

Digital Systems

Moore and Mealy finite state machines

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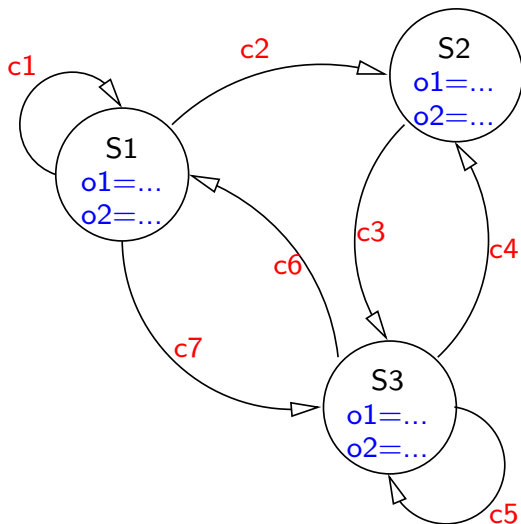
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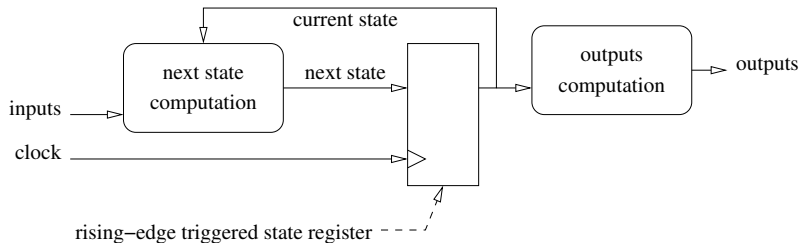


- What is a finite state machine (FSM)?
- Differences between Moore and Mealy FSMs?
- Advantages and drawbacks of Moore and Mealy FSMs?
- Can we say that Moore FSM is special case of Mealy FSM?
- Can we say that Mealy FSM is special case of Moore FSM?
- What does states diagram of Moore FSM look like?
 - Where do we indicate values of outputs?
 - Where do we indicate conditions of transitions?
- Draw block diagram of Moore FSM

Moore state diagram

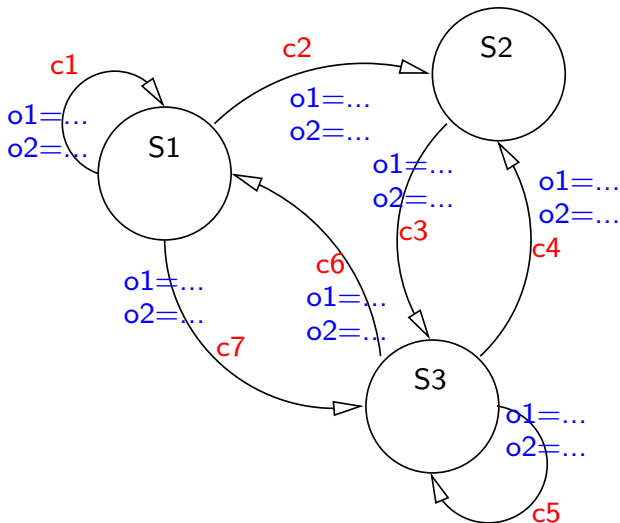


Moore block diagram



- Moore: minimum number of VHDL processes?
- Special Moore FSMs with less processes?
- What does states diagram of Mealy FSM look like?
 - Where do we indicate values of outputs?
 - Where do we indicate conditions of transitions?
- Draw block diagram of Mealy FSM
- Mealy: minimum number of VHDL processes?
- Special Mealy FSMs with less processes?
- Which VHDL types to represent FSM states?
 - Advantages and drawbacks?

Mealy state diagram



Mealy block diagram

