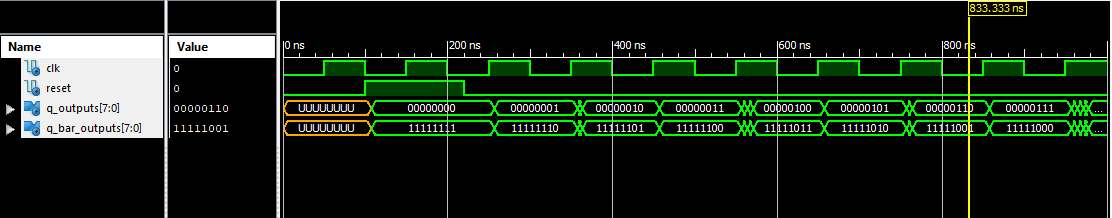
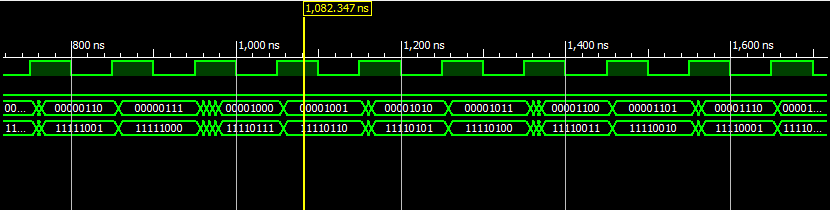
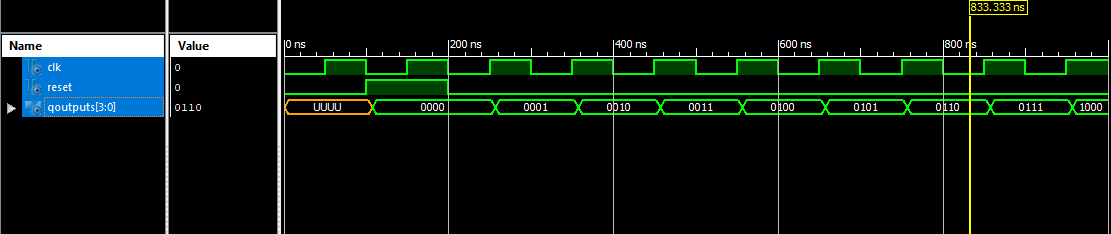
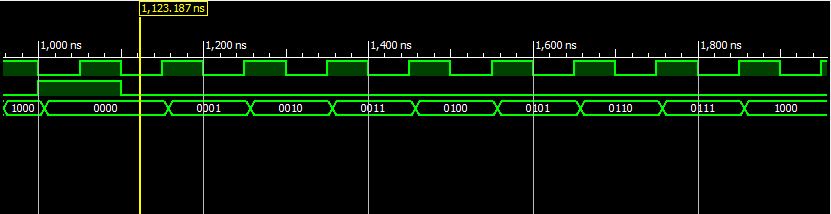
**n-bit asynchronous (ripple) counter**



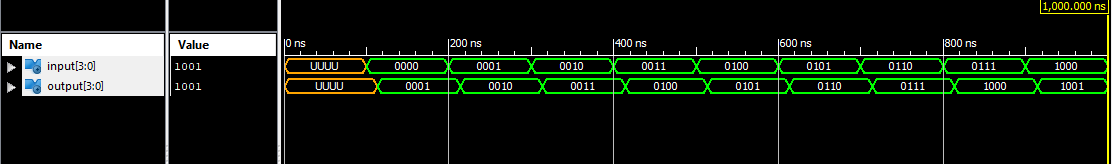


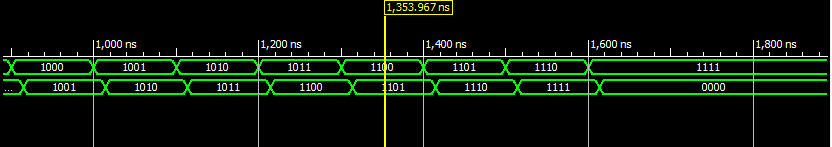
**4 bit synchronous counter (using combinational next state logic)**



