sdmay23-29: Building blocks and sub-circuits with magnetic field generators
Week 5 Report
October 13 - October 19

Team Members
Andrew Murphy — *Circuit Design*
William Nichols — *Circuit and Optical Design*
Michael Lopez — *Optical Design*
Steven Huynh — *Circuit Design*
Umair Sarwar — *Circuit and Optical Design*

Summary of Progress this Report
For this week, the team was asked to expand upon all assignments from last week. First, to continue dissecting the assigned paper and the references it used. Second, come up with an inductor and MOSFET to use in our circuit, and show it works in MultiSim. Lastly, we had to expand upon our Simulink simulation to gain a better understanding of the optical system. We also have the option of attempting to use Comsol to simulate the optical portion of this assignment.

Pending Issues
We have no pending issues from last week's report. Our client wants us to fully understand our circuit, so we will spend multiple weeks expanding on the same tasks.

Plans for Upcoming Reporting Period
Next week we plan to hopefully finalize our MOSFET and Inductor choices. We will also continue expanding on our Comsol and Simulink designs to get a higher accuracy simulation.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Andrew Murphy	This week, Andrew primarily focused on inductor design and MOSFET choice. He came up with multiple options for the MOSFET and a potential design for the inductor. He also did some individual research regarding optical systems.	12	60
William Nichols	This week, William focused on our optical simulations in Comsol and Simulink. He also worked on creating a simulation of our MFG circuit with Michael Lopez as well as looking for potential MOSFET, and did some individual research on optical systems.	12	55

Michael Lopez	Michael spent most of his time working in Comsol and Simulink to make a working simulation of our optical and MFG circuit. He also spent some time looking for potential MOSFETs and researching optical systems.	14	55
Steven Huynh	Steven spent much of his time this week looking for potential MOSFETs and performing individual research on optical systems.	11	59
Umair Sarwar	This week, Umair spent most of his time looking for potential MOSFETs. He also spent some time working in Comsol working on simulating our MFG circuit. Lastly, he spent some time doing individual research on optical systems.	10	53

Gitlab Activity Summary
Nothing to report.