Weekly Report EE492

Date:9/17/2014

	#10 - Team Cenergy
Client/Advisor	**Honeywell, FM&T / Dr. Ajjarapu**
Attendees	**Tym Wood** **Jeremiah Janssen** **Tori Sorensen** **Chen Cheng** **Kailey McGuire**

Past week accomplishments

What was done, who did it, and when it was done

- On Monday we had our weekly meeting with Dr. Ajjarapu. In this meeting we discussed the new chips that Bob sent us and their application. Unfortunately the chips were surface mount, so we are back to trying to calibrate the $5 chips we purchased. We feel that if the $5 chips workout, that will be to our advantage because we can claim our product works while reducing the cost.
- The previous Monday we met with Bob here at Iowa State, and he allowed us to test our preliminary design on his yellow “black box” device. We found that our chip was miscalibrated and we have to go back and calibrate it this week.
- Jeremiah reviewed the sensor data sheets, helped select the wire we would use to wrap our cores, picked out a prototype board, helped wrap the cores, and helped write the code for the chips.
- Chen and Kailey worked on updating the design document, and helped write the code for the chips.
- Tori worked on the poster design, wrapping the cores, and helped write the code for the chips.
- Tym worked on the final presentation, set up the meeting with Bob to test our device, helped wrap the cores, and helped write the code for the chips.
- On Wednesday we had our group meeting where we decided we would get together the following weekend and write the code for the chips and wrap the cores. We hope to get a lot done this weekend, but plan to

continue work in the upcoming weekends. Our goal is to have a working device ready for test in 2-3 weeks and be finished polishing by the first or second weekend of November.

Plan for coming week

What to do, who, and when should it be done

- Jeremiah - reviewed the sensor data sheets, helped select the wire we would use to wrap our cores, picked out a prototype board, helped wrap the cores, and helped write the code for the chips.
- Tori -Tori worked on the poster design, wrapping the cores, and helped write the code for the chips.
- Tym- Compile weekly report, type up meeting minutes from meeting with Bob this summer, work on the presentation slides, and work on winding our test cores.
- Kailey- Update the design document, work on code
- Chen- Update the design document, work on code

Pending Issues

- Getting our black box test unit to match the parameters of the Honeywell black box units
- Finding a power supply to fit our unit
- Recalibrating our chips to read the sensitivity of the field produced

Individual Contributions

- Individually we accomplished the following:
  - Tori-worked on the poster design, wrapping the cores, and helped write the code for the chips.
  - Chen-worked on updating the design document, and helped write the code for the chips.
  - Kailey-worked on updating the design document, and helped write the code for the chips.
  - Jeremiah- reviewed the sensor data sheets, helped select the wire we would use to wrap our cores, picked out a prototype board, helped wrap the cores, and helped write the code for the chips.
  - Tym- worked on the final presentation, set up the meeting with Bob to test our device, helped wrap the cores, and helped write the code for the chips.

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Individual hourly Contributions

NAME	Hours this week	HOURS Cumulative
Jeremiah	15	57
Kailey	13	47
Tym	15	55
Tori	15	55
Chen	13	47

Comments and extended discussions: