

Members in Attendance

- Josh Mendez (Sponsor/Advisor)
- Felix Moss (Exused)
- Annika Boyd
- Eisa Alsharifi
- Nathan Truong

Questions:

- Should we step up the voltage to 5 volts or step it down to 3.3 volts for operational efficiency?
- How can we integrate a negative supply voltage using a single positive battery?
- What are the best options for op-amps considering current noise and bias requirements?

Notes:

- Voltage Regulation Options:
 - Discuss stepping up to 5 volts vs. stepping down to 3.3 volts.
 - Evaluate the need for a 5-volt supply based on component requirements.
 - Consider the op-amp's ability to operate on 3.3 volts and the need for a negative supply.
- Negative Voltage Solutions:
 - Explore using charge pumps or creating a virtual ground for generating negative voltage.
 - Address noise issues associated with charge pumps and filtering requirements.
- Op-Amp Configurations and Considerations:
 - Selection criteria are based on low-bias currents and stable operation under varying temperatures.
 - Discussion on the use of dual op-amps to simplify the design and reduce part count.
- Procurement and Project Management:
 - Methods for procuring parts and managing the budget.
 - Procedures for ordering components and expected timelines for delivery.

Decisions and Adjustments:

- Preference for stepping down to 3.3 volts to simplify power supply needs.

- Consideration of dual op-amps to reduce part count and streamline the prototype design.
- Agreement on using passive components to split voltage and create a virtual ground.