sdmay18-12: Pilot Biometrics - ECG waveform captures

Week 4 Report

September 22 - September 29

Team Members

Zachary Glanz — Driver Design Lead
Andrew Jones — Algorithm Design Lead
David Kirpes — Circuit Design Lead
Justin Bader — PCB Design Lead
Kory Gray — Operating Systems Lead
Ryan Gallus — Communications Lead

Summary of Progress this Report

This past week, our team worked on both the microcontroller board and the ADC evaluation board. We attempted to put a version of Ubuntu on the microcontroller, but had issues with the limited storage space on the board. We then completed the application for a license for micro C linux, which should meet our storage requirements. We also powered up the ADC, installed the evaluation software, and began testing the device. In addition to work on both boards, we also updated the project plan/website and prepared for lightning talks.

Pending Issues

The microcontroller board has very limited built-in storage space, which will make the linux OS installation tricky.

Plans for Upcoming Reporting Period

The main goal for this week is to begin interfacing the ADC with the microcontroller board, and to continue work on installing micro C linux. We will also be presenting our project plan to our client at Rockwell Collins.

Individual Contributions

| Team Member | Contribution | Weekly Hours | Total Hours |
|---------------|---|--------------|-------------|
| Zachary Glanz | Researched getting embedded uClinux OS. | 3 | 13 |
| Andrew Jones | Attempted to access mcu through linux machine. | 3 | 13 |
| David Kirpes | Worked on testing the ADC evaluation board. | 3 | 14 |
| Justin Bader | Worked on testing the ADC evaluation board. | 3 | 13 |
| Kory Gray | Worked to install OS onto the micro controller. | 3 | 13 |
| Ryan Gallus | Worked on testing the ADC evaluation board. Updated the project plan. | 3 | 15 |