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ECE 425 Lab 8\
Mar 28 2017

Part 1: Counter

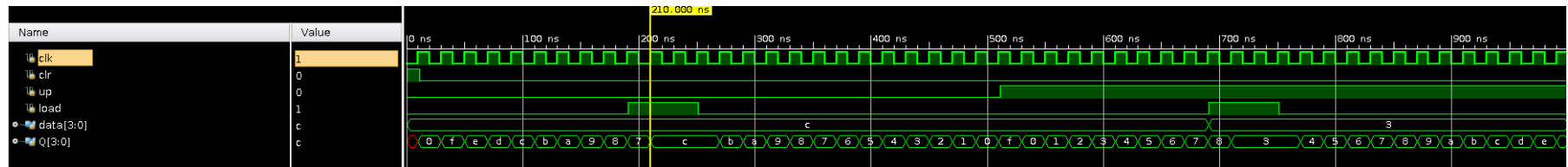


Figure 1: Modified Counter Simulation

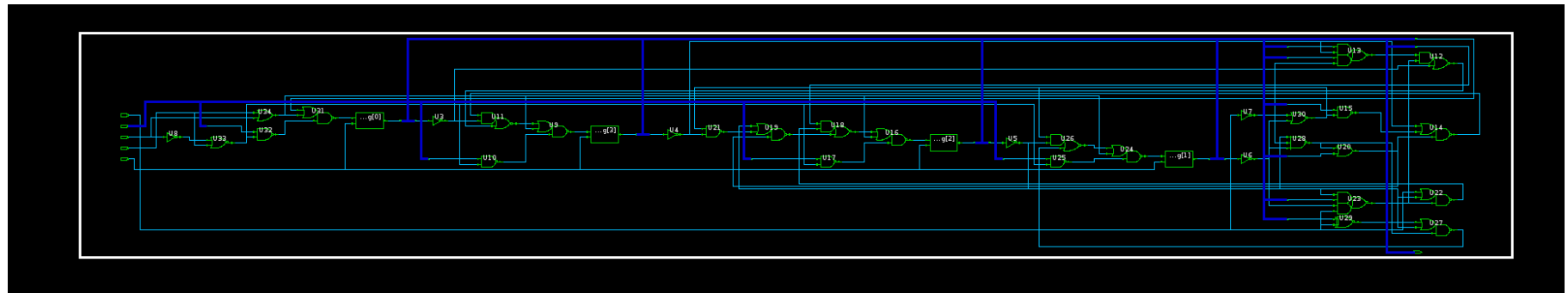


Figure 2: Modified Counter Circuit Diagram

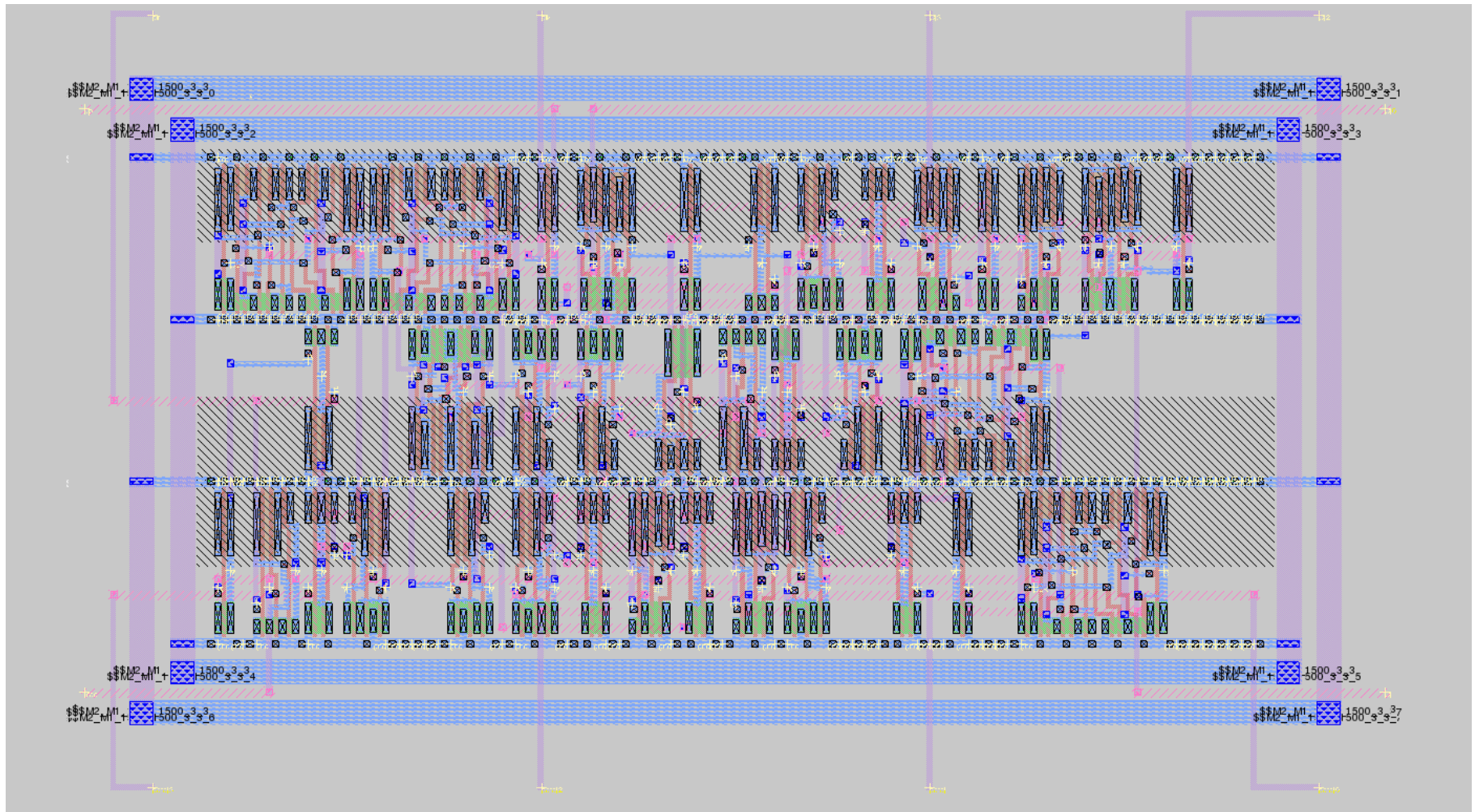
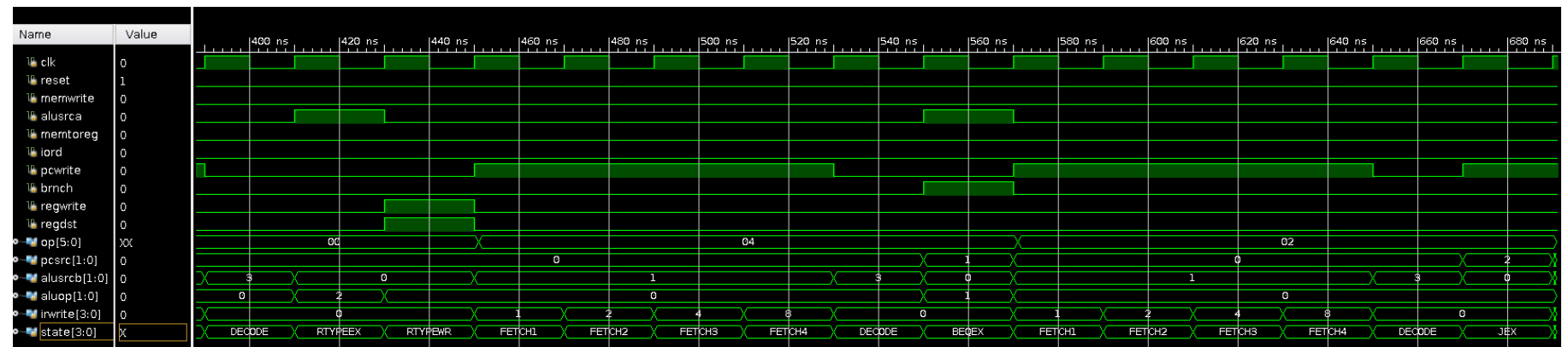
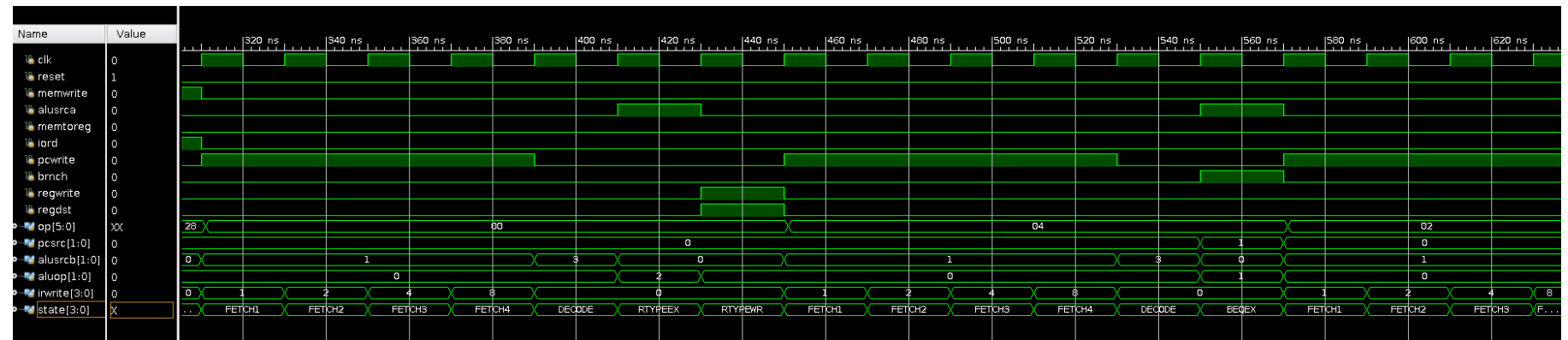
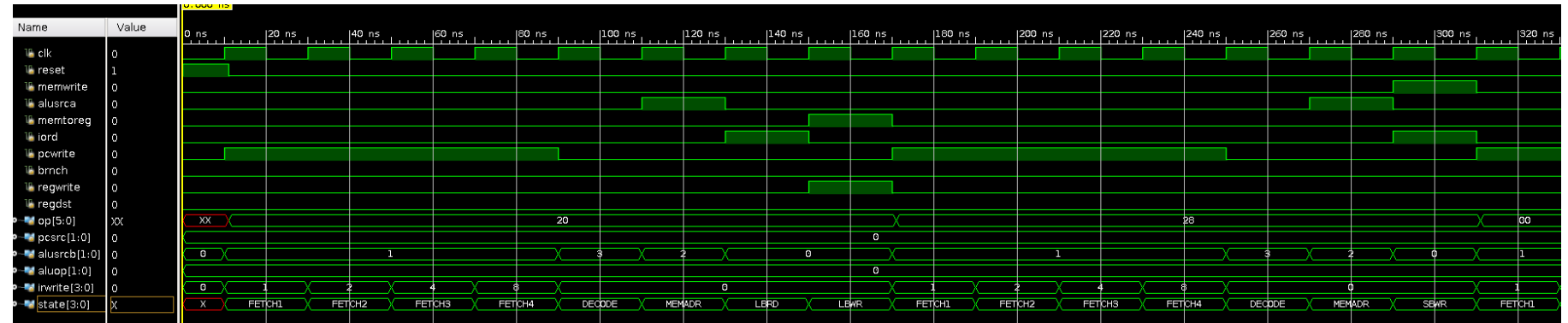


