Cody Onishi

Week of April 20, 2020

What have I accomplished recently:

* Completed the PCB design with Nicholas Birmingham for the first submission on 4/17/20.
* Assisted Nicholas Birmingham with important tasks for PCB design such as pin assignments for push button inputs and outputs, pin assignments for power and ground, push button circuit design, and more.
* Assisted with creating Bill of materials, filling out design capabilities of JLCPCB, importing schematic and footprint as PDF files, and generating Gerber, centroid, DRC, and ERC files
* Discovered that it is possible to decode the headers/data of the wav file by using f\_read function on the wav file and converting the read data from little endian to big endian to make the data understandable.
* See the following pdf file for our completed PCB design:

“PDF schematic.pdf”

What am I working on now:

* Writing functional code that allows me to read the headers of the wav file as well as the data size of the sample and the number of elements in the wav file’s audio data.
* Writing an algorithm that fully reads all the data into the DAC channel output using arrays and timer 6 interrupt.
* Writing code that allows me to display the data output of my key variables using printf statements for code demonstration purposes for the final demo.

What needs to be done next:

* Updating Design Document 3 with all my new findings, prototyping, and data measurements.
* Downloading and figuring out how to record a video of my computer’s screen for code demonstration purposes using Camtasia software or Movie Maker as a last resort.
* Creating power point slides for the final demonstration of my subsystem
* Creating a demonstration video of my subsystem