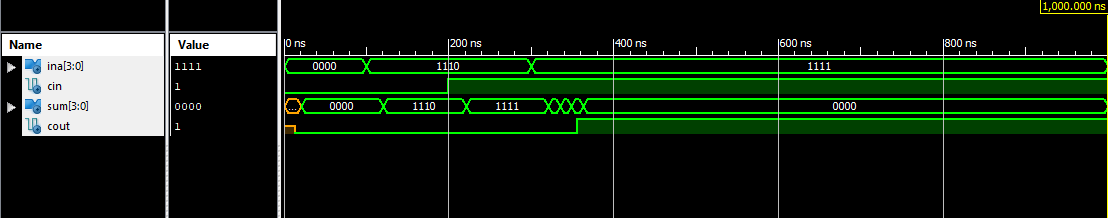


**Next state logic**

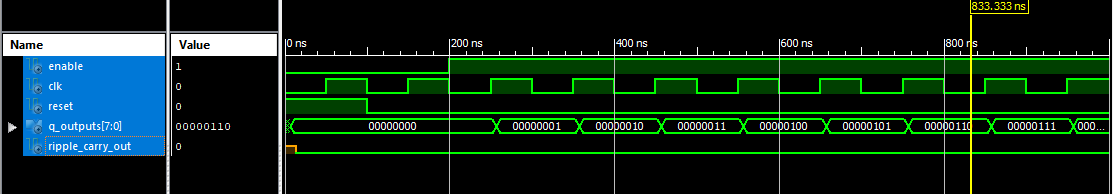


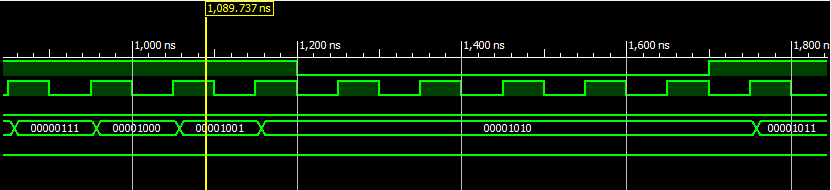


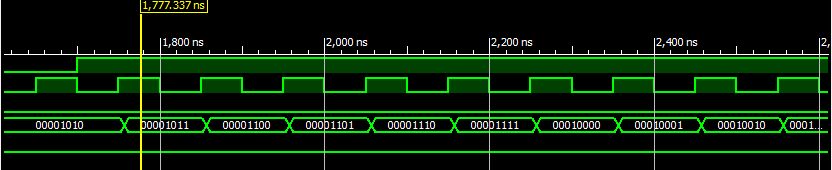
**N bit incrementer circuit**



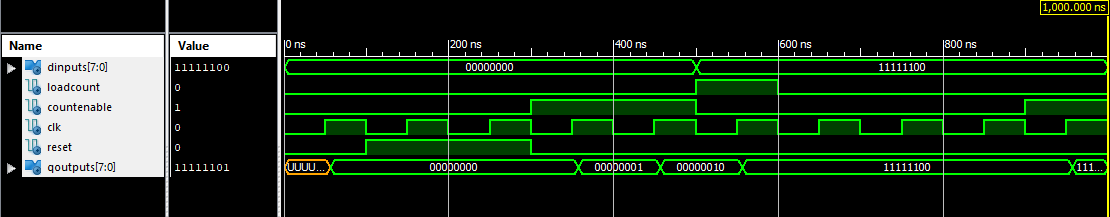
**n-bit synchronous counter with enable (code provided)**

