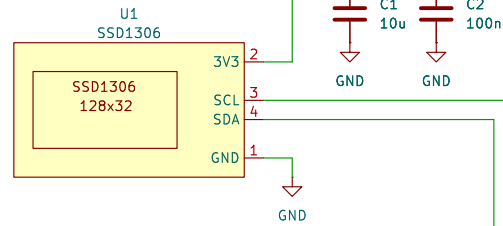
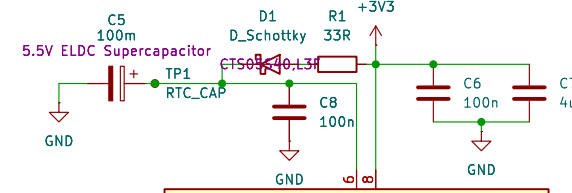


Display

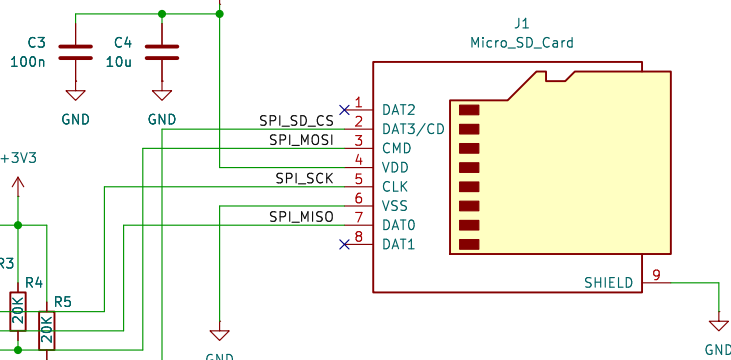


MCU

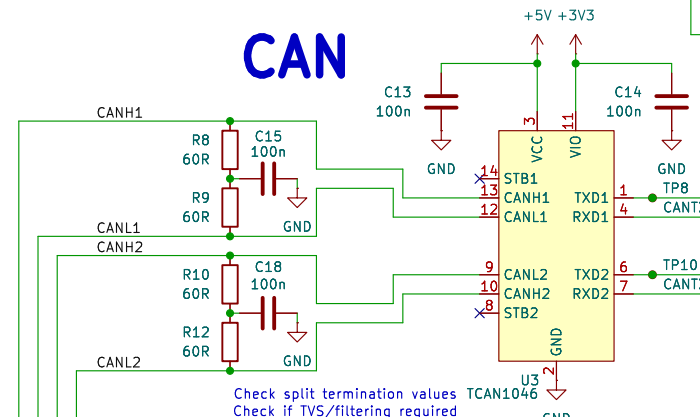
VBATT cap charged internally through 5k resistor.
To speed charging also external diode, with 33 ohm resistor and 23 ohm ESR worst case load of $I=3.3/50=66\text{mA}$



