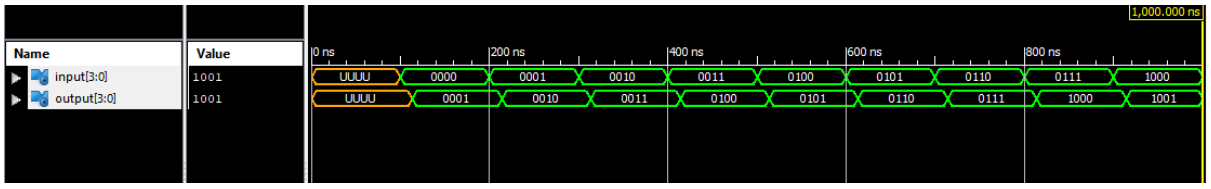
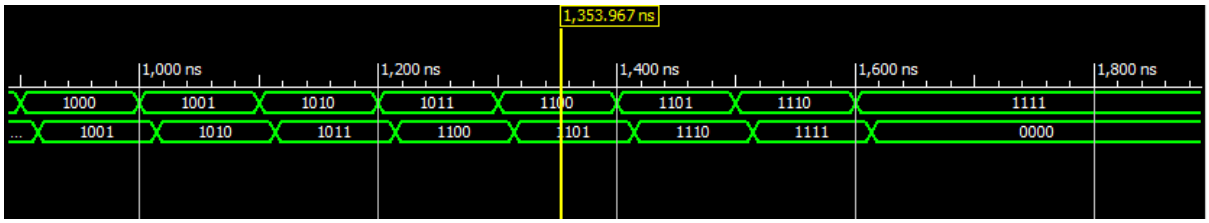
n-bit asynchronous (ripple) counter

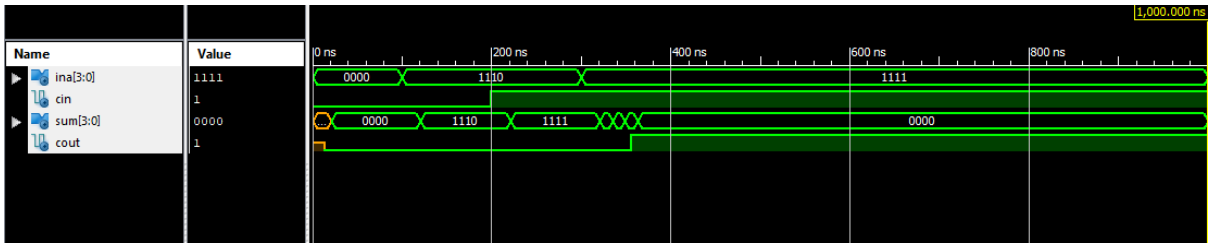
4 bit synchronous counter (using combinational next state logic)

