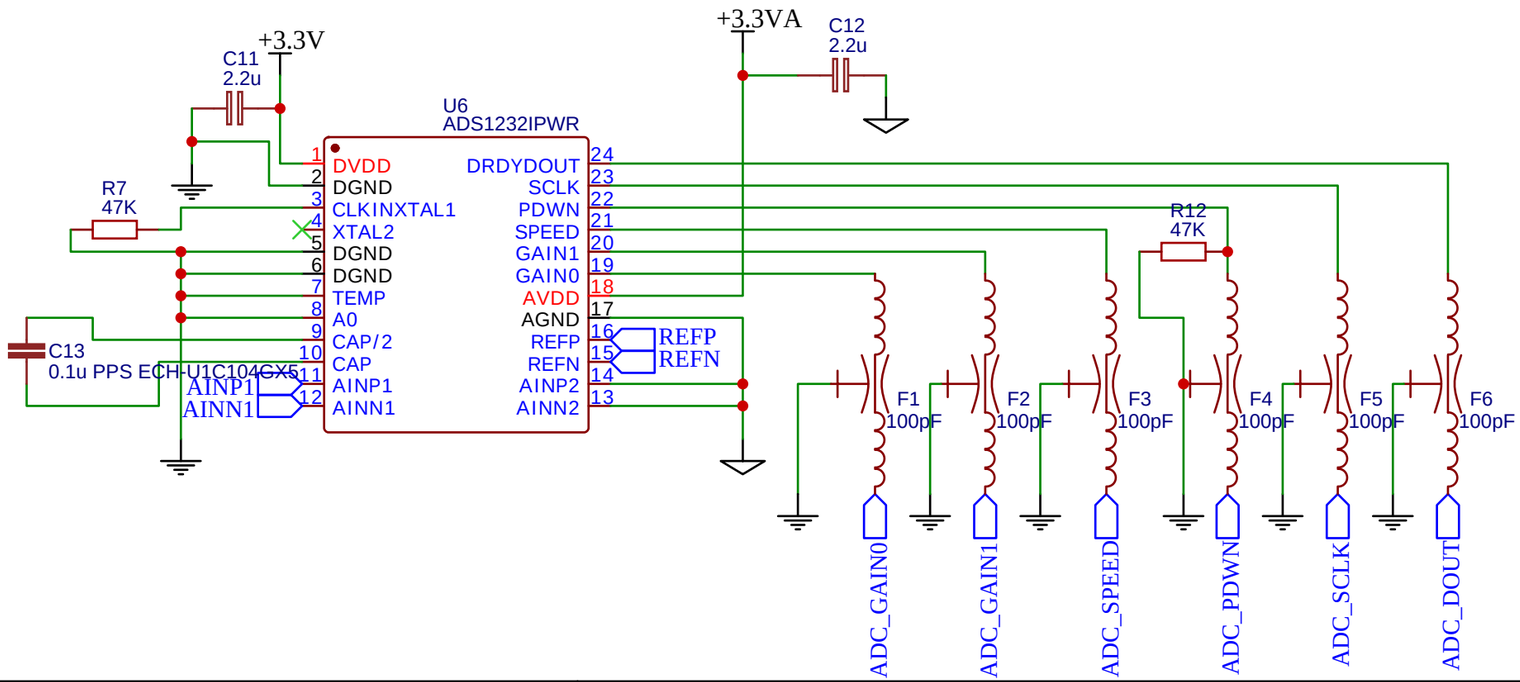
If you don't want R20, remember to join the pads together to ground C10.

C24 is only for some LDOs for lower noise (ex. TPS736)

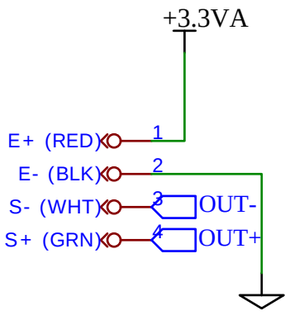
and even then, is completely optional. Check datasheet.

Note:

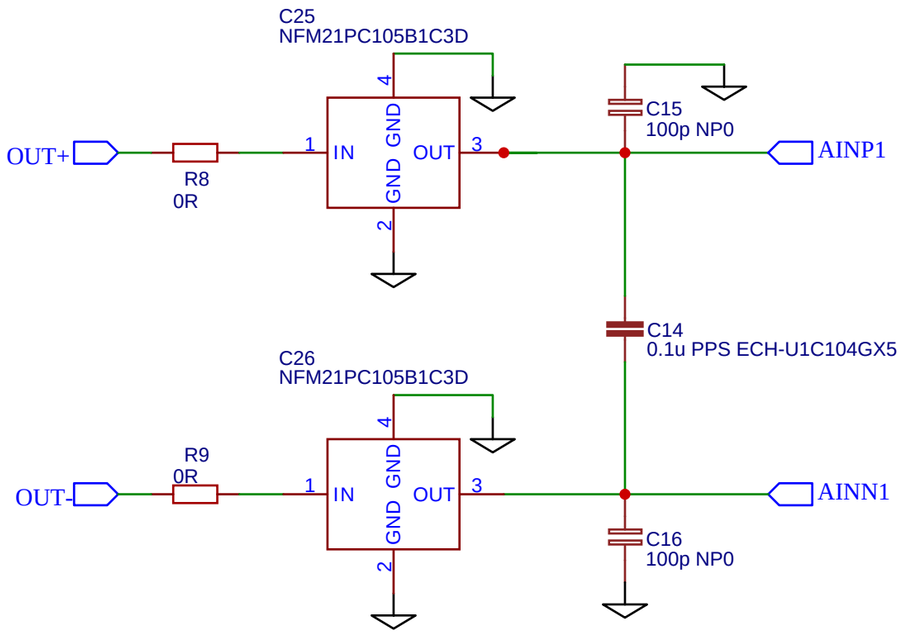
ADS1232 is not using regular SPI protocol
You can use any GPIO (Digital / Output)
Do not use (H/V)SPI bus if you have other SPI devices




## Load Cell Pads

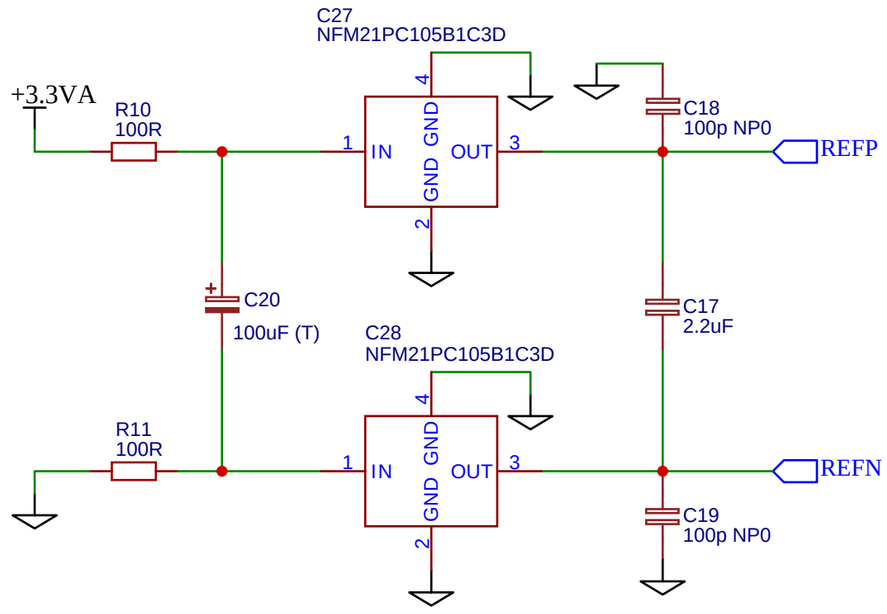



## Analog Input +/- RC Filter




Note: R8,R9 values are not fine tuned. Try 150R or more.

## REF+/REF- RC Filter

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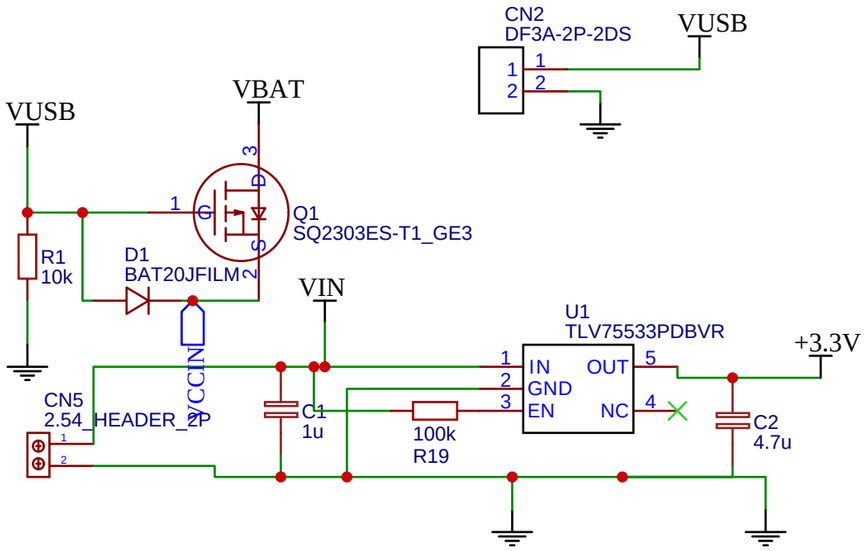
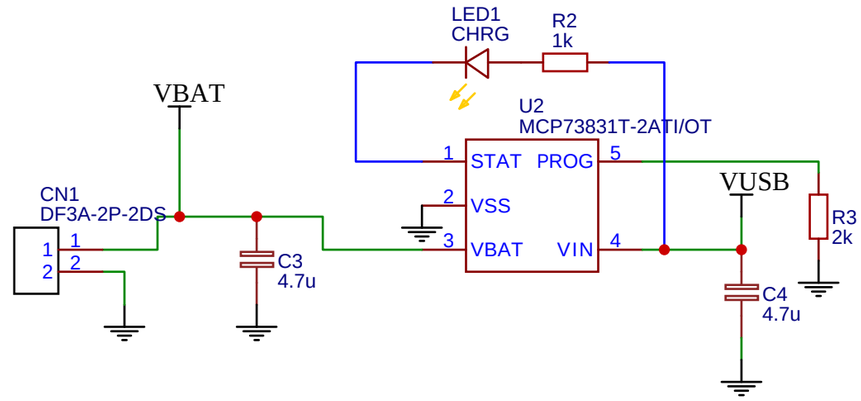
## Power input (USB/Lipo)