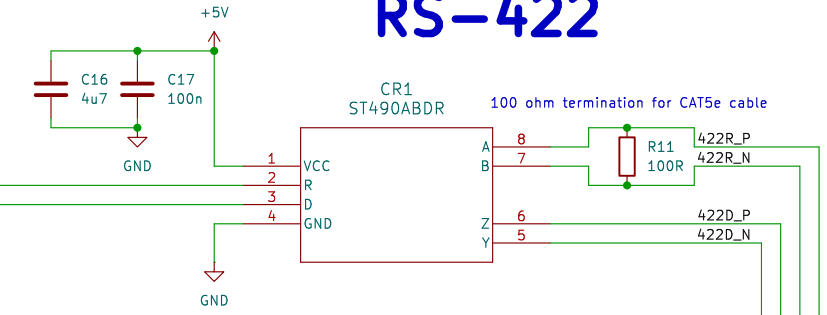
Micro SD



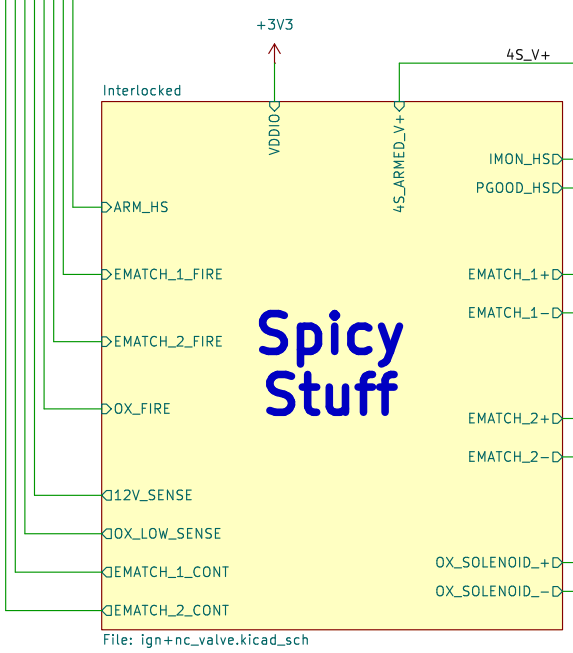
CAN



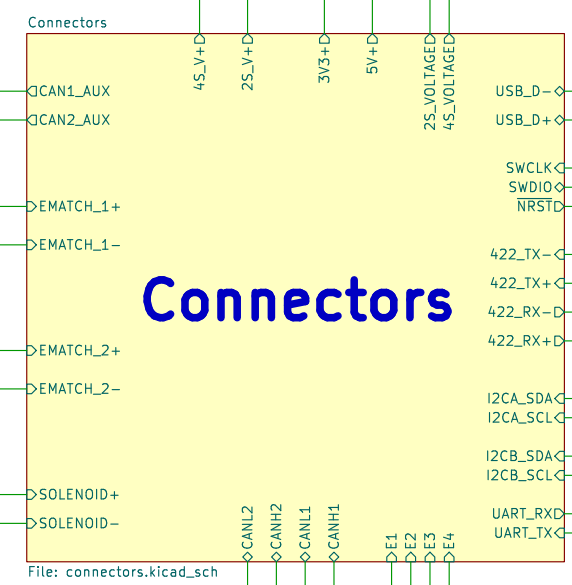
RS-422



Spicy Stuff



Connectors



Checked:
Drawn: Brad Redpath
Hybrid Test Stand 2025
Sheet: /
File: Central_ECU.kicad_sch

