

Meeting Minutes

Lydia Engerbretson

Hannah Pearson

Matt Covalt

Matt Waltz

Roy Cochran

Feng Li

October 25, 2017 3:30pm-4:20pm

Agenda

* Agenda is here: <https://github.com/mateoconlechuga/tater/issues/16>

Agenda Notes/Status Report

We have discovered that we have smaller amplitude on the probe that they sent us versus the one that we made! We plan to get some captures and send them to Dr. Li. We also plan to do more testing to discover this issue (we may be using it incorrectly, etc.) We also need to find a power supply.

How to achieve deterministic results: This is how we determine what runs on the processor - if it looks the same and we are getting consistent results (we also need a shielding box which could help with consistent results). We are thinking one instruction per microsecond, but we are trying to measure the radiation coming off of the processor. We plan to capture raw data and perform FFT ourselves. We are thinking a loop granularity is achievable since gotos mess up the pipeline.

Determine how to go through an FPGA: FFT calculations - the issue is getting output from the probe to the FPGA. Once ADC outputs, it can be processed on the FPGA, we can talk to them about it, we need to do more testing with the o-scope.

MSR: We need to proofread it before we send it out. We plan to send it off on Tuesday, so we can work on the MSR on Sunday night.

Antenna Design: We need a design of box that will shield processor.

Potential languages: Oscilloscope samples to binary file, we need to get process signals. We could use FAUST, which is a standard functional programming language. We need to look into what format we need (it needs to be able to grab a binary file), so we need to find a language that is good with low level languages, and FAUST looks like a good option.

Action Items

- * Lydia: Reprint portfolio cover page to include team member names.
- * Everyone: Meet in senior lab on Sunday (10/29) at 4pm.
- * Everyone: Send bio (3-5 sentences) and picture (professional looking) to Hannah before Wednesday.