

Senior Design 492 Weekly Report 25

Week 18 (3/29/16 – 4/4/16)

May1624 -- Programmable Wireless Sensor Package for CprE Education

Advisor/Client: Dr. Thomas Daniels

Team Members -- Roles:

Yidong Liu – Team Leader

Xinian Bo – Team Webmaster

Niklas Jorve – Team Communication Leader

Branden Sammons – Key Concept Holder, Secretary

Jonathan Krueger – Key Concept Holder, Manager

Weekly Summary:

This week we focused on modifying the existing PCB prototype to correct some of the issues with the first version. We changed locations of some of the parts, added in extra space for header pins, and corrected the silkscreen layer which gives each part a name on the board. The second prototype will be sent to production next week and will arrive before the final presentation

Weekly Accomplishments:

1. Completed PCB prototype 2.0

Advisor Meeting (3/29/16):

Duration: 1 Hour

Members Attending: Niklas Jorve, Jonathan Krueger, Branden Sammons, Yidong Liu, Xinian Bo

Notes: During our advisor meeting we looked critically at our prototype 1.0 and talked about the modifications that needed to be made. The board is mostly correct, however there were a few changes that needed to be made. Some of the parts on the board were placed in an area that could be easily damaged, so we changed the location of the USB-B port and the audio jacks. We also needed to add more space in the bottom of the board so that we could create openings for header pins of various components on the board. Finally we needed to change a silkscreen layer which was

accidentally created using copper and is an interior layer of the board. This silkscreen layer will be moved to the top of the board and should contain information about various parts on the PCB.

Group Lab Meeting (3/30/16):

Duration: 3 Hours

Members Attending: Niklas Jorve, Yidong Liu, Jonathan Krueger, Branden Sammons, Xinian Bo

Notes: During our group meeting we worked on modifying the layout of the PCB and discussing the changes that needed to be made

Plans for Next Week:

1. Meet with Lee Harker in the component shop to critically examine PCB prototype 2.0 and double check for errors
2. Send PCB prototype 2.0 to production

Individual Contributions:

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|------------------|---|
| Niklas Jorve | Worked on weekly report, attended meetings, worked on PCB prototype 2.0 planning |
| Yidong Liu | Meetings and second PCB design |
| Branden Sammons | <p>Goals from last week:</p> <ul style="list-style-type: none">● Program software.● Finish Documentation changes. <p>This week:</p> <ul style="list-style-type: none">● Lightly updated design documentation.● Did research for software.● Helped team with PCB designs. <p>Goals for next Week:</p> <ul style="list-style-type: none">● Program software.● Finish Documentation changes. |
| Jonathan Krueger | Attended meetings, worked on design document, worked on code for controller |
| Xinian Bo | Meetings and second PCB design, weekly websit update |

Project Contributions:

| Member | Project Time this week (hours) | Total Project Time (hours) |
|------------------|--------------------------------|----------------------------|
| Niklas Jorve | 6 | 155 |
| Yidong Liu | 20 | 167 |
| Branden Sammons | 4 | 128 |
| Jonathan Krueger | 6 | 173 |
| Xinian Bo | 10 | 134 |