

EE491 Weekly Report 11

Date: 11/22/16-11/27/16

Group number: May 1717

Project title: 19 - Wireless Solar Temperature/Humidity Sensor

Client: Dan Stieler

Team Members/Role:

Yi Qiu - General Member

Xiang Li - Webmaster

Kebei Wang - Team Leader

Trevor Brown - Key Concept Holder

Kukjin Chung - Communication Leader

Weekly Summary

- We had the second client meeting to discuss what we have done and to make next goal.

- We also finished the revised design document.

Past week accomplishments (please describe as what was done, by whom, when)

- Kebei Wang -test the property of new chips we will get and check to see if we can find new BLE and compare it with which we are using.
- Trevor Brown - Compared BLE development boards and researched the SDK
- Yi Qiu - meeting with group and go to Nordic website to search the nRF52 datasheet
- KukJin Chung - I joined the advisor and client meeting and participated Monday, Friday, and Sunday group meeting. I worked on the design document.
- Xiang Li —did some research on how to use BLE module board, and participated the meetings as well as finished the revised design document.

Pending Issues

- Power harvesting test is postponed to next week.
- Figure out how to use BLE module.

Individual contributions

<u>NAME</u>	<u>Individual Contributions</u>	<u>Hours</u> <u>this</u> <u>week</u>	<u>HOURS</u> <u>cumulative</u>
Yi Qiu	meeting with group and go to Nordic website to search the nRF52 datasheet	4	29.5
Xiang Li	did some research on how to use BLE module board, and participated the meetings as well as finished the revised design document.	3	30
Kebei Wang	Read data sheet for harvest chip and attend the group meeting.	3	32.5
Trevor Brown	Tested multiple sensors and measured the power consumption. Tested the energy harvesting circuit with a battery.	8	31
Kukjin Chung	Participated meeting and worked on project plan. Read energy harvesting data sheet. Found out the problem we couldn't get the BLE address and fixed.	6	31.5

Comments and extended discussion

- We will get another sensor from our client and test it.

- Connect the our circuit board to the battery.

Plan for coming week (please describe as what, who, when)

- Kebei W. continue to test chip and prepare for the presentation.
- Yi Q. continue prepare for presentation, prepare for next advisor meeting
- Kukjin C. will connect the circuit board to the energy harvesting board with battery.
- Trevor B. Continue research on TI chips and compare power consumption.
- Xiang L. build the circuits and do some test as well as join in the meetings.