Next state logic

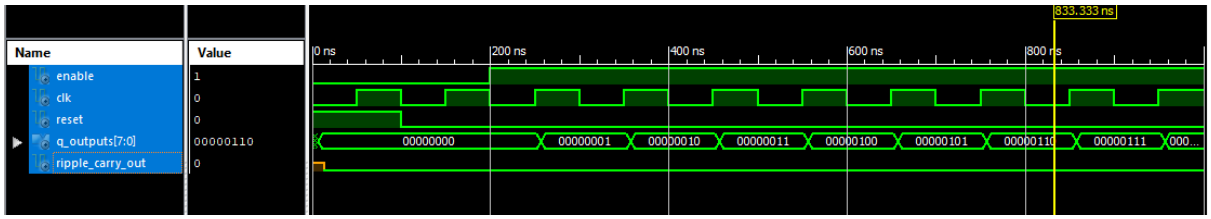


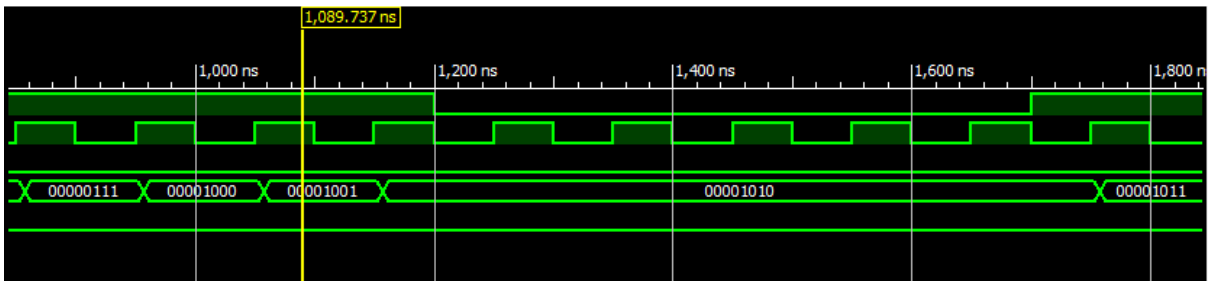


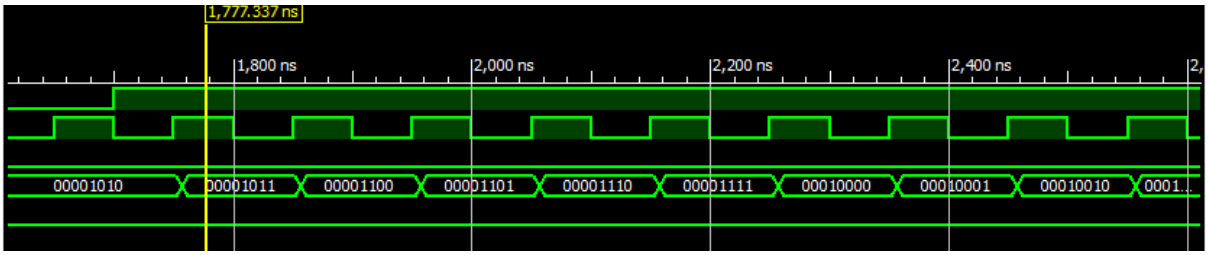
N bit incrementer circuit



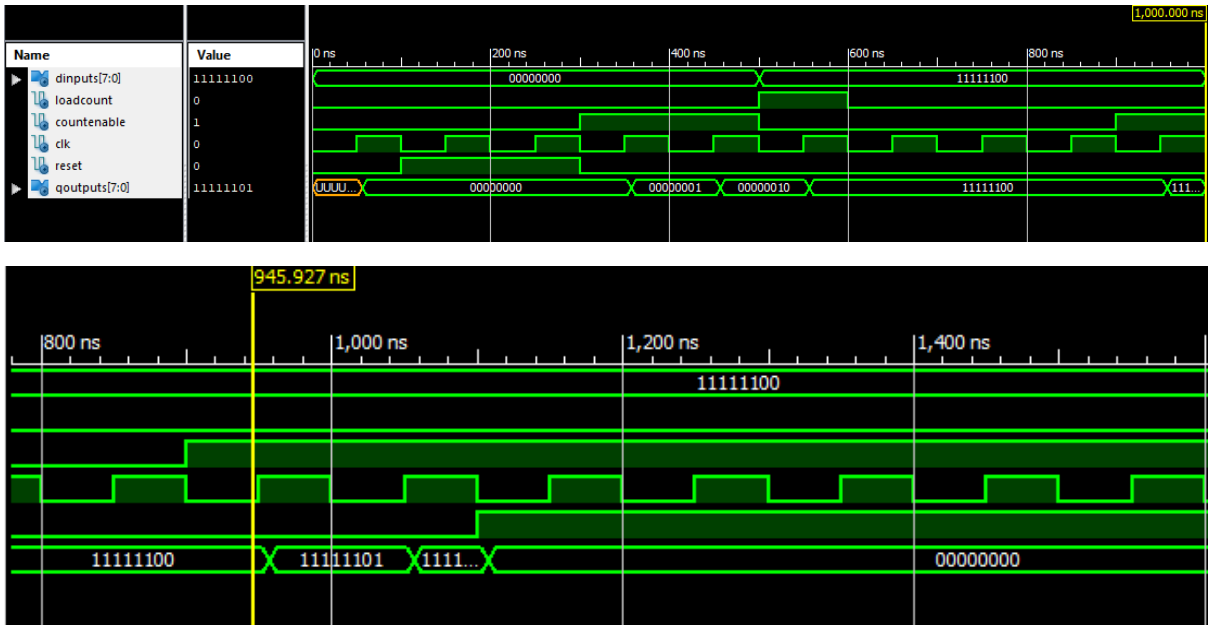
n-bit synchronous counter with enable (code provided)



