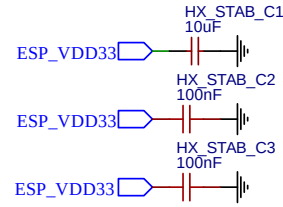
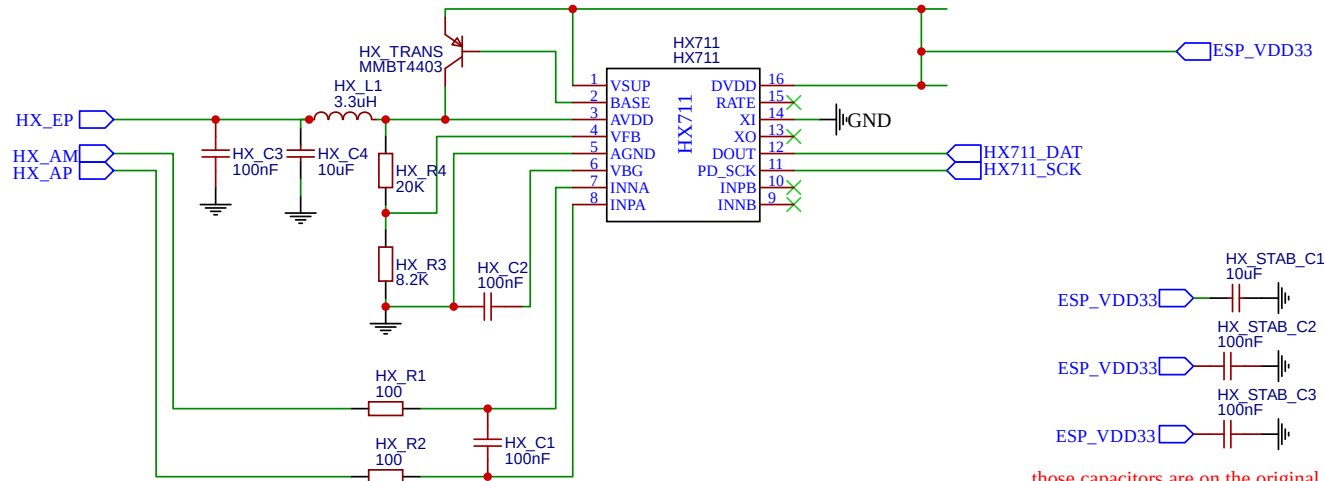
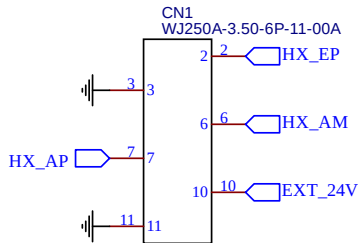


Base on https://cdn.sparkfun.com/assets/f/5/5/b/c/SparkFun_HX711_Load_Cell.pdf



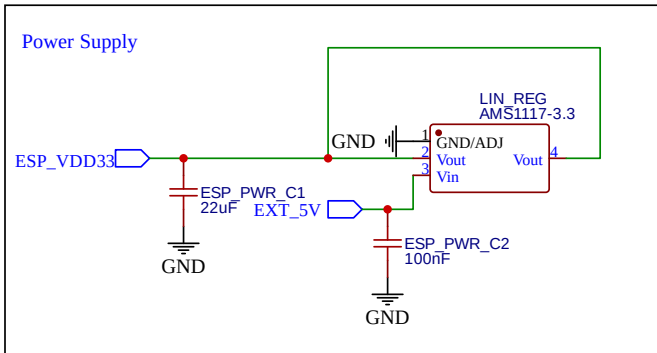
those capacitors are on the original sparkfun board
can I leave them out, since VDD33 should be stabilized already?



TITLE: HX711 Load Sensor		REV: 1.0
EasyEDA	Company: bauer.tech	Sheet: 1/4
	Date: 2020-08-10	Drawn By: Martin Bauer

