

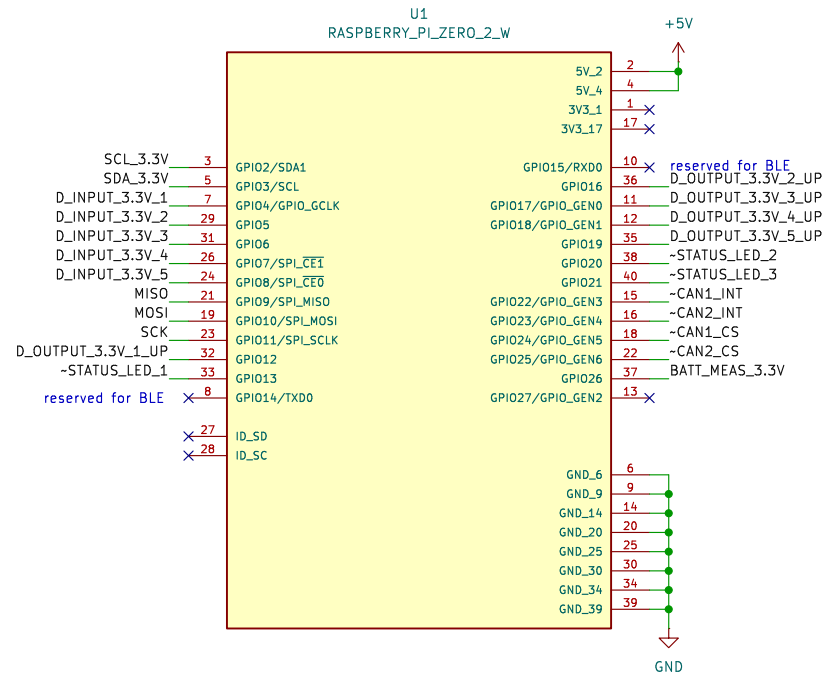
DESIGN REQUIREMENTS:

- Raspberry Pi Mounting
- 5V / 3.3V Power Supply
- Right-angle ECU-style connector
- 2 separate CAN bus
- Programmable GPIO
- Ancillary sensors for log information:
 - temperature
 - pressure
 - humidity level
 - battery voltage

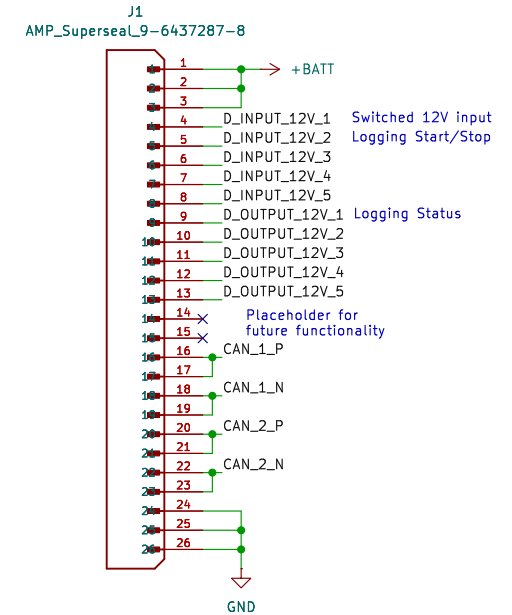
TODO:

- battery/super capacitor for r/rw protection
- connector & mating part numbers
- pi mounting hardware
- QR code to repository
- silkscreen info

