EE/CprE/SE 491 WEEKLY REPORT 4

Start Date – End Date March 12 - March 25

Group number: 6

Project title: Wireless Data Acquisition (wDAQ)

Client &/Advisor: Manojit Pramonik and Avishek Das

Team Members/Role: Merrick Czaplewski, Rocco Yassani, Samuel Foster, Jerry Liu

- **Weekly Summary**

  This past week we have been continuing to research how to edit the plot axes for the ADC-DMA part of this project. We all met up in the senior design lab to attempt to edit the STM code to produce a more coherent plot but we were unable to achieve the plot we desired. We did resolve the issue where the plot was all being squeezed onto the very right side of the graph, but we still haven't found a reliable way to prevent the axis scales from constantly changing every time new data is graphed.

- **Past week accomplishments**

  Rocco Yassini: Edited code to get the graph to stop being pressed/condensed against just the right side of the plot. Also discovered, part of this plot formatting issue was due to a weak/improper connection to the source (the device being measured).

  Merrick Czaplewski : Gathered needed physical materials and figured out what we will be needing in the future to continue our process. He will also finish some diagrams and make them clean so they can be displayed in the final document.

  Samuel Foster: Attempted to format the output graph of the ADC.

  Jerry Liu: Fixed code error and running a good process Code loop for STM app.

- **Pending issues**

- Rocco Yassini: Still figuring out how to resolve the constantly changing axes increment issue.
- Jerry Liu: Still need to figure out the connection between ADC and motherboard chips.
- Samuel Foster: Need another STM-Link, need to figure out how to correct present formatting
- Merrick Czaplewski: Get another STM-Link for the second BluePill, figure out how to get it from the ETG

o **Individual contributions**

NAME	Individual Contributions	Hours this week	HOURS cumulative
Member 1: Rocco Y	- Fixed the issue causing the plot to be condensed to just the right side of the plot. I edited the code and fastened the source connection to do this.	2	12-14
Member 2: Sam F	- Worked on output formatting with group	1	7-8
Member 3: Jerry L	- Fixed code bugs and errors, get a frequency block diagram for the arduino system.	2-3	6-7
Member 4 Merrick C	- worked in the lab with the rest of the team to figure out more progress with the lab - Worked on fixing up some designs and finalizing the steps we will need to do to accomplish our project goal	5	12.75

o **Plans for the upcoming week**

- Rocco Yassini: Continue altering code and experimenting with alternative serial plotters to see if a better looking waveform and a larger/longer plot with constant axes can be obtained.
- Jerry Liu: Keep doing more code for ADC system running and try to fix bugs and errors in the arduino progress.
- Samuel Foster: Continue experimenting with code to format output graph, begin to see what sort of issues may be encountered when upgrading microcontrollers.
- Merrick Czaplewski:

o **<u>Summary of weekly advisor meeting</u>:**

The team did not have a meeting with the advisor this week due to it being spring break. We will be having one this week with both our client and advisor. We will discuss how our progress is going and how we will finish our semester with this project.