EE 491 Weekly Report 1

Date: 1-16-17 -- 1-23-17

Group Number: May1735

Project Title: Cy-Mote

Advisor: Dr. Daniels

Team Members:

Kyle Fischer - Team Lead

Michael Linthicum - Communications Lead

Daniel Shauger - Concept Holder Lead

Sam Neff - Webmaster

Nick Juelsgaard - Schedule and Planning Lead

Summary of the Week:

This week we received a few more pieces of hardware: the bluetooth dongle and the ICE debugger for the PCB. We plan to connect the ICE debugger to the B11 through the SPI bus and we will be able to debug without the XPlained Pro. We are on track to being able to interface fully with the B11 without needing the XPlained Pro. PCB and other circuits are being worked on by the EE team. We are learning how to write a windows executable so we can write the wrapper program. The wrapper program is planned to be a large portion of our CPRE team’s second semester.

Past Week Accomplishments

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Accomplishments | Time worked | Cumulative Time |
| Kyle Fischer | Went to meetings. | 1 | 1 |
| Michael Linthicum | We may have a defective XPlained Pro. I could not print to putty for a few days using one of the boards and the problem stopped when I switched boards.  Began writing a hardware implementation of the LSM9DS0 code. Was not able to test because the board would not print to a terminal. | 4 | 4 |
| Daniel Shauger | Began research on BLE development in C# for wrapper. | 2 | 2 |
| Sam Neff | Looked at PMIC chips and worked with NI software | 4 | 4 |
| Nick Juelsgaard | Worked on sourcing the correct PMIC chips | 3 | 3 |

Pending Issues:

* Kyle Fischer - Working with Dan on BLE wrapper. Need to add BLE characteristics for all of the data we want to send.
* Michael Linthicum - Determine if one of the XPlained boards is actually busted. Need to test hardware implementation with working board. Need to find a workaround for supporting floating point calculations.
* Daniel Shauger - Working with Kyle on BLE wrapper.
* Sam Neff - PCB needs to be cut asap
* Nick Juelsgaard - PCB needs to be cut asap

Comments and extended discussion

We are starting off the semester well. We all have our goals and we are finishing up loose ends from last semester and starting work on the later portions of the project. We are planning a team meeting. There will be beer.

Plan for coming week

* Kyle Fischer - Work with Dan on PC Wrapper
* Michael Linthicum - Test hardware implementation and keep working on it until complete.
* Daniel Shauger - Work with Kyle on PC Wrapper
* Sam Neff - PCB design
* Nick Juelsgaard - Start PCB design

Summary of weekly advisor meeting:

Learned that the PC wrapper has to work with cygwin and command prompt.