

Spring 2016 EE 492 Weekly Report

Week 15 1/27/2016-2/4/2016

Advisor/Client: Dr. Degang Chen

Members: Yifan Jiang (Webmaster), Scott Poder (Concept Holder), Tao Chen (Team Lead)

Project Title: Low cost high accuracy spectral test system (May1623)

Summary

In this week's meeting we reviewed what we did in the last semester and talked about changes we decided upon the previous week.

Meeting notes

Time: 1/26/2016 at 9am **Duration:** 1 hour **Member Present:** All

Purpose and Goals:

We needed to ask some questions about relays, microcontroller clock rate, and sampling speed for the ADC/ DAC. We also needed to confirm how much memory was needed for the algorithms and ensure that our microcontroller was capable of storing it.

Achievements:

1. Decided to use Arduino Due for the microcontroller of our PCB instead of FPGA.
2. Decided the sampling rate for the ADC/ DAC.
3. Decided the SPI communication speed should be as high as clock speed.

Pending issues

1. Finish the PCB layout in this week.
2. Understand how relays work.
3. Start to research on the arduino programming.

Plans for next week

1. Implement relays into the circuits.
2. Resize filters for the lower frequencies.
3. Chip connection and clock for each chip.

Total contributions

Yifan Jiang: 6 hours: Researched Relay Documentation, general project research.

Scott Poder: 6 hours: Researched Microcontroller options with sufficient memory and clock, general project research.

Tao Chen: 6 hours: Researched Relay Documentation and Battery Drain of PCB, general project research.

This report is created by: Tao Chen on Jan 26