Raspberry Pi Zero 2W



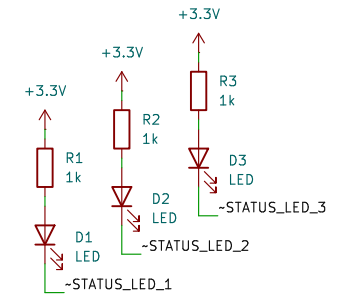
Connector



Hardware

- H1 MountingHole
- H2 MountingHole
- H3 MountingHole
- H4 MountingHole

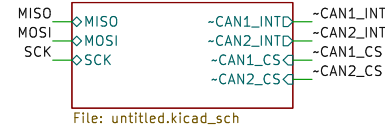
Status LEDs



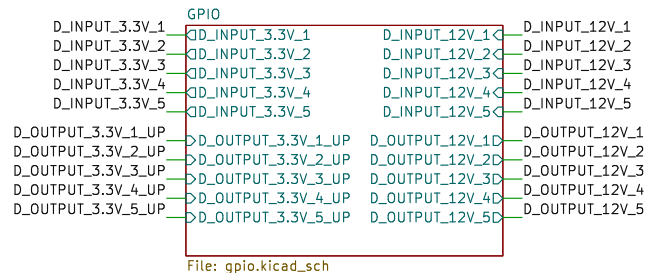
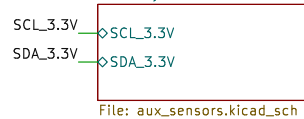
Power Supply



CAN Communication



Auxiliary Sensors



Brian Glen

Sheet: /

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Title: CAN Data Logger PCB

Size: A4

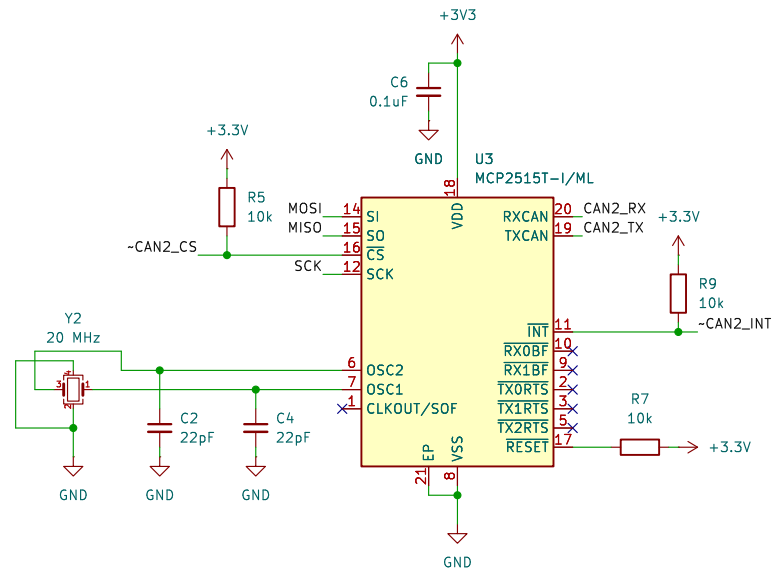
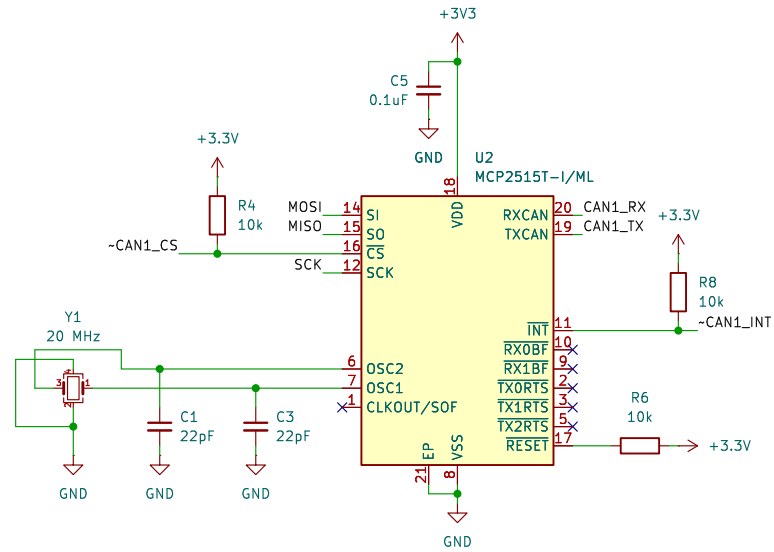
Date: 2025-05-27

