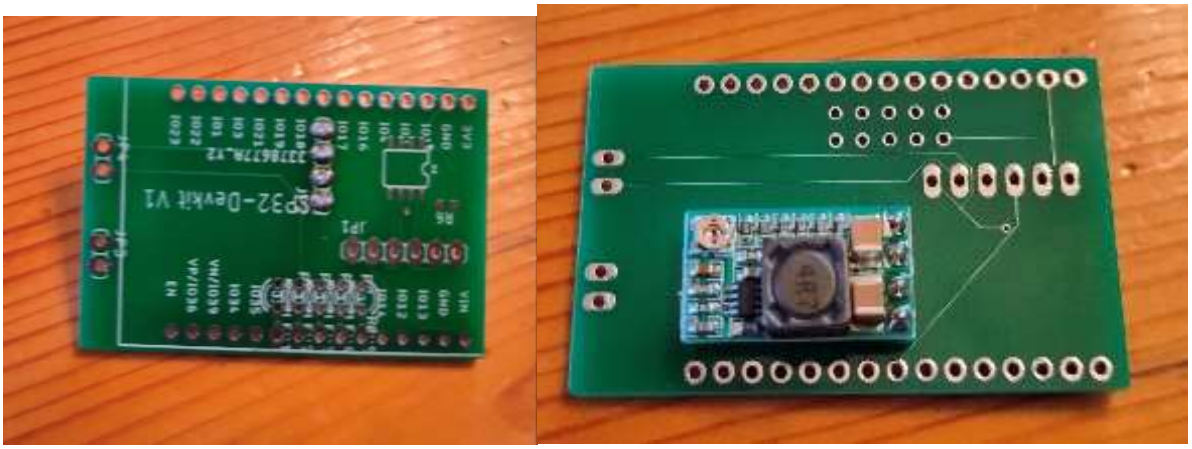
CANSee Build Documentation with PCB

You need: DOIT ESP32-DevKit V1, SN65HVD230 Breakout (ATTENTION there are lots of garbage sold), DC-DC Converter 4 PIN HW-613, ODBII Dongle Case and a PCB.

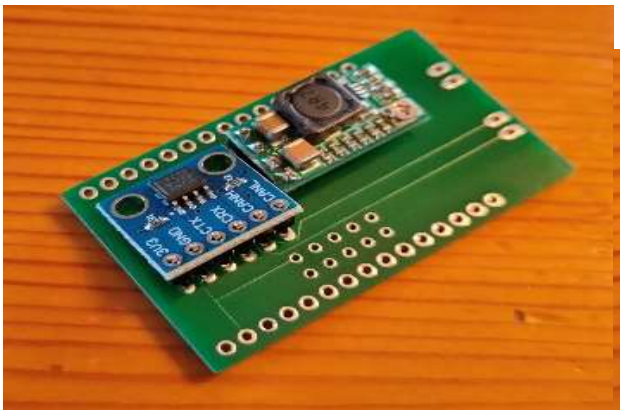
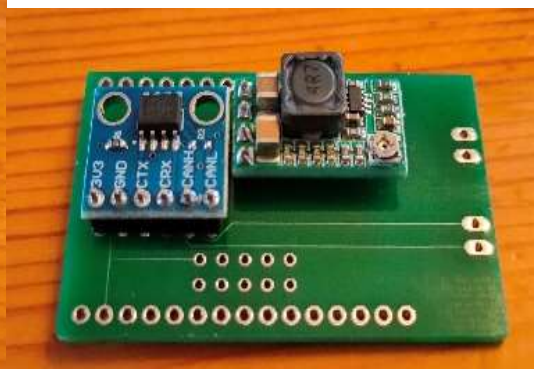
First of all you need to “configure” the DC-DC Converter to use the hard coded voltages by cutting the connection on the ADJ bridge. Then you need to create a new bridge (dot of soldier) at the 5V position. And adding a pins to the board.

Then this will be soldered to the back of the PCB.



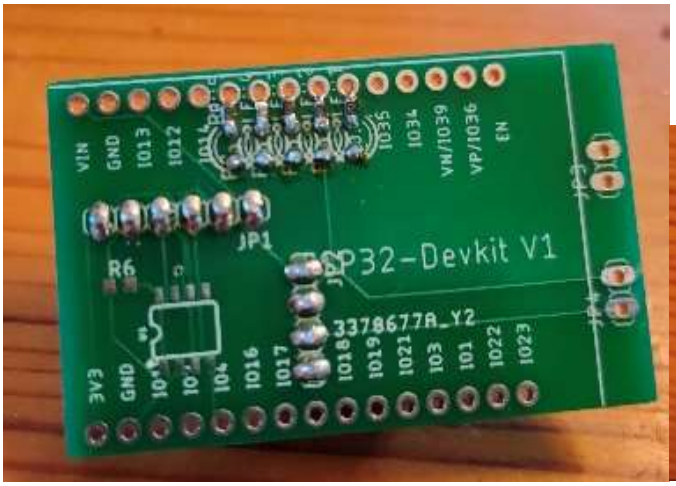
Next step is to solder the SN65HVD230 to the board. Here it might be useful to use some kind of connector instead of using the soldered PIN directly, as many SN65HVD230 boards don’t work. (You could also directly solder a chip with a 10k resistor on the other side (not tested).