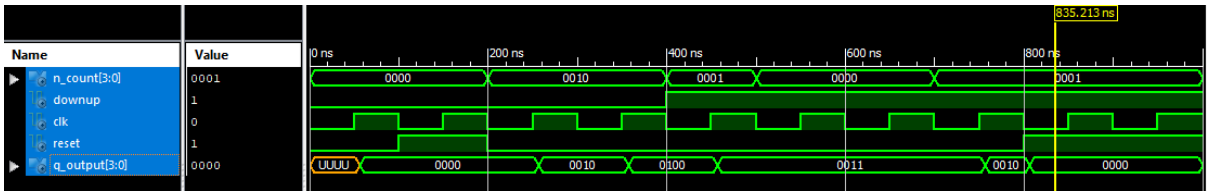




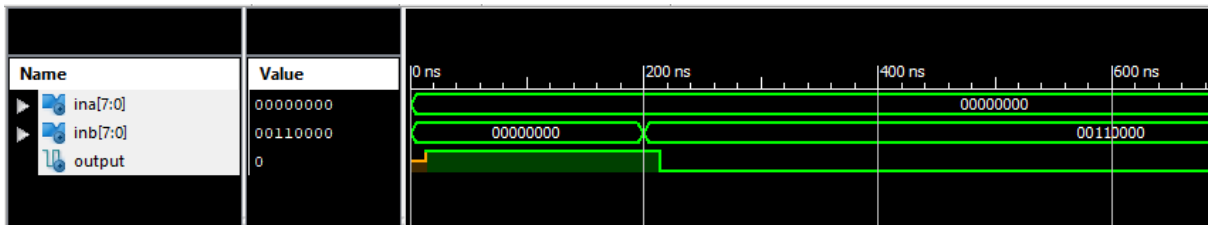
n-bit synchronous counter with parallel load input