Rev: 1.0

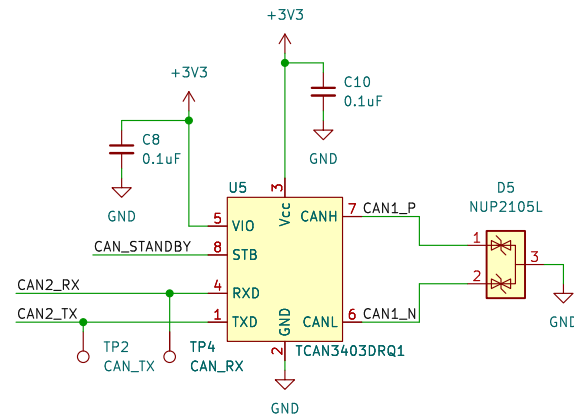
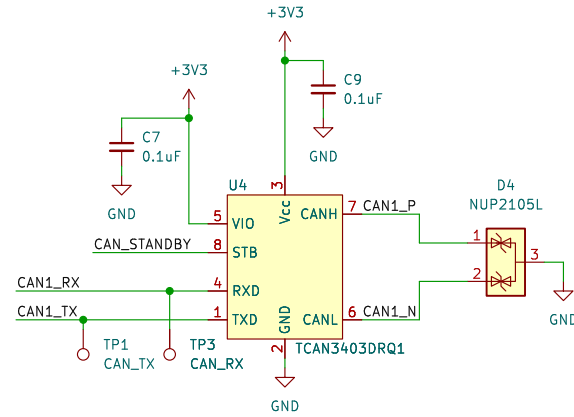
KiCad E.D.A. 9.0.1

Id: 1/5

CAN Controller

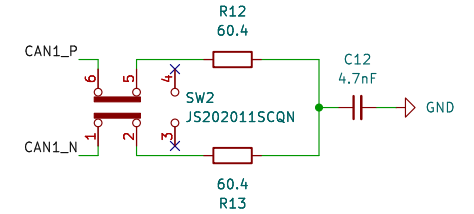
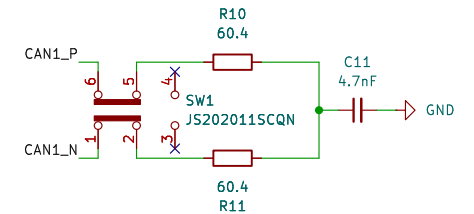


CAN Transceiver



MISO \diamond MISO
 MOSI \diamond MOSI
 SCK \diamond SCK
 ~CAN1_CS \diamond ~CAN1_CS
 ~CAN2_CS \diamond ~CAN2_CS
 ~CAN1_INT \triangleleft ~CAN1_INT
 ~CAN2_INT \triangleleft ~CAN2_INT

Selectable Termination



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Title:

Size: A4

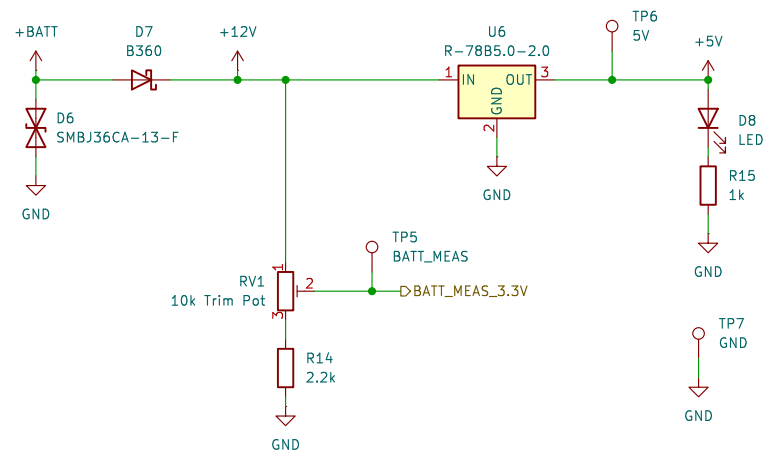
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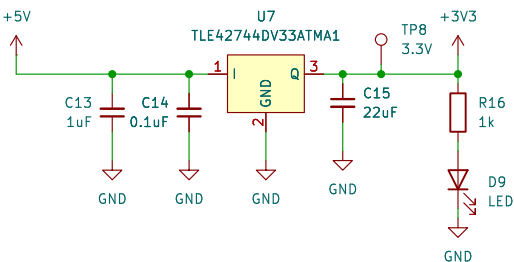
Id: 2/5

