EE 491 Weekly Report 2

Date: 1-23-17 -- 11-30-17

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 continued work on the portions discussed last week. We are still making progress with the PCB; the PCB is priority one and needs to be sent out for manufacturing ASAP.

Past Week Accomplishments

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Accomplishments | Time worked | Cumulative Time |
| Kyle Fischer | Tried to get the ICE debugger to work. | 4 | 5 |
| Michael Linthicum | Defective board is most likely defective. I will work using another board for the time being.  I combined my bitbanged version of the LSM9DS0 code with a hardware implementation attempt to allow for easy comparison and faster debugging. Continued work on a hardware implementation with this improved environment.  The LSM9DS0 was found to be obsolete and we need to use the LSM9DS1 instead. | 5 | 9 |
| Daniel Shauger | Testing of Bluetooth/BLE transmissions between windows apps and phone for proof of concept | 3 | 5 |
| Sam Neff | Worked on the multisim file | 5 | 9 |
| Nick Juelsgaard | Sam and I laid out the first multisim file | 5 | 8 |

Pending Issues:

* Kyle Fischer - Learning another API to talk BLE.
* Michael Linthicum - Hardware implementation is still slow and there is a possibility that a bitbanged version featuring interrupts will end up in the final project submission. Still need to find a floating point workaround. LSM9DS0 is obsolete and we need to use the LSM9DS1 instead.
* Daniel Shauger - Only a rough concept of wrapper design given. Need to focus on BLE development while avoiding Bluetooth’s more power-hungry protocols.
* Sam Neff - Not much experience with MultiSIM/Ultiboard
* Nick Juelsgaard - Not much experience with MultiSIM/Ultiboard, will ask for help

Comments and extended discussion

The team outing was a success. There was fun, food, and beer. We are feeling a little stress from the PCB and BLE portions of the project.

Plan for coming week

* Kyle Fischer - BLE BLE BLE BLE BLE BLE BLE BLE BLEBLEBLEBLEBLEBLE
* Michael Linthicum - Implement interrupts in bitbanged version of LSM9DS0 code.
* Daniel Shauger - Work on wrapper
* Sam Neff - PCB Design
* Nick Juelsgaard - PCB. PCB.PCB.PCB.PCBPCBPCBPCBPCBPCB

Summary of weekly advisor meeting:

Going to use C# for PC wrapper because it will be supported for a long time.