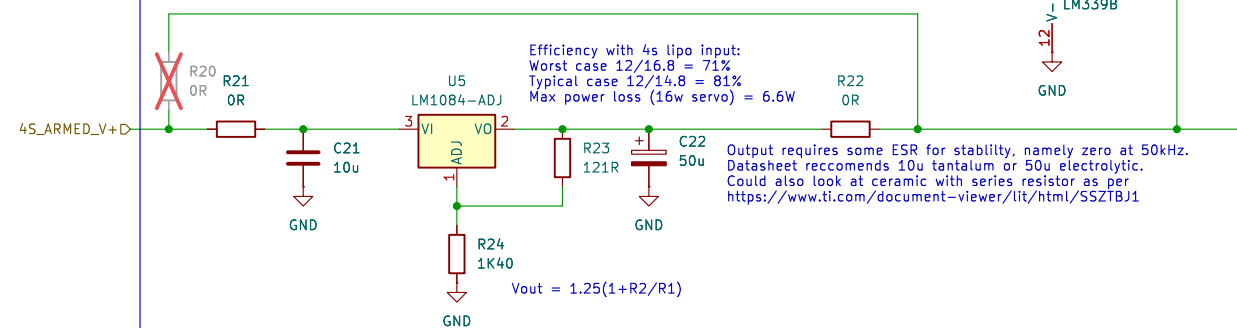
Title: Central ECU Board

Size: A3 Date: 2025-04-02
KiCad E.D.A. 9.0.0

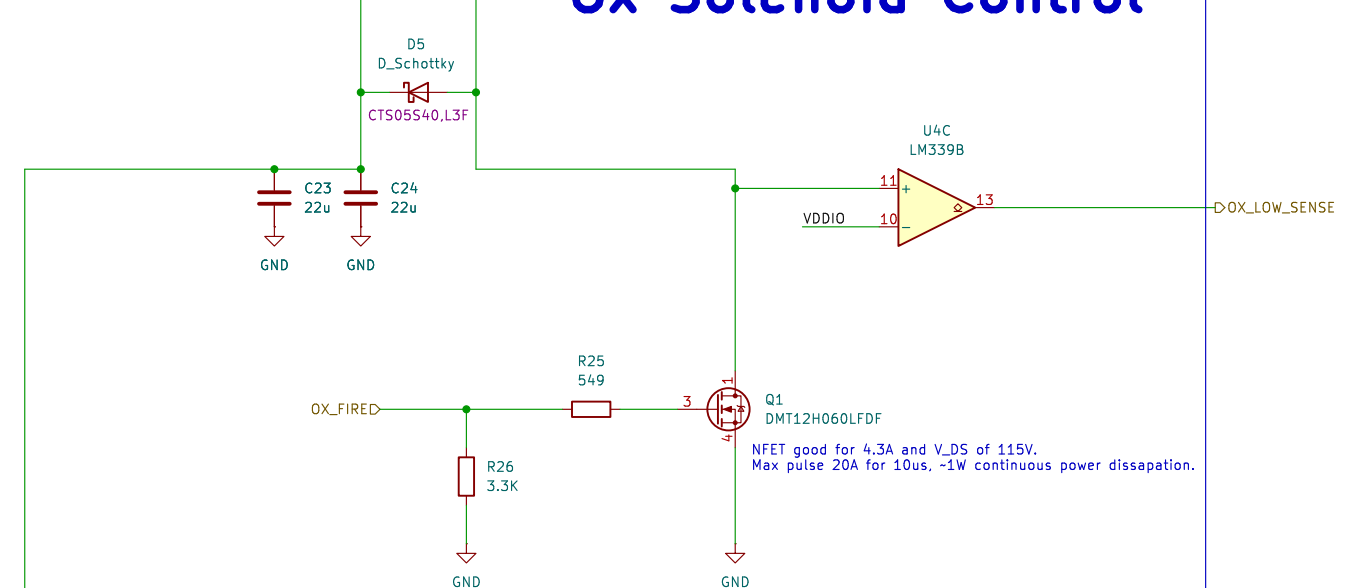
Rev: A
Id: 1/5

12V Regulator

Bypass to allow for externally regulated power to be passed directly through.
This will be useful if a 24V solenoid is used.