5V Power Supply



3.3V Regulator

3.3V Regulator 400mA max. 4.5-40V input
- reverse-polarity protection
- over temperature protection
- over current protection
- short circuit protection



Sheet: /Power Supply/
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Size: A4

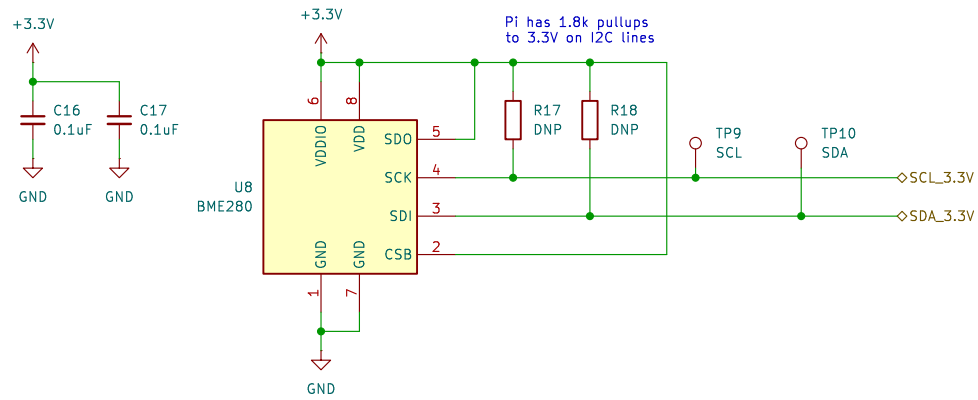
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Id: 3/5

Temp, Humidity, Pressure Sensor



Sheet: /Auxillary Sensors/
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Size: A4

