

IOWA STATE UNIVERSITY

# Senior Design Weekly Report

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## Weekly Report 18

**Group: May-06**

**Group member: Chongli Cai, Qiaoya Cui, David Hoffman, Andrew Kom, Ailing Mei**

**Client: Garmin International**

**Advisor: Dr. Collin Christy**

**Period: 2/18/2013-2/24/2013**

**Date: 2/24/2013**

## Goals to Meet

Our goals for the week were simply to start putting our code together. This is an ongoing process, as code that others have written may have not been fully tested, so it is a combination of debugging and progress to combine them. Specifically, we were able to get the ADC value to print on the LCD screen in real-time.

## Weekly Progress

After a long process of determining what connection to the LCD screen that we wanted to use, we decided that, for the number of pins we needed to implement, serial communication was the best option. These pins include the following: the ADCs, LCD screen, push-button inputs, and SD card communication.

## Future Planning

Given the realization that a broken computer could lead to loss of valuable code, we have determined that the use of Dropbox would be a good idea. Other than this, we will continue to try to combine the ADC readings, with the 3 ADCs being read simultaneously next on our agenda. Additionally, we will get the Initial setup user interface programmed, and implemented. And finally, we will get the SD card saving function completed.

## Pending Issues

No issues for this week. We have determined that the potential problem of too few timers is not a problem for our implementation, as we can just utilize a single timer for the 3 ADC readings.

## Individual Contributions

### Andrew:

Weekly Report 18	1 hour
LCD coding and testing	2 hours
2 <sup>nd</sup> Advisor Meeting Presentation	3.5 hours

### Chongli:

ADC code debugging and circuit testing	5 hours
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### Ailing:

ADC code debugging and circuit testing	5 hours
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### Qiaoya:

Temperature Sensor Display through Hyper Terminal	3 hours
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### David:

ADC real-time display on LCD Screen	5.5 hours
Debug minor display issues of ADC value	1 hour