

Fall 2015 EE 491 Weekly Report

Week 9 10/27/2015-11/03/2015

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

We derive the equation for our RC filter design, with the equation we have, now we can pick the resistor and cap's value for each of our desired testing frequency. We also cleared up additional questions on our power supply, we realize our battery may not have enough energy to drive our whole circuit.

Meeting notes

Time: 10/29/2015 at 1pm **Duration:** 1 hour **Member Present:** All

Purpose and Goals:

We presented our weekly work to advisor, and we also planned for next week's things to do.

Achievements:

1. Equation about choosing RC filter component's value
2. Cleared up questions about signal manipulate after DAC.
3. Cleared up questions about power supply from battery.

Pending issues

1. Calculate the whole power consumption from our circuit.
2. SPI controlling between chips

Plans for next week

1. Implement/Research using a Relay for RC Filter
2. Implement Power Supply circuit, divide power from source.
3. Pin connection

Total contributions

Yifan Jiang: 8 hours: FPGA clock divider design. Switch for the circuit (relay)

Scott Poder: 8 hours: Continued design on Filters, Relays, and Power Supply Circuits

Tao Chen: 8 hours: FPGA SPI control on DAC and clock generating.

This report is created by: Yifan Jiang on Nov 2