

# Spring 2016 EE 492 Weekly Report

## Week 16 2/5/2016-2/11/2016

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**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)

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### 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