1st ProtoTAU EEES Meeting

Introduction

Goals (informal)

- Get the PCB actually done and assembled.
- Document as much as we could and should.
- Make it future-proof
- Get a system created so Data and Telemetry people have something to actually do and should.

Goals (formal)

- Finish the KiCAD schematic of the electronics
- Check up the PCB creation and ask for feedback from professors.
- Waiting the delivery of the components and assembly tools
- Agree on the foundation how we will design the system
- Follow the proposed plan and adapt it without much sacrifice

Optional goals

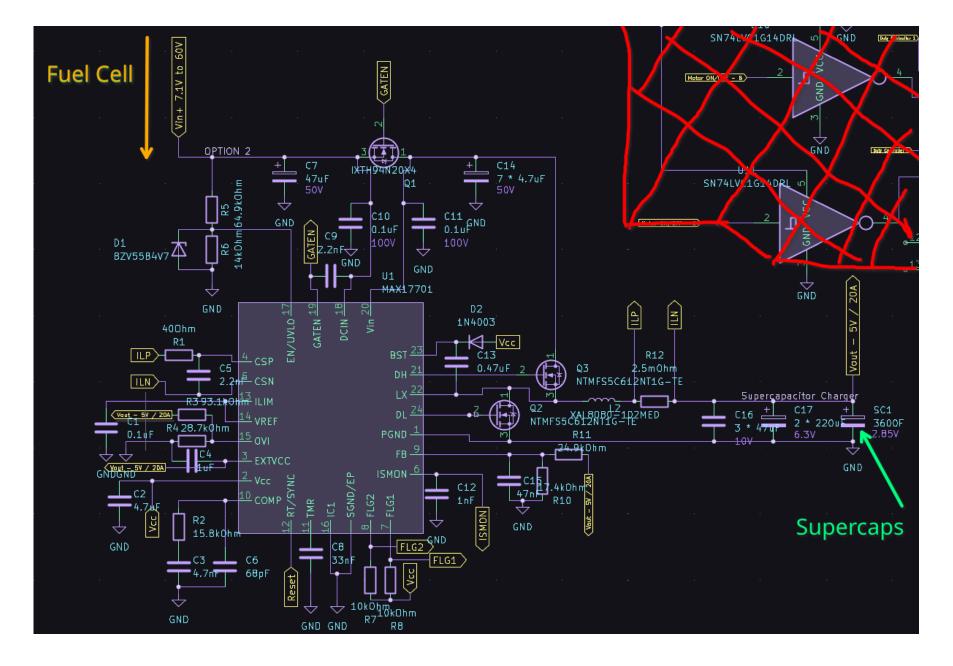
- Unify our documentation in own made home server and host the webserver for it (Obsidian).
- Learn how to make our own motor (for people who have courses in this especially ie. MechElec, EEE and Electrical Engineers)

Risks and "Elephants in the room"

- Does the motor actually work.
- Some solutions are now in purely followed by datasheets and thus we may or may not know the reality of the matters at hand.
- We may need to have to outsource ourselves to other teams as they also need EEES advice on the matters.

