sdmay20-39: High Speed Magnetic Field Generator
Week 6 Report
December 1 - December 8

Team Members
Jason Cheng — *Technology Lead*
Ben Colson — *Test Lead*
Zach Higgs — *Project Lead*
Harel Cohen — *Hardware Lead*
Craig Philipp — *Communications Lead*

Summary of Progress this Report
Intensive testing sessions. We now have functioning boards, and are putting in work to see if our MOSFETs we have selected get us closer to our goal of rise time and field strength without increasing noise and ringing. We also are finalizing documentation and making sure our standards can be held and continued throughout the current semester, and next semester. Lastly, we are starting to lay out connector and MOSFET changes for V2, to be developed next semester.

Pending Issues
We need a driver for GA MOSFETs that we want to try, that needs to be designed into V2. Additionally, we need to finalize documentation to be prepared and submitted for our final.

Plans for Upcoming Reporting Period
Finish preliminary testing and all work for this semester's class.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Jason Cheng	Created work and helped correct design document. Helped create final presentation. Assisted in MOSFET testing and signal gathering.	8	0
Ben Colson	This week I have aided in the development of the senior design YouTube video that was posted for our group. In addition to this I aided in soldering one of our MOS and testing them with Zack and Craig.	5	
Zach Higgs	This week we have received our printed circuit board (PCB) and parts, and so we soldered our PCB and started our testing. We have been testing several different MOSFETs and testing each one to see how they differ	5	

	from past choices. We also plan to test the same MOSFET on the past PCB and our current PCB to see differences in the circuit's performance. I think this should be a very interesting test for our team.		
Harel Cohen	Helped in the creation of YouTube video to explain the importance and use cases of our project. Made quick check in MOSFET drivers and sourcing to decrease rise time	5	0
Craig Philipp	I worked on fixing up our design document so the final revision would be ready before our final presentation. I fixed fonts and color scheme changes throughout the document. After our design document review, I used the notes to change other formatting errors as well. We were not consistent with bullet points and lists, so I made that consistent and I added a table for the responsibilities section. I added a few more sentences about the previous design as well as moved the pictures and figures to the beginning of the document in their appropriate sections. I then added large red lettering in spaces that needed to be edited by other members and I will put it together when I get responses from everyone. I	10	0

Gitlab Activity Summary
Nothing to report.