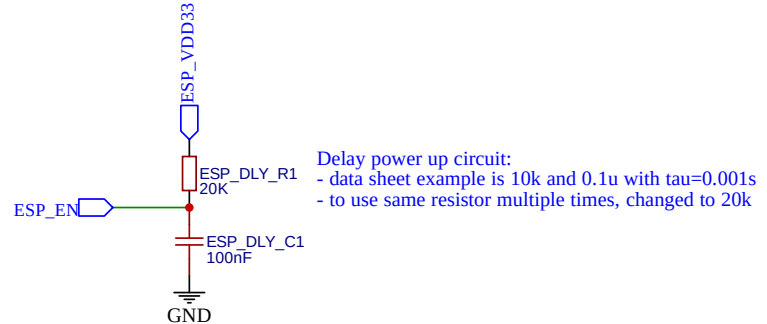
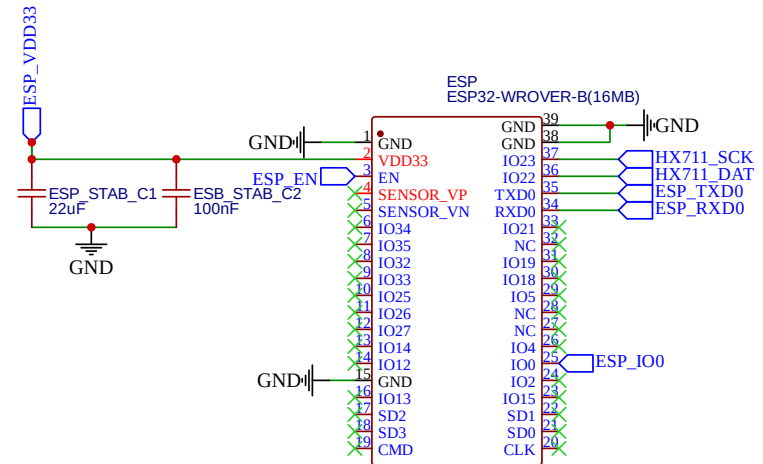
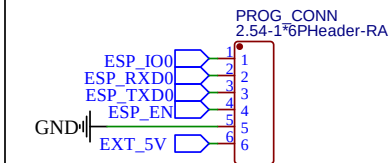
ESP32 Circuit

- based on https://www.espressif.com/sites/default/files/documentation/esp32-wrover_datasheet_en.pdf and https://dl.espressif.com/dl/schematics/esp32_devkitc_v4-sch.pdf
- further resource <https://github.com/adafruit/adafruit-HUZZAH32-ESP32-Feather-PCB>
- removed the USB programmer (connected externally once, then OTA)



in the ESP32 data sheet there are 25V and 50V capacitors here, why? should be max 5V right? not too important, since I found cheap 25V and 50V versions

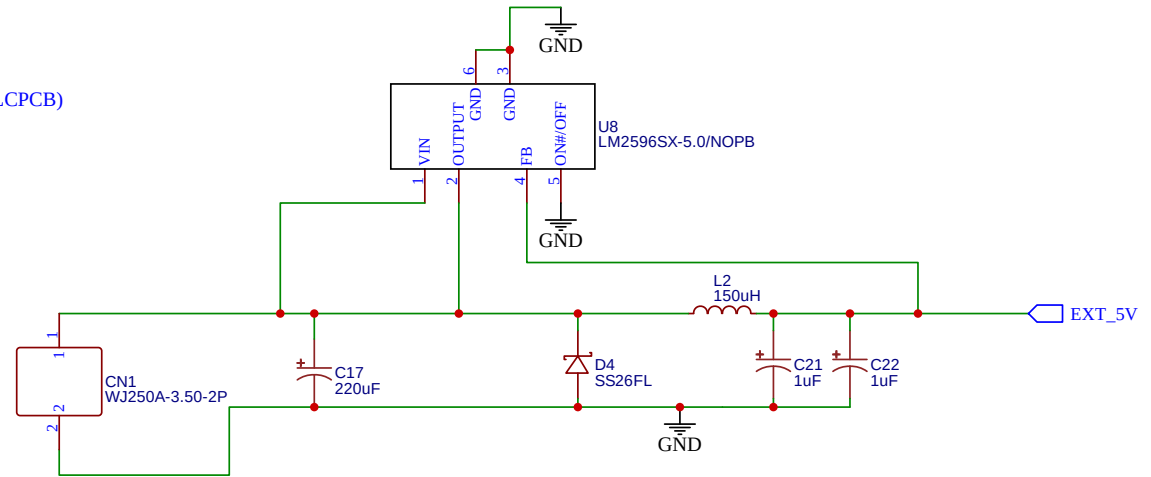
Programmer connection



TITLE: ESP32		REV: 1.0
EasyEDA	Company: bauer.tech	Sheet: 2/4
	Date: 2020-08-13	Drawn By: Martin Bauer

Power Circuit Design

- Goal: power by typical outdoor power supply
- googled around and found Texas Instruments LM2596SX
- they have a tool to design circuit:
 - <https://webench.ti.com/power-designer>
- Selected Parameters
 - Input 12V - 25V
 - Output 5V at 0.8A
 - (0.8A because for higher currents I couldn't find the suggested components on JLCPCB)
 - Temp 30
- From the tool selected components that JLCPCB offers
 - Input Cin: UUD1H221MNL1GS (Nichicon)
 - Diode D1: SS26FL (Fairchild Semiconductors)
 - Inductor: SLF12575T-151M1R5-PF (TDK)
 - Outout Cout: 2x TPSA105K035R3000 (AVX)
- Open Questions
 - ESP32 datasheet mentions 0.5A, so 0.8A design should be enough?



TITLE: High Voltage Step Down		REV: 1.0
EasyEDA	Company: bauer.tech	Sheet: 4/4
	Date: 2020-09-01	Drawn By: Martin Bauer