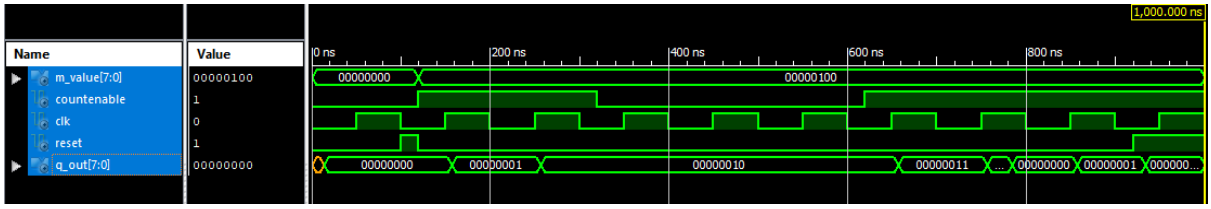
4-bit synchronous up/down counter



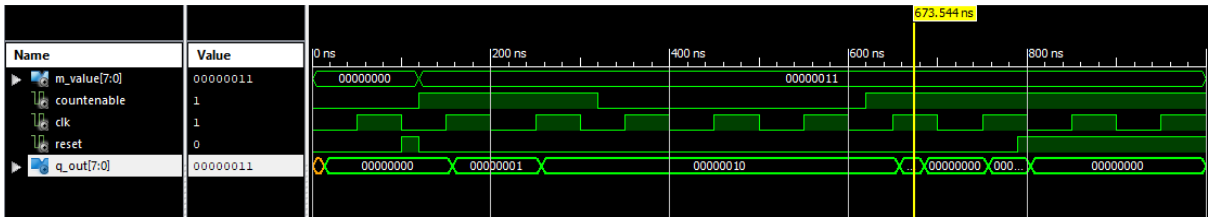
8-bit Comparator



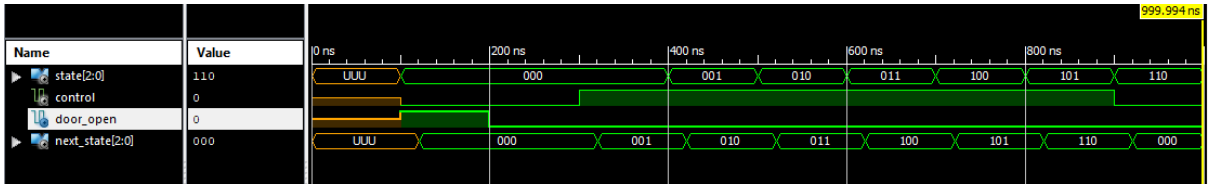
8-bit modulo-m counter with asynchronous reset

