Weekly Report 8

Sddec24\_04

**Weekly Summary**: This past week we were able to work through and initialize communication to the board given to us by Sukup. This allowed us to run test scripts and read registers that related to temperature. We ran the temperature reading script and got measurements that were reasonable for the environment they were placed in. We also worked through getting tables created for different bit DACs.

**Past week accomplishments**

**Team Member 1(Justin):** This week I worked on making some improvements to our tables for finding the resistance we need to simulate to make it easier for us to find the voltage we will need to force. I also helped Sam a little with troubleshooting our issues we had with our communication with the Sukup board.

**Team Member 2(Tony):** After some trial and error of trying to talk with Sukup’s board, we were finally successful. We were able to read temperature values off of the Max chip, although the accuracy of the measurements seems debatable. The values returned seemed to be at least within 10oF, but we are unsure as we did not know the correct temperature.

**Team Member 3(Sam):** This week I worked on getting communication between Sukups board and our laptop. I reached out to our contact at Sukup and verified that we were running the correct python scripts. After going to the lab I was able to install python and its associated libraries to get temperature readings back.

**Team member 4(Michael):**

**Pending issues**

**Team Member 1(Justin):** Currently I would like to go through the functionality tests that were given to us by our client so I can start working on our own tests to run.

**Team Member 2(Tony):** Not sure if it will get done this week, but need to take one of the 1MΩ resistors off of Sukup’s board, and test the measurements in a temperature controlled environment.

**Team Member 3(Sam):** Not many issues this week. Was able to accomplish the majority of what we set out to do.

**Team Member 4(Michael):**

**Individual contributions:**

| **Name** | **Hours this week** | **Hours Cumulative** |
| --- | --- | --- |
| **Tony Haberkorn** | **2** | **21** |
| **Samuel Estrada** | **3** | **21** |
| **Justin Garden** | **3** | **21** |
| **Michael Hurley** |  | **17** |

**Comments and extended discussion**

**Plans for the upcoming week:** In the upcoming week we would like to remove the 1MOhm resistor that is part of each RTD circuit and compare the test results of the current circuit with the resistor. This will help us verify the functionality of the resistor as it is currently one of the questions that our contact at Sukup has.

**Summary of weekly advisor meeting:**

Dr. Neihart wasn’t able to meet this week