Senior Design 492 Weekly Report 20

Week 18 (2/16/16 - 2/22/16)

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:

During this week we worked on solving our continuing SPI issues that we have been facing. We received the logic level shifters that we ordered however we found out that we were not able to use them how we expected. The main problem that we are running into now is figuring out how to supply the correct voltage to the correct pins. Once we accomplish this task, we should be able to quickly build the board.

Weekly Accomplishments:

- 1. Started work with logic level shifters
- 2. Started working on joystick functionality
- 3. Started working with ADC/DAC chip

Advisor Meeting (2/16/16):

Duration: 2 Hour

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

Notes: During the advisor meeting, we discussed the SPI issues that we have been having. We talked about the logic level shifters and how we might be able to use them. We also discussed the PCB progress and the decision about choosing the correct battery to power the PCB.

Group Lab Meeting (2/17/16):

Duration: 3 Hours

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

Notes: During the group lab meeting we focused our work on the logic level shifter. We are still encountering problems with this chip so we will be continuing to focus on this issue for the next couple weeks or until it is resolved

Plans for Next Week:

1. Solve SPI logic level shifter issues

2. Work on footprint of new components for PCB

Individual Contributions:

Niklas Jorve	Worked on weekly report, attended meetings, worked on SPI logic level and joystick	
Yidong Liu	worked on pcb design, added footprint for joystick	
Branden Sammons	Attended meetings, worked with SPI and level shifters.	
Jonathan Krueger	Attended meetings, worked on SPI and level shifters, worked on software, researched new 9 degree of freedom sensors	
Xinian Bo	Attended meeting. Worked on pcb design, and website	

Project Contributions:

Member	Project Time this week (hours)	Total Project Time (hours)	
Niklas Jorve	8	109	
Yidong Liu	5	102	
Branden Sammons	9	91	
Jonathan Krueger	11	125	
Xinian Bo	8	89	