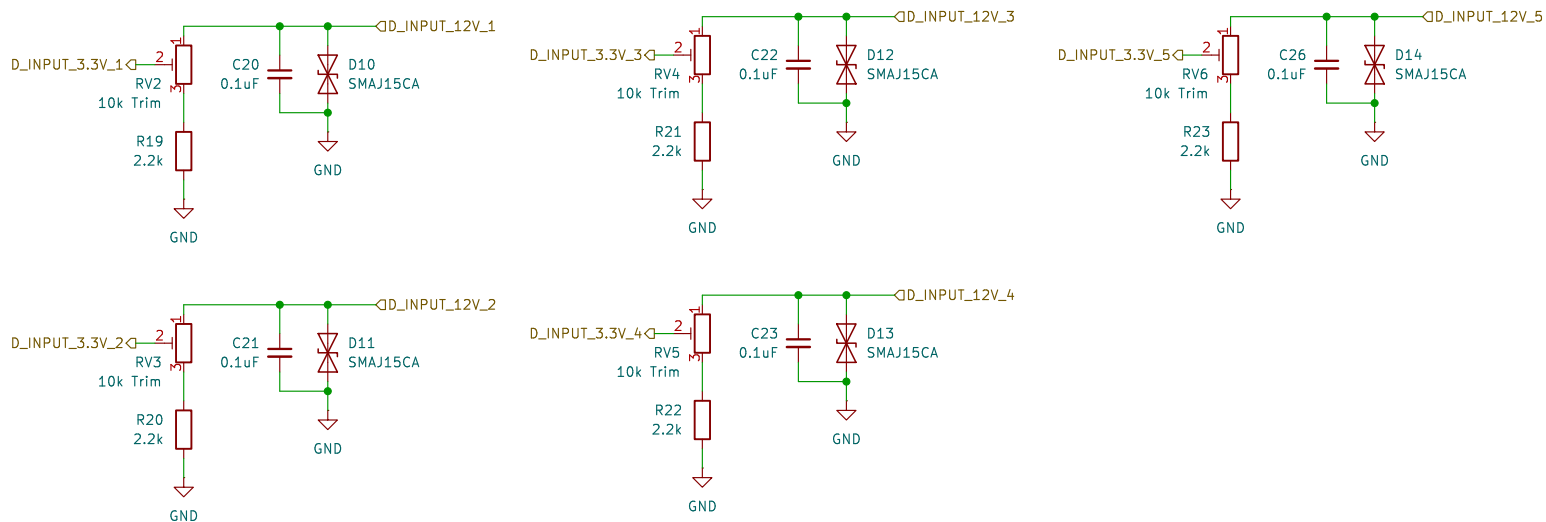
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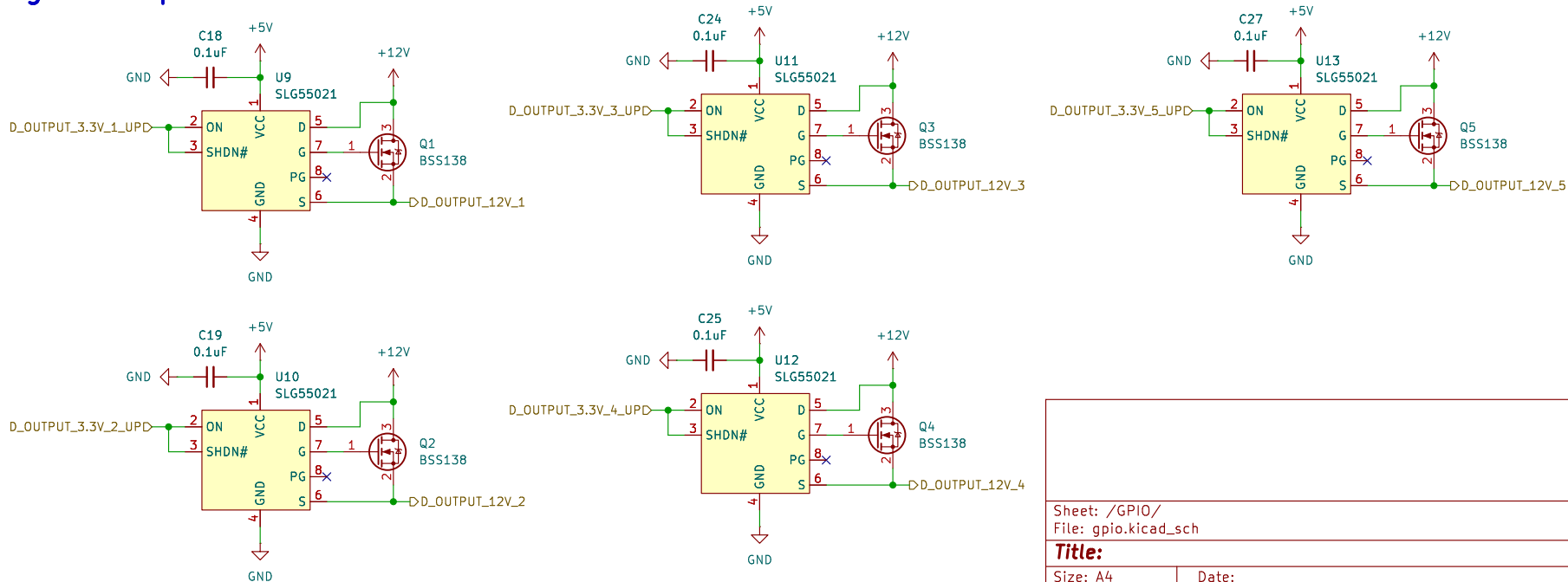
Rev:

Id: 4/5

Digital Inputs



Digital Outputs



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Date:

KiCad E.D.A. 9.0.1

Rev:

Id: 5/5