Memo

TO: Micah Taylor, Project Lead

FROM: Jeffery Humphrey, Benjamin Efron, Josh Gayso, Thomas Bonatti, Designers

DATE: January 29, 2015

SUBJECT: Milestone III – Datapath Design

We constructed our first version of our multi-cycle datapath. From that, we constructed our controller state diagram. The datapath includes two controls, a main control, and then a separate control for the ALU. Both the main control and the ALU control are operational. We have begun constructing our tests for our control and our ALU control, and we have also created some of the other components of our datapath, including the sign extender and the register file, along with the adder for the PC + 1 and the jump/branch commands. We plan on meeting more frequently over the weekends when we have time to get larger chunks of work done earlier since many of us have other large commitments as well. Progress is being made on an assembler and possibly also a compiler, depending on time and ease of creation. Our main focus at this point, however, is to focus on creating our components of our datapath and test them thoroughly, leaving no possibility of failure.