**CDAC Feb 2015**

**LAB 4**

Q1. Sequence Detector

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**Sequence Detector**

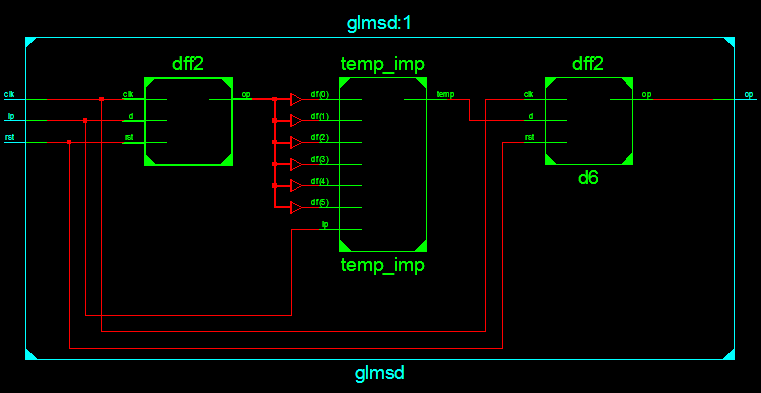
# Design Approach:

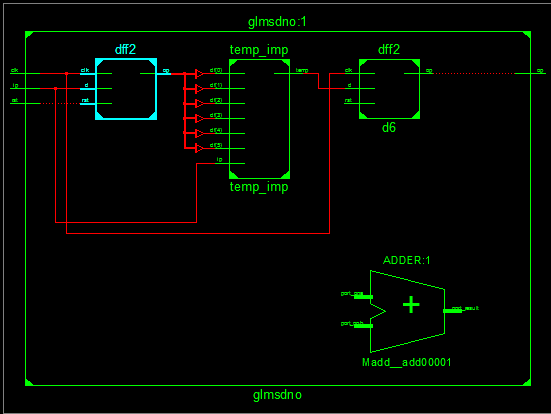
To begin with, the design is done using behavioural style of coding. Also, state machine is used to define the desired states.

1. Mealy Non-Overlapping: In Non-Overlapping, the state machine will return back to the idle state after the sequence is detected.
2. Mealy Overlapping: In overlapping, the state machine will return to some intermediated state other than the idle state.

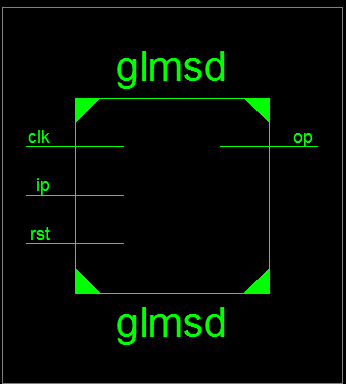
**Synthesis:**

1. RTL Schematic

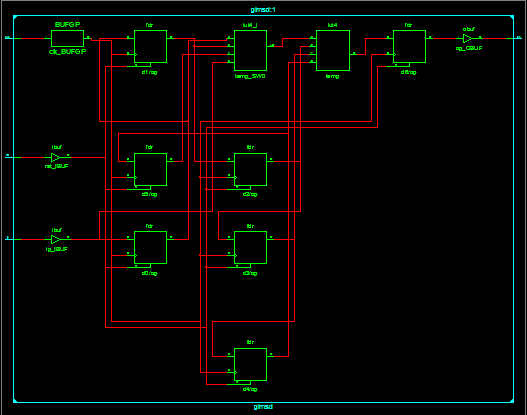


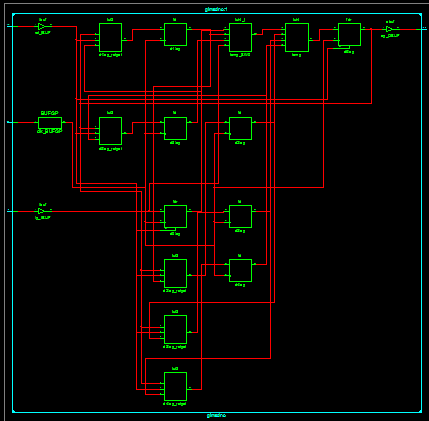


1. Block Diagram

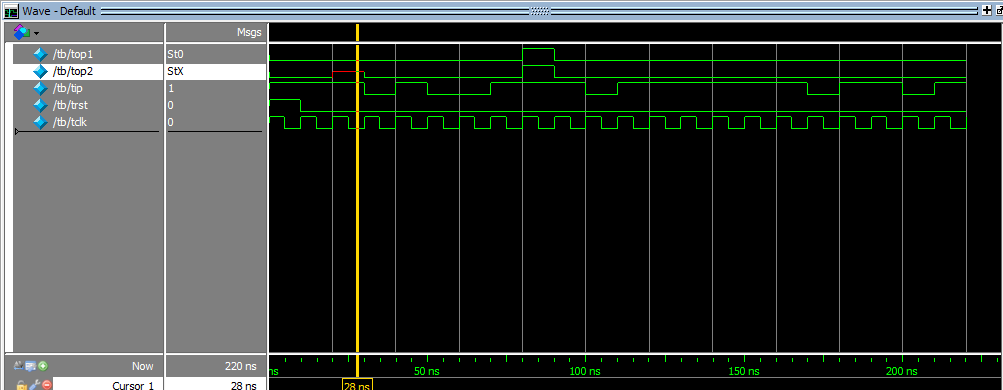
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1. Tech Schematic





1. Simulation Waveform Result

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**Error:**

None

**Verified by:**

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