

May1623 Weekly Report September 8-14, 2015

Project Title: Low-Cost High-Accuracy Spectral Test System

Team Members: Tao Chen, Scott Poder, Yifan Jiang

Client/Advison: Degang Chen

Meeting Summary:

- Reported Findings on the ADS8881 and App Notes
- Explored the ADS8881 Eval Board and discussed how this relates to our design
- Briefly discussed IEEE Standard on Waveform Digitization
- Discussed the overall system on the PCB, what it will entail, how we are going to generate waveforms, ect.
 - Broke the system down into a block level diagram and specified anticipated inputs and output goals
- Discussed issues on our signal generator and how we will have to use 2 DACs to generate an impure sine wave
 - Benjamin Magstadt's MS Thesis address impurity and how to work with it

Future Tasks:

- Explore Options for Schematic and PCB Layout Software
- Explore relevant sections in the IEEE Standard on Waveform Digitization
- Explore *An Introduction to Mixed-Signal IC Test and Measurement (2nd Edition)* Textbook
- Explore Benjamin Magstadt's MS Thesis
- Begin drafting a rough draft schematic for the system
- Begin exploring specific TI part numbers for DACs, Drivers, ect

Hours Logged:

Tao – 1

Scott – 1

Yifin - 1