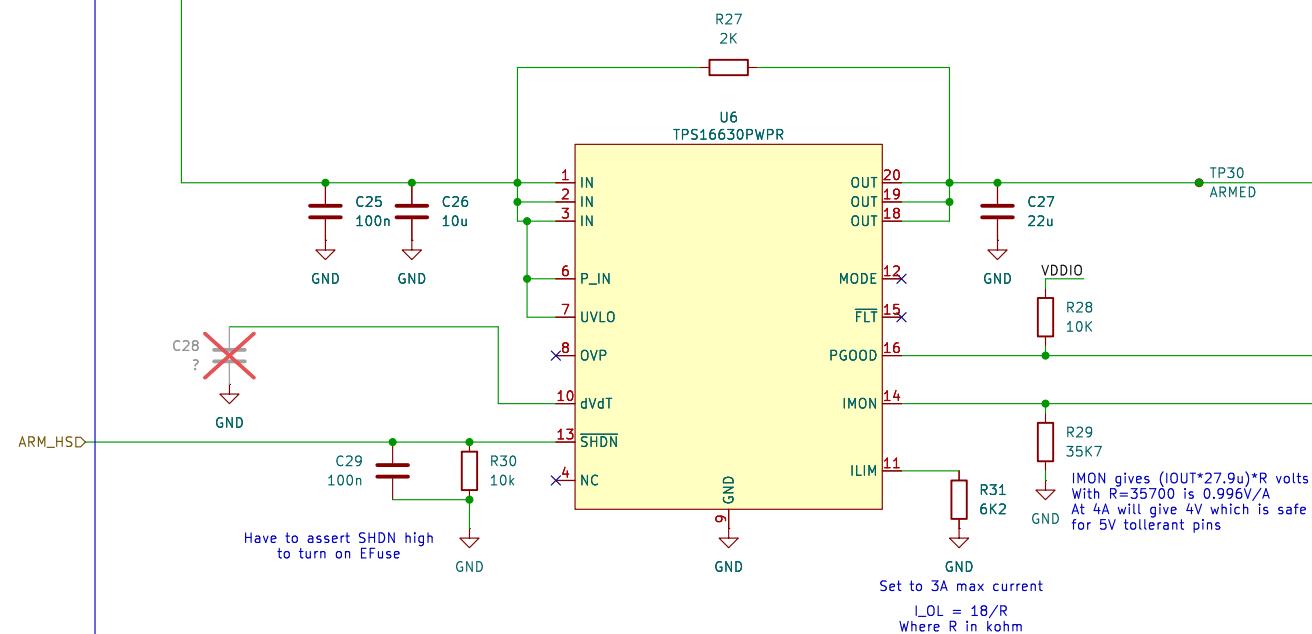


Ox Solenoid Control

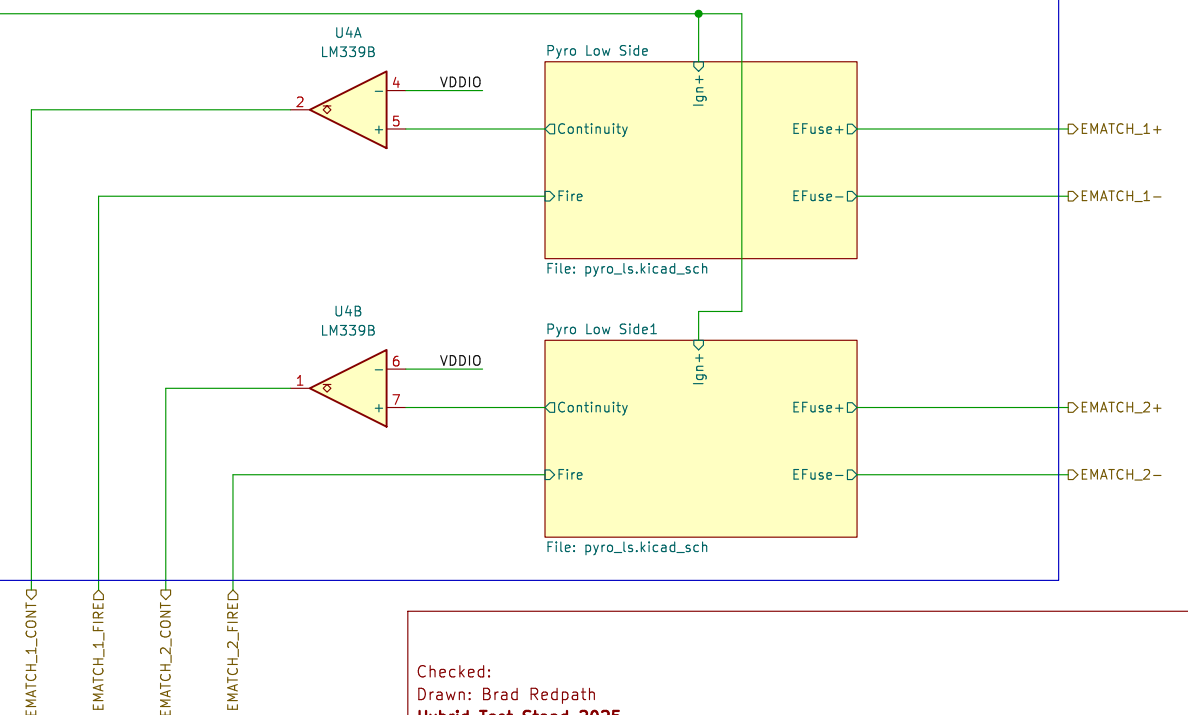


High Side Switch

Allow a small current through to test continuity.
With the voltage divider on the other side current
will not exceed 137uA through each ignitor.
In case of low side switch fault upto 15mA
can pass, this should be well safe.
Click for verification



Ignitors



Checked:
Drawn: Brad Redpath
Hybrid Test Stand 2025
Sheet: /Interlocked/
File: ign+nc_valve.kicad_sch

Title: Interlocked Components

Size: A3 Date: 2025-04-02
KiCad E.D.A. 9.0.0

Rev: A
Id: 2/5

