

ECE 492 Weekly Report MAY 1607 Week 11

(4/12/2016-4/18/2016)

Advisor: Jaeyoun Kim

Client: Honeywell, FM&T

Members (roles): Gregory Kuhn (Weekly Report), Noah Bergman (Team Leader) Michael Kelly (Key Concept Holder), Garrett Hembry (Webmaster)

Project Title: Microscope Embedded Display for Assembly Work Instructions

Weekly Summary:

We have accomplished the majority of our technical objectives, so this week we were to focus more on the documentation requirements. We successfully completed our design poster as well as made good headway on our final design document. Furthermore, the micro-projector circuit we had previously designed in multi-sim was successfully fabricated and we managed to put it together and have it working properly.

4/14/16/Group Meeting in TLA

Duration: 90min **Members Present:** All

Purpose and Goals:

Work on installing the newly fabricated micro-projector circuit.

Achievements:

We were successfully able to install and get the micro-projector circuit working properly. This was accomplished by attaching the optical engine to the DLP board via the DMD connection and the DLP board to the main board via the serial connection. We then tested it and found it worked successfully.

4/16/16/Group Meeting in TLA

Duration: 300 min **Members Present:** All

Purpose and Goals:

Our objective in this meeting was create our project poster as well as begin to work on our final document.

Achievements:

We were able to complete the project poster, and in addition we made a good amount of progress on our final design document. For our project poster we divided it into 7 separate parts. The header, project overview, design requirements, design approach, technical details, and testing. After viewing it in the docs r we determined it was presentable and sent it in. For the final document we made good headway by completing the introduction, the project statement, the technical requirements, and materials sections of the report.

Pending issues

- 1) Fabricate the remodeled lense holder.
- 2) Continue to further integrate the micro-projector circuit with EVM software so that it could send multiple signals.
- 3) Work on finishing our project report.

Plans for next week

Next week we would like to continue to integrate the microcontroller with I²C and be able to send multiple signals from our computer, as we have only been able to send one signal across at a time. Furthermore we would like to have our modified lense holder fabricated and installed on the microscope. We will also continue to work on the final project report.

Individual Contributions (this week)

Gregory Kuhn-Worked on project poster and the design document. Assisted in installing the new micro projector circuit.

Noah Bergman-Worked on project poster and the design document. Assisted in installing the new micro projector circuit.

Garrett Hembry -Worked on project poster and the design document. Assisted in installing the new micro projector circuit.

Michael Kelly- Worked on project poster and the design document. Assisted in installing the new micro projector circuit.

Total contributions for the project

Noah Bergman-83 hrs

Gregory Kuhn-83 hrs

Michael Kelly-83 hrs

Garrett Hembry-83 hrs