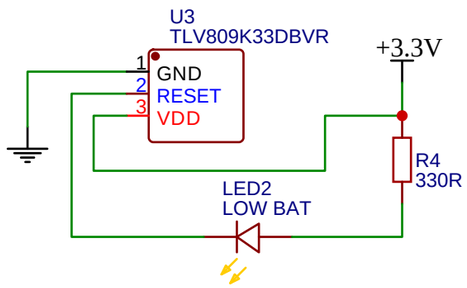

https://cdn.sparkfun.com/assets/learn_tutorials/5/0/7/esp32-thing-schematic.pdf

## Li-Po Charging




https://cdn.sparkfun.com/assets/learn_tutorials/5/0/7/esp32-thing-schematic.pdf

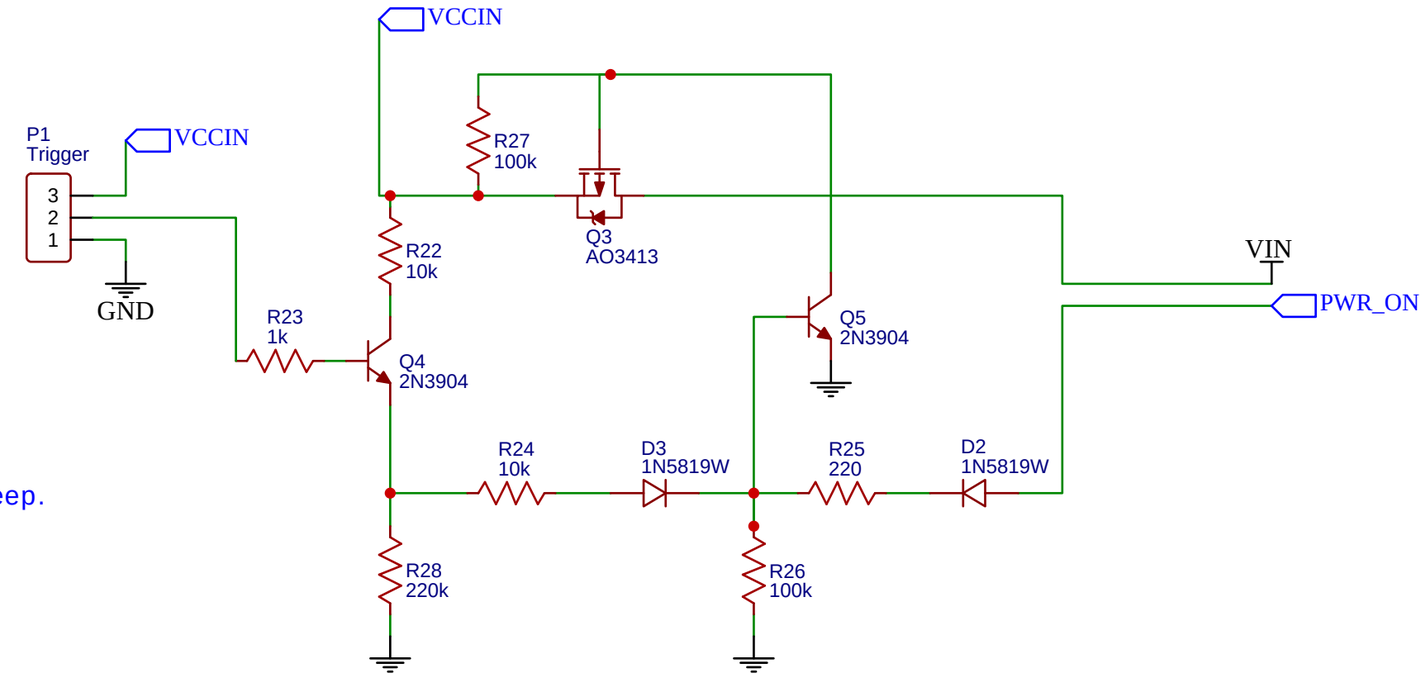
## Low Bat Warning LED




Completely optional but very useful.

Will detect and enable LED even when our MCU is in deep sleep.

Use a low power led.

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| TITLE: ESPresso Scale PRO | | REV: 3.0 |
| | Company: | Sheet: 1/3 |
| | Date: 2019-03-14 Drawn By: jousis | |