

**sdmay19-30: EE 448 Stroboscope**

Week 10 Report

November 22 - December 2

**Team Members**Katrina Choong — *Chief Hardware Engineer / Timeline Manager*Meghna Chandrasekaran — *Chief Software Engineer / Meeting Facilitator*Seth Noel — *Chief Hardware Engineer*Kyle Zelnio — *Project Manager*Jessica Bader — *Chief Software Engineer / Communication Manager / Scribe***Summary of Progress this Report**

This week we spent most of our time putting together presentation slides, practicing our presentation, and fixing our Design Document and Project Plan. Seth and Jessie also did the finishing touches to be ready to demo, including calibrating our waveform to match the fan we were demoing on and videoing our demo. Seth also did the rest of the calculations we wanted to present on during our presentation.

**Pending Issues**

Our hardware team (Seth, Katrina, and Kyle) has realized that our stroboscope is still lacking brightness compared to the original stroboscope. Part of the issue with this is we designed our hardware circuit assuming the Tiva board would output a 4V high, but it only outputs 3V. We need to continue to research and brainstorm ideas to increase the brightness. Furthermore, we found that the output waveform does not look how we expected it to. We are worried that the ground is moving, and need to research what may be happening and how to fix it. The software team (Meghna and Jessie) will continue to try to connect to the Tiva board with the GUI, because we have not been able to figure out how to do this.

**Plans for Upcoming Reporting Period**

In the upcoming week, our entire team (Meghna, Seth, Katrina, Kyle, and Jessie) will be presenting our project and turning in our documentation. At the beginning of next semester, we plan to add the tachometer (Seth, Katrina, and Kyle). These same members will also research the Hall-effect tachometer and how to use it in our design as well as creating a new PCB. The software team (Meghna and Jessie) will work on connecting the Tiva board to the GUI and doing more tests with the Tiva board to make sure the output waveform is what it is supposed to be.

**Individual Contributions**

Team Member	Contribution	Weekly Hours	Total Hours
Katrina Choong	This week I worked with the team to put together the presentation slides, editing the project plan and design document, preparing my parts for the final presentation. I also helped with some input to the circuit.	17	82.5
Meghna	This week I worked on the final presentation	18	86

Chandrasekaran	slides, fixing my sections on the project plan and design document, and preparing my speech for the slides I will be talking about for the final presentation.		
Seth Noel	This week I worked on the final presentation by making a video, formating my slides, practicing what I was going to say and redoing the low-level design. I also worked on the project plan and design documents for the last time this semester. I also did measurements and calculations of the current circuit to accompany the presentation and the project overall.	20	90
Kyle Zelnio	This week I helped with the new design testing with our current itteration of the LED circuit board. As well as oscilloscope captures for the presentation and documentation. Working on fixing the documentation and practicing for the final presentation.	18	81
Jessica Bader	This week I worked on calibrating the waveform software for the demo, putting the slides together for the final presentation, fixing the design document and the project plan, preparing my speaking portions for the final presentation, and doing calculations for the circuit	27	98

**Gitlab Activity Summary**

Nothing to report.