

Processor Design CS 3220

Real Project 2 Report

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Approach

Our approach to designing the processor is to design the assembler that implements the ISA so we can use that later to make some tests for our processor design implementation. We also decided to design the processor by first designing each of all the components one by one independently. We also make sure we know for sure the interface needed between each components so we can put it all together later on. After we both finishes our part, we basically sit together and try to put all the pieces.

Problems

After we finished putting things together, of course things go awry. Nothing works and we have no idea what caused the problem. So then, we started to make a test bench for each of the components to make sure the problem is not on the individual components themselves. However, even after that, we still run into problems that took days to be tracked. By this point, we can only try to step our processor and display some information through the board LEDs and hoping to find some problem. In the end turns out to be a very minor wiring problem.

Contributions

I wrote the assembler, the SCPProcController, I/O, and of course help in putting things together and debugging!