Afternoon Lab Notes

In this lab period, Sabbir worked on building a communication protocol between the LCD display and the Arduino. In addition, he divided the touch screen code into functions increasing the code’s ease of use. For the Arduino, Sabbir also further organized the code. And finally, Sabbir worked on sending serial data from the Arduino to the touch screen to update values on the display.

Simon and Gerry reconsidered their cell charging station design. They decided that they will continue with their current LabView program to press onward in obtaining the characteristic curves. However, they did decide to switch overall master control to a java program that can interface with the DAQ.

AJ spent his time specifying heat sink sizing parameters based on the required thermal resistance of 3 degC/Watt. It was decided that the heat sink should be 8cm by 4cm by 4cm tall. The sink will have 5 fins. Moving forward, he plans on making a comsol model for charging and discharging.

Kai and John worked on a pack design. Kai had drawings made up in inventor to show the aluminum casing that would be placed around the cells. This drawing also shows the area where the PCB will sit and locations where the cap can be mounted. In addition, further design was discussed including the fuse location and relay location inside of the packaging. The interfacing strap needs to be changed as well.

John also worked with Tony to determine the location of the banana jack holes on the PCB.