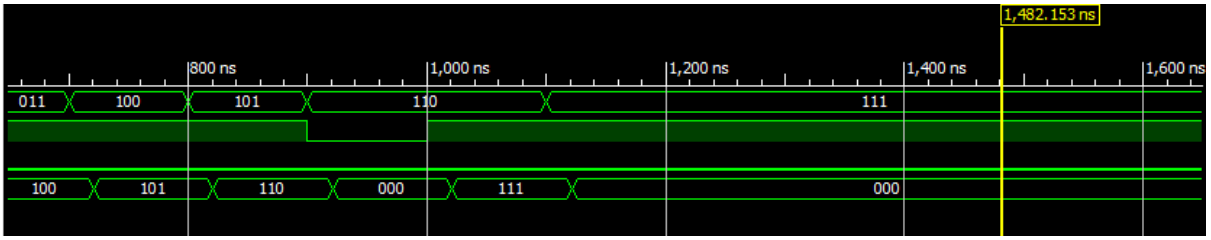


8-bit modulo-m counter with synchronous reset

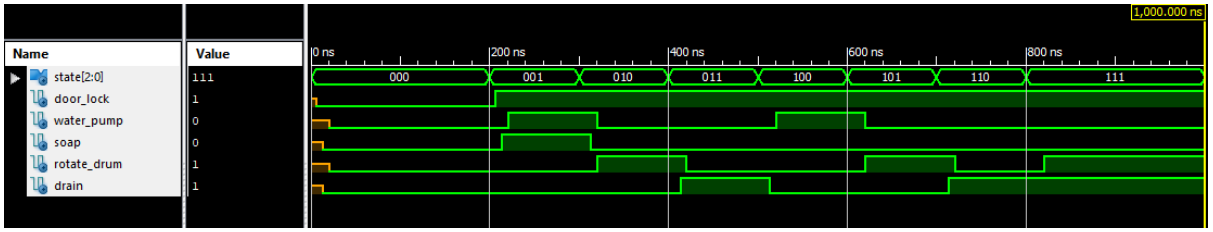


Washer next state logic

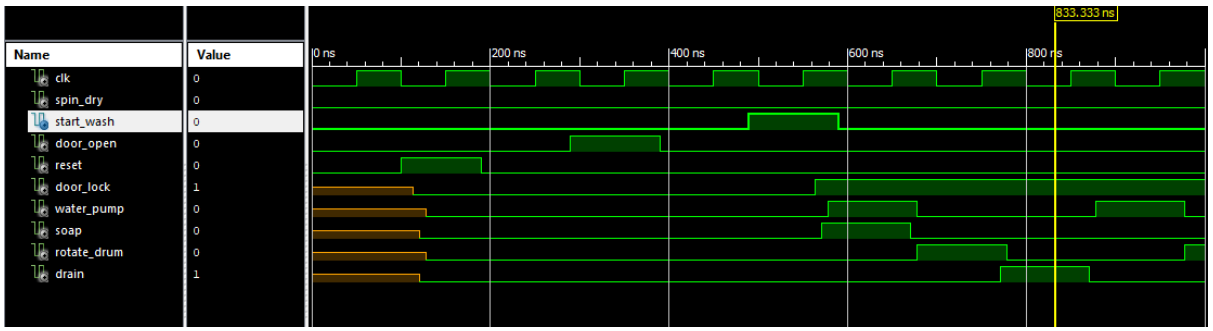


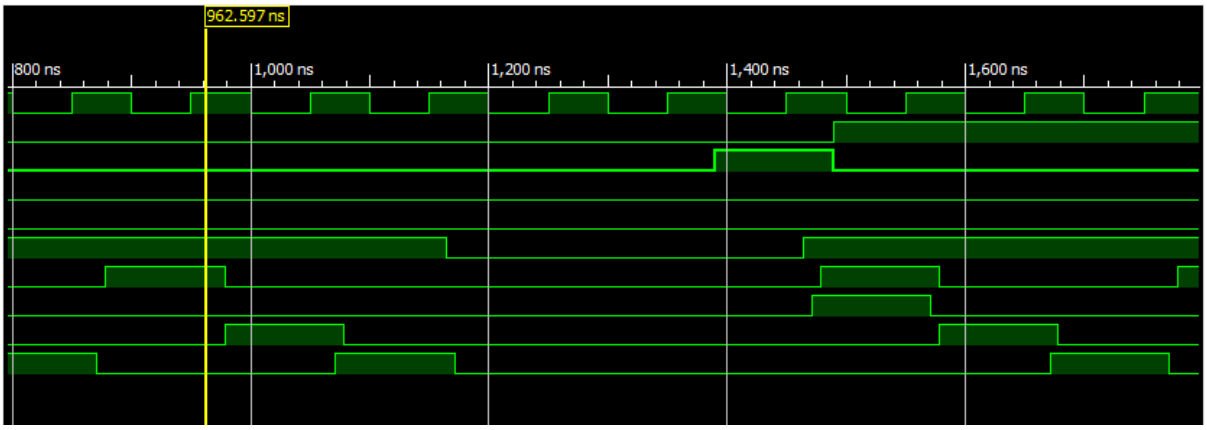


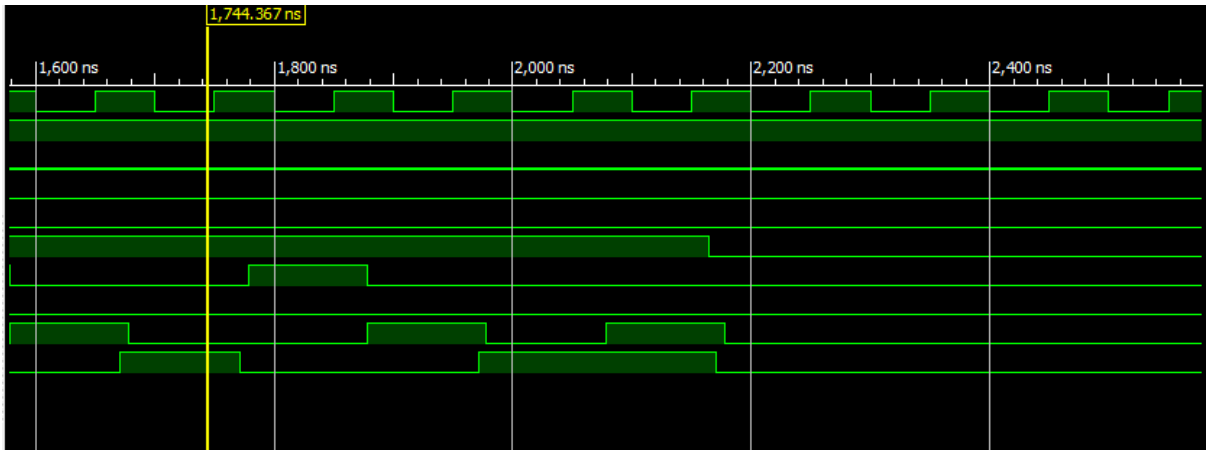
Washer output logic



Controller state machine for a clothes washer(top level)




962.597 ns
800 ns
1,000 ns
1,200 ns
1,400 ns
1,600 ns


1,744.367 ns
1,600 ns
1,800 ns
2,000 ns
2,200 ns
2,400 ns