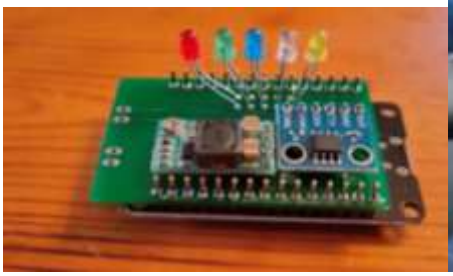
The 120 Ohm Resistor R2 should be removed from the SN65HVD230 board.

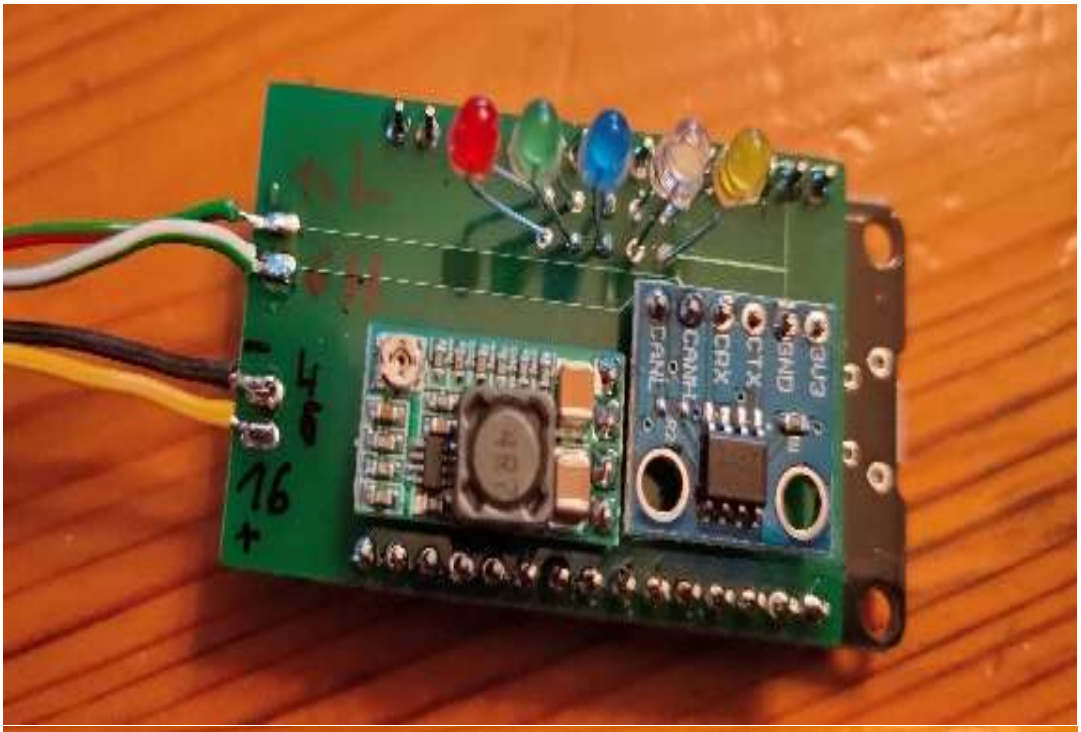
Last but not least you need to solder the ESP onto the board.

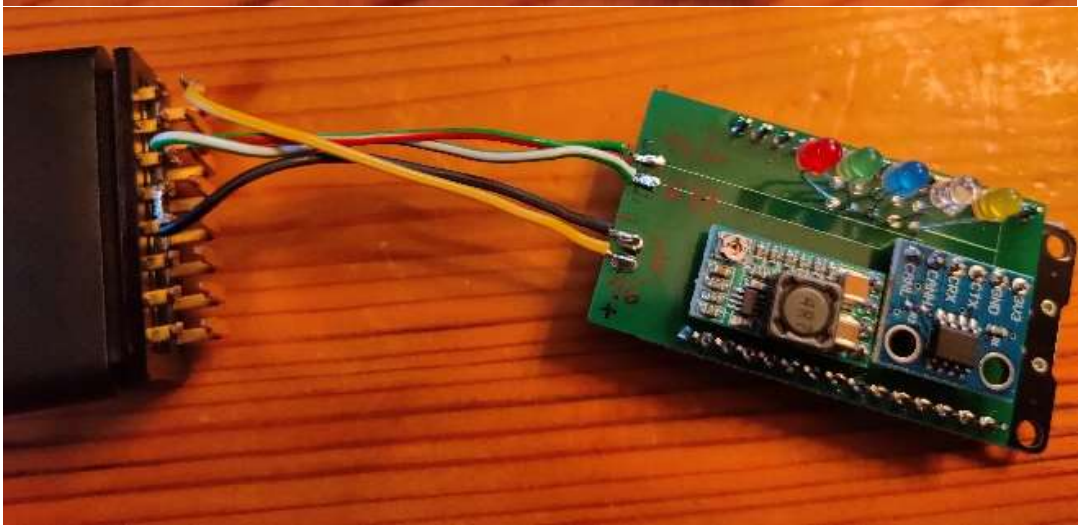

As an option you can add 5 3mm LEDs with a resistor in front (I used 2.2kOhm SMD 0402)






OK


5V3
GND
CTX
CRX
CANH
CANL



Now you should download the firmware, if not done already. This requires Platform IO and a USB connection to the ESP32 board.

1.0	30.12.2020	Added removal can termination resistor, cut pictures
0.9	30.12.2020	First draft released to forum