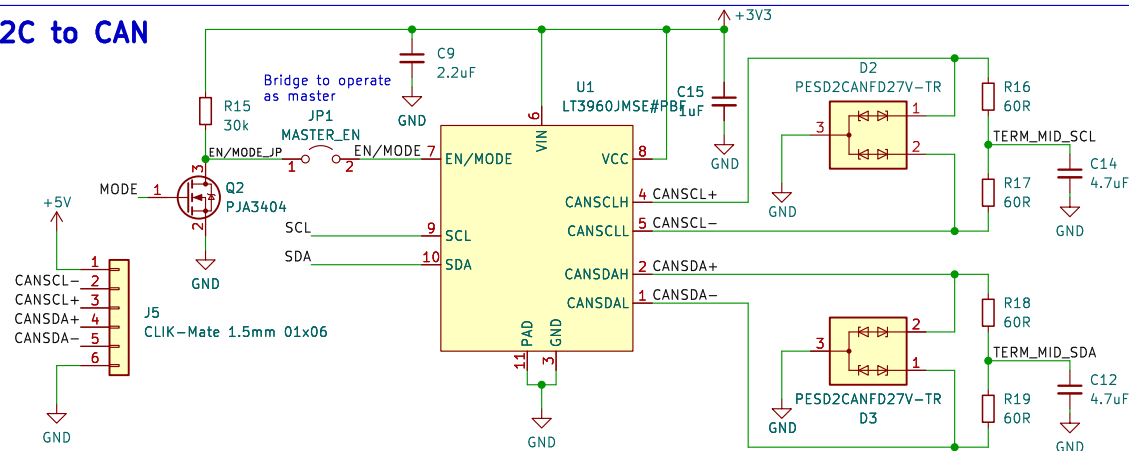
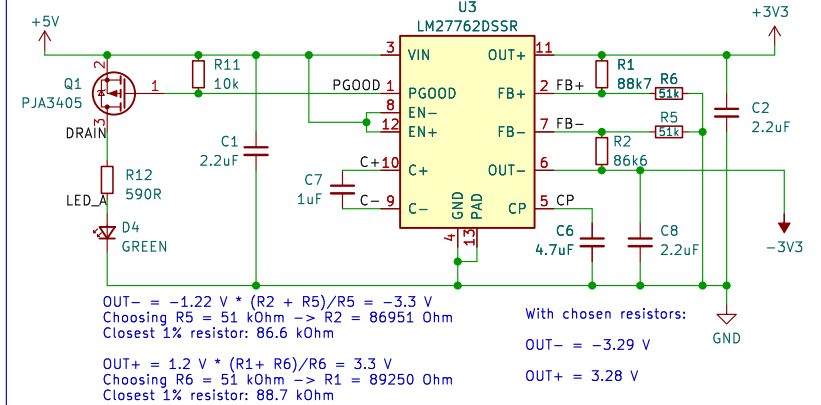


I2C to CAN



Positive and negative charge pump + LDO



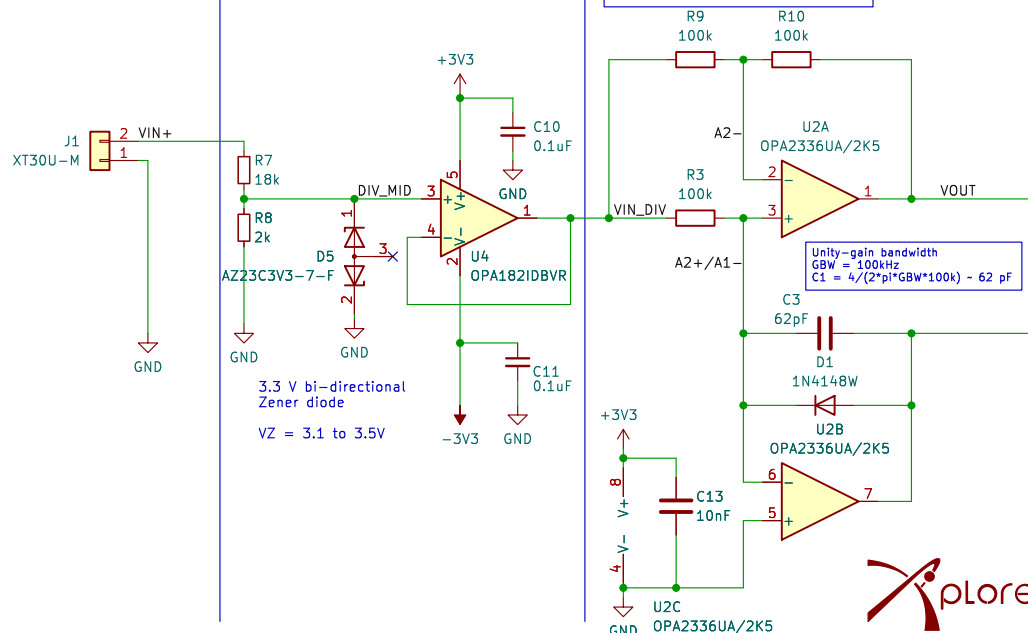
Voltage division + rectification

Voltage to be measured
 [-30, 30] V

Voltage divider + follower
 [-3, 3] V

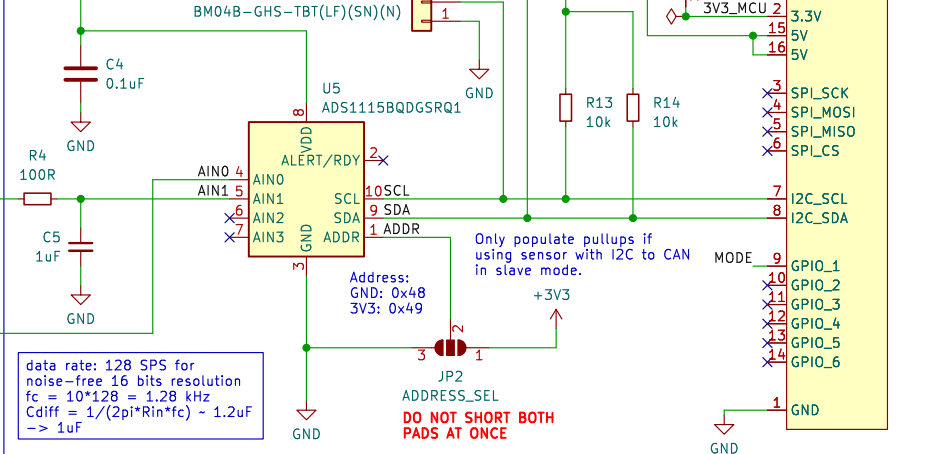
Reading the voltage at the anode of the diode allows us to monitor the input voltage polarity. This is very convenient for setting different coefficients for different polarities.

Precision rectifier
 [0, 3] V



Voltage measurement

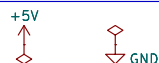
16-bit ADC
 FSR to be used: 4.096 V



Mounting holes



Power flags



Nominal input differential voltage: -30 to 30 V
 Absolute maximum ratings: -33 to 33 V
 Theoretical resolution: 1.25 mV
 Author: Vincent Nguyen



Sheet: /
 File: voltmeter.kicad_sch

Title: 30 V Voltmeter Hat

Size: A4 Date: 2023-07-13
 KiCad E.D.A. kicad 7.0.1

EPFL Xplore

Project Kerby



Rev: 3.1
 Id: 1/1