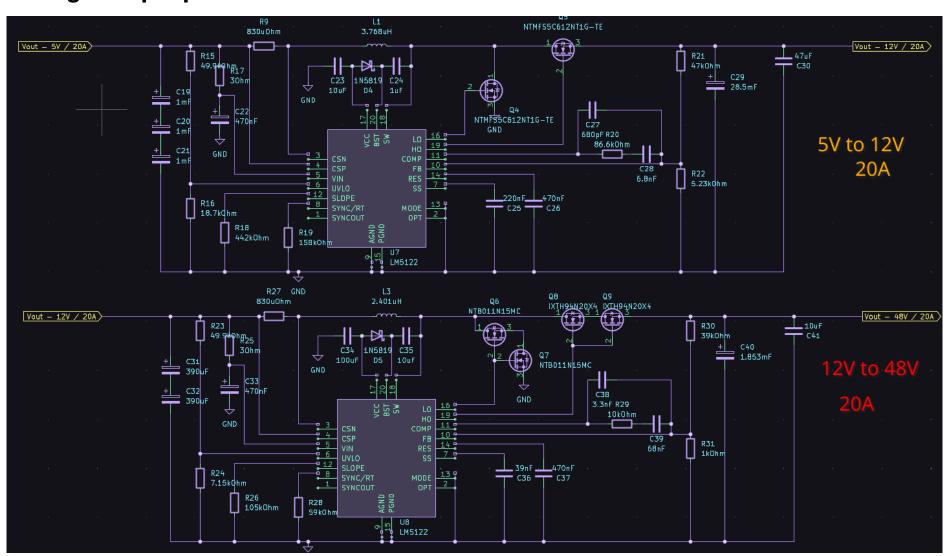
System

Charging System



Documentation

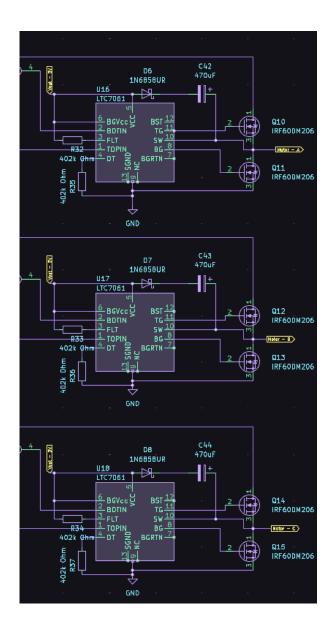
Voltage Step-Up



Documentation

Power Bench

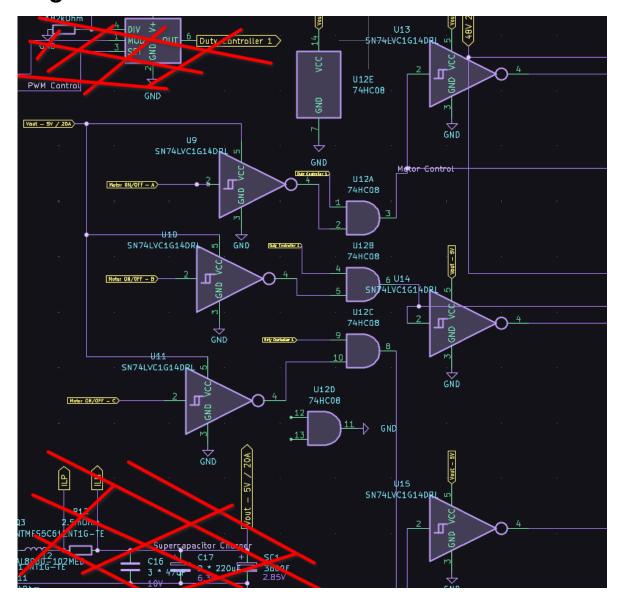
Phase Controller



Documentation

Simulation LTSpice

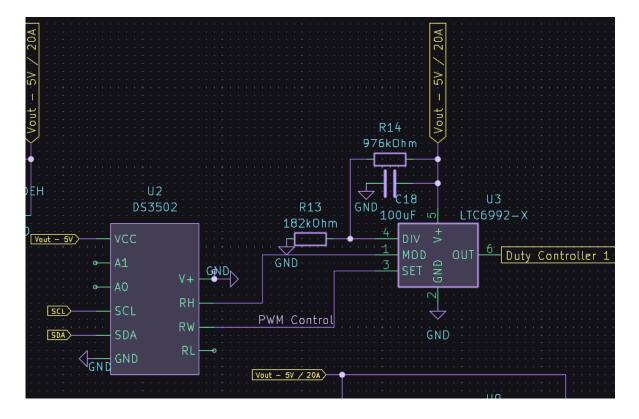
Logic Controller



Inverter Documentation

AND-Gate Documentation

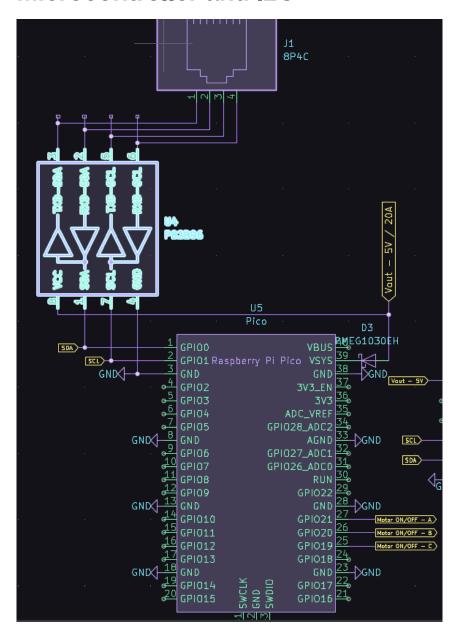
Pulse Width Controller



Modulator Documentation

<u>Digital Potentiometer Documentation</u>

Microcontroller and I2C



Microcontroller Documentation

Active Terminator

Questions?