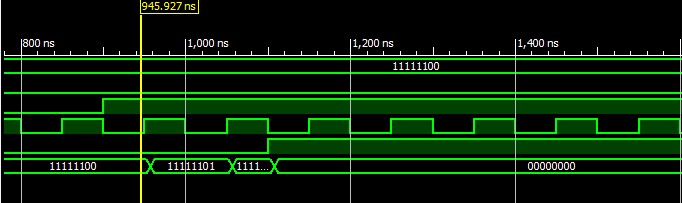




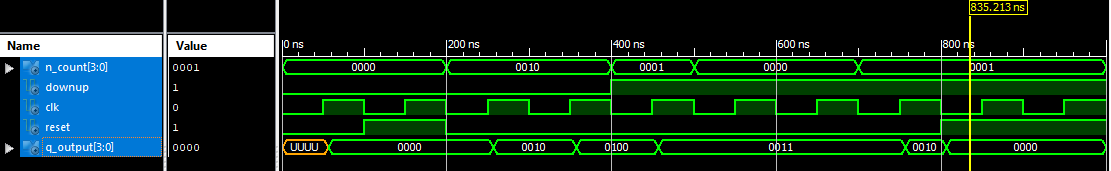


**n-bit synchronous counter with parallel load input**

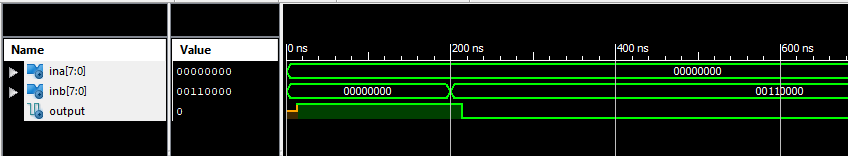




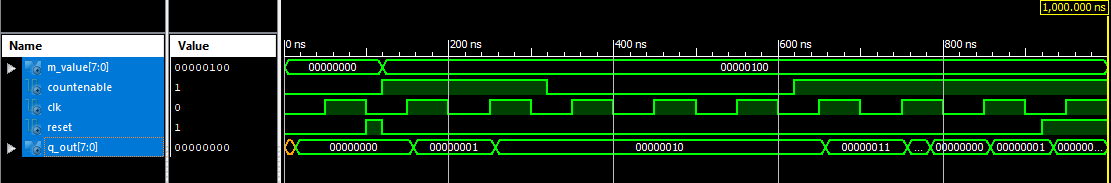
**4-bit synchronous up/down counter**



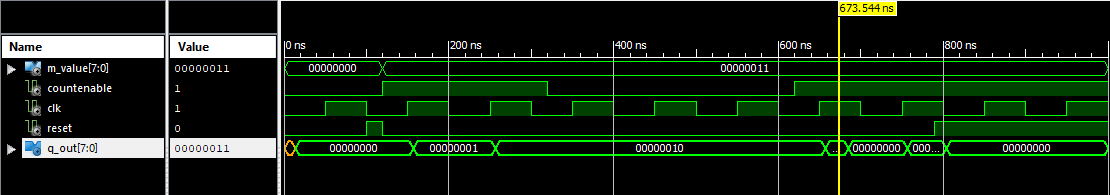
**8-bit Comparator**



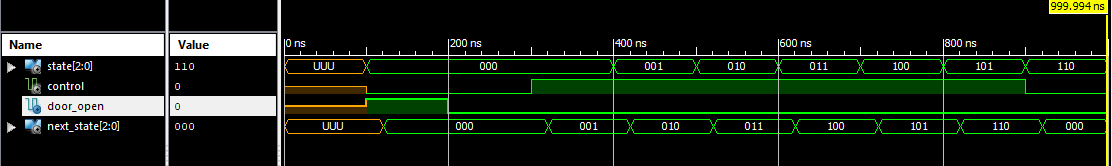
**8-bit modulo-m counter with asynchronous reset**

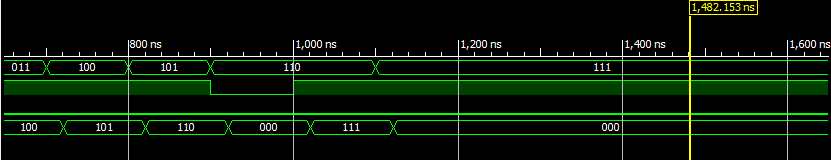


**8-bit modulo-m counter with synchronous reset**

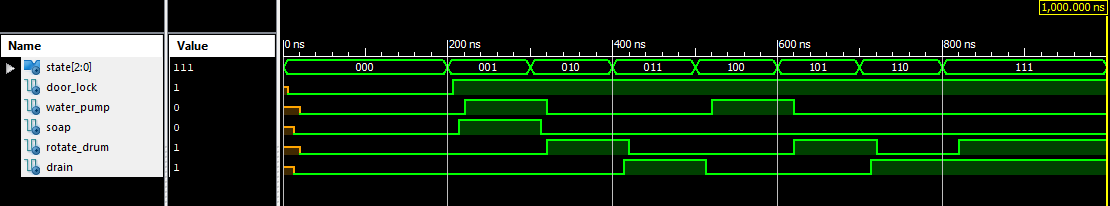


**Washer next state logic**





**Washer output logic**



**Controller state machine for a clothes washer(top level)**

