Cyril Agbi

LOG: 3/17/19 –3/23/19

This week I focused on finishing the testing of the FPU. I found a way to change the rounding mode in c and was able to rigorously test all of the floating point operations. For each operation, I generated a bunch of random tests values using the c code and compared that to the answer that my FLU got to determine how accurate my design was. From doing this random test, I found that my FPU is correct about 97% of the time. And for the other three percent, the result is within 1 LSB of the actual value. It also does well when I test the extreme cases (infinity, nan, and zero).

I was supposed to get started on the FPGA mapping, but spent the time further perfecting the FPU. Rather than do this next, I will meet with David and get the FPU working with his RISC-V core. After that, I will worry about optimizing the FPGA mapping. This should all be done within the next 2 weeks.