sdmay20-39: High Speed Magnetic Field Generator

Week 1 Report
September 1 - October 6

Team Members

Jason Cheng — *Technology Lead*
Zack Higgs — *Project Lead*
Harel Cohen — *Hardware Lead*
Ben Colson — *Test Engineer*
Craig Phillip — *Communication Lead*

Summary of Progress this Report

At this time, we have finish initial designing and planning. We have met with our advisor, as well as the professor in charge of our project. We have then set up weekly (or weeklyish due to various scheduling issues) meetings with everyone to both discuss progress and plan next steps. In terms of prototyping and figuring out next steps, we have setup a timeline (provisionally), that lets us figure out where we should be for the next semester. At this stage, we plan to finish out the last team's circuit as a starting point. There is enough that we can just finish the circuit to their specifications, and start iterating through additional prototypes later in the semester/year to actually meet the guidelines after we have a proof of concept.

Pending Issues

We need to schedule training with Lee Harker so we can use the PCB prototyper. In addition, we need to settle out what people are going to do as the tasks start converging, since due to the nature of our schedules, it will be hard to gather everyone at one time. When we run into blockers or tasks that require multiple people, we need to figure out how to solve those projects

Plans for Upcoming Reporting Period

We need to finalize research plans, and figure out what we can iterate on so we can meet the minimums. We also need to make a BOM so we can start ordering parts and being prototyping with the goal to have the circuit designed, if not prototyped by the end of the period, so we can begin testing and troubleshooting as soon as we can.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Jason Cheng	Finish out documentation and timeline so we can plan out the rest of the project. Also help create templates and other necessary materials (lightning talk/reports) for grading	20	0
Zack Higgs	Organize meetings and other necessary connections for project work. Also research and simulate circuit.	20	

Harel Cohen	Research previous circuits and parts we can use to improve circuitry performance	10	0
Ben Colson	Research applications and necessary parts to finish out circuit	10	
Craig Phillip	Create and organize notes and documentation for progress on project. Research circuitry to understand previous groups' work	10	

Gitlab Activity Summary

Nothing to report.