

Team Name: sdmay24-14

Team Members: Daryl Damman, Logan Lee, Grant Nordling, Braxton Rokos, Gavin Tersteeg

Report Period: Aug 28-Sept 10

Summary of Progress in this Period

In this period, we have had five meetings: one with the TA, two with the team, and two with the client. During our first team meeting, we created our team contract that everyone signed in agreement. We also determined which roles each team member will take. During the first client meeting, we discussed what the requirements of the project are, the history of the project, and a few design ideas. For the first TA meeting, we discussed where we were in the project and what requirements we learned from the client. From our second team meeting, we discussed upcoming deadlines, tasks that were needing to be done, design choices, and part ordering. From our second client meeting, we addressed the ordering parts concerns, how we are going to design our RAM/ROM, and how many instructions we are going to have. Most importantly, we created our team contract and preamble. These documents define our efforts towards the project and what we are doing for it. Our requirements as defined in the preamble are:

- Visualize all data in registers, instruction memory, data memory, and control signals;
- CPU clock needs to have several modes (one for single instruction execution and more for variable speeds);
- Ability to load custom programs via switches;
- Users must be able to run example programs that already exist on the CPU;
- All visible components of the CPU must be explainable to CPR E 281 students;
- PCB builds must be separated by function and connected via ribbon cables;
- The sample program PONG must be playable; CPU design must be as close as possible to the original Verilog design.

Additional details regarding the requirements have been written out in the second client meeting notes in Gitlab.

Pending Issues

We need to start designing and ordering parts as soon as possible to speed up our timeline.

We also need to design a bus multiplexer with 16 datalines. This design needs to be able to be implemented. Much work is still needed on the project website to have it look professional and well done with a lot of info provided.

Plans for Upcoming Reporting Period

For the upcoming reporting period, we are going to have the bulk of the design written up and parts ordered for some of the design. Flushing out the requirements documentation and the lightning talk presentation also need to be written during our next reporting period.