Figure 3: Modified Counter Layout

Part 2: MIPS FSM



MIPS FSM Simulations (note there is some overlap in the waveforms)

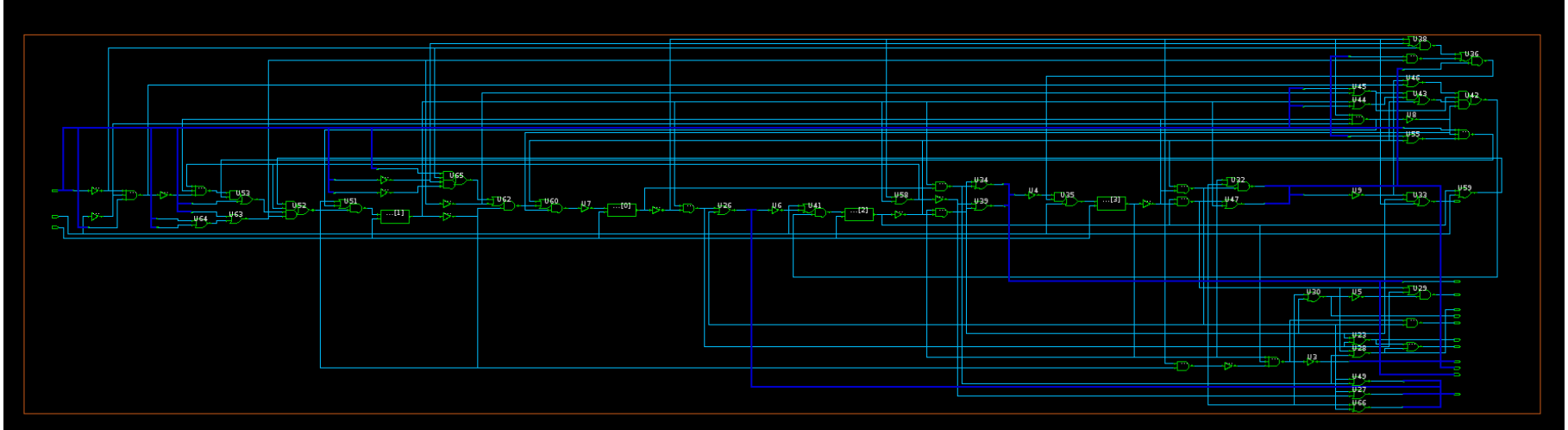


Figure 4: MIPS FSM Circuit Diagram

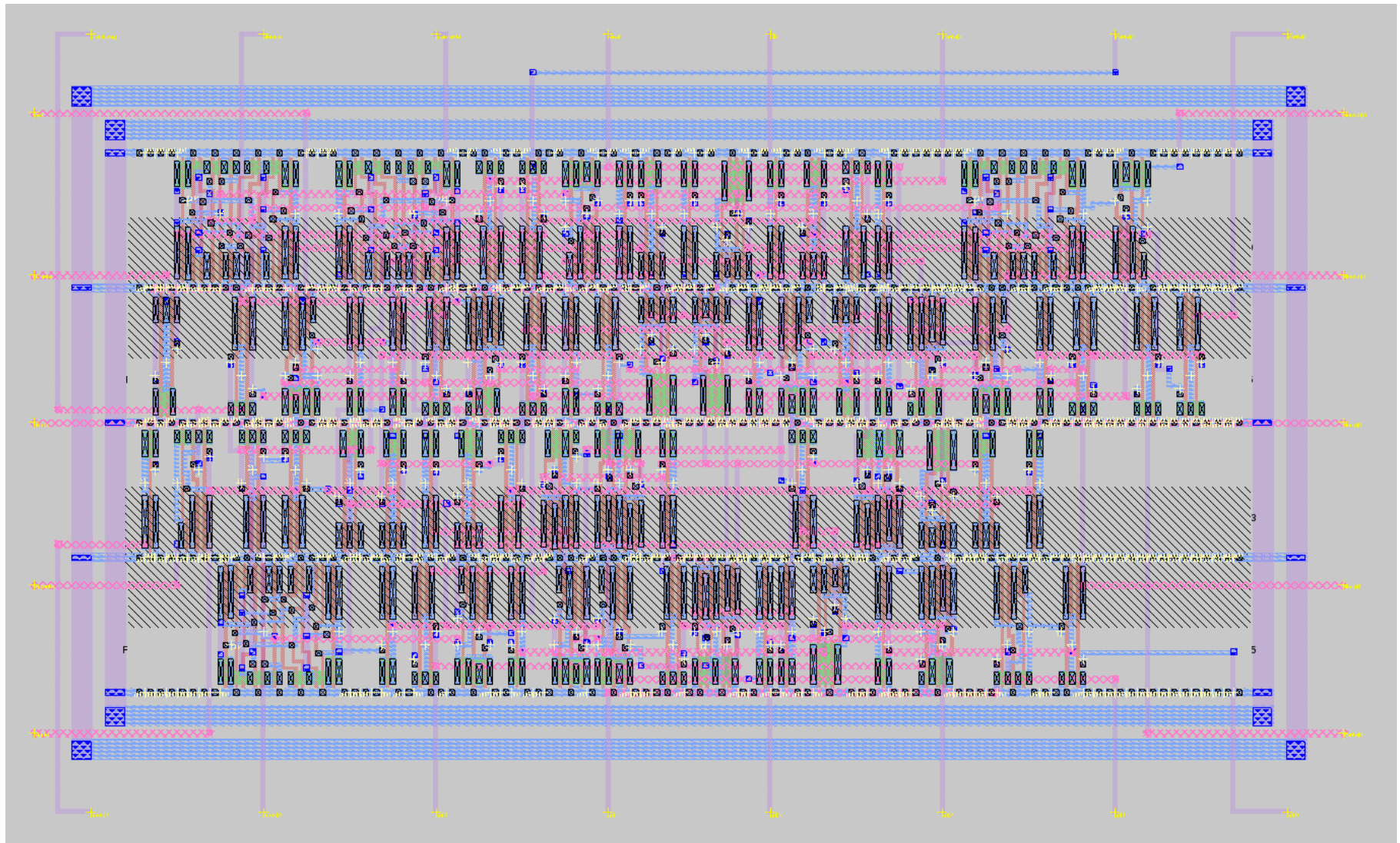


Figure 5: MIPS FSM Layout

The area of the layout was $291.9 \times 173.4 \text{ um}$ or $973 \times 578 \text{ lambda}$ (50615 um^2 or 562394 lambda^2)

This lab took about 2.5 hours. No major obstacles were encountered, as in fact our FSM ended up working in simulation without issue, once we refreshed our memory of SystemVerilog.