



NUST CHIP DESIGN CENTRE

Digital Design Verification

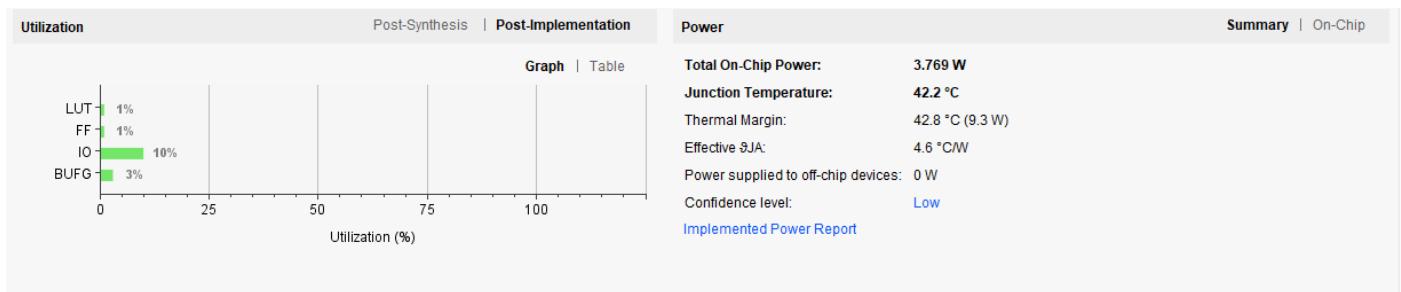
Lab Manual # 09 – Sequential Circuits using System Verilog (Counters / Digital clocks)

<u>Name</u>	<i>Khalil Rehman</i>
<u>Instructor</u>	<i>Hira Sohail</i>
<u>Date</u>	<u><i>31 July 2025</i></u>

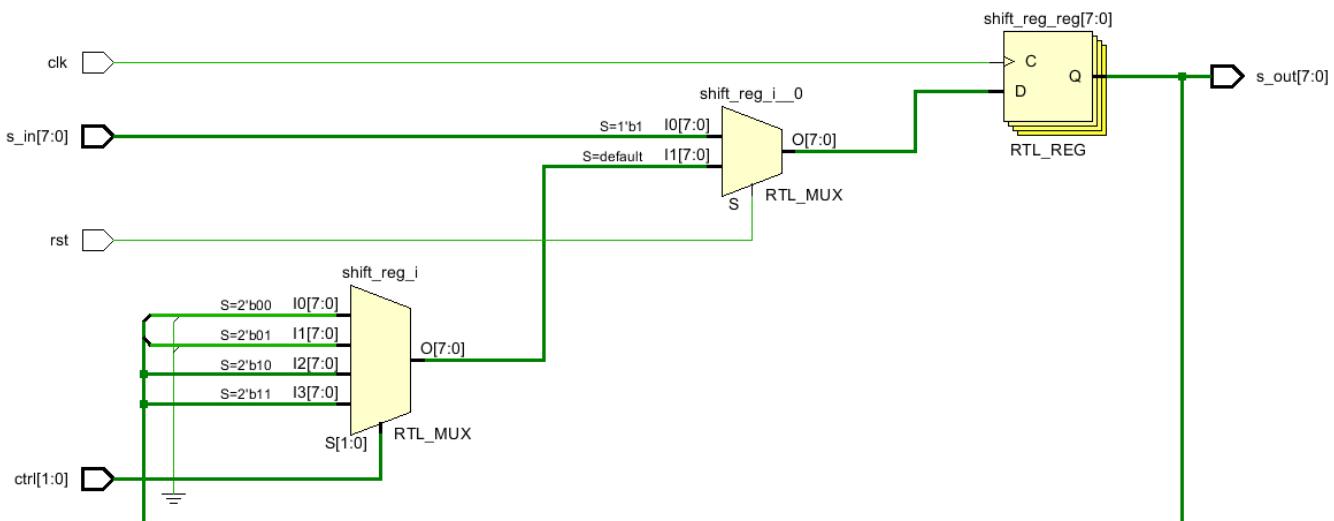
1. In-Lab Tasks: (Write your lab task & screenshots here)

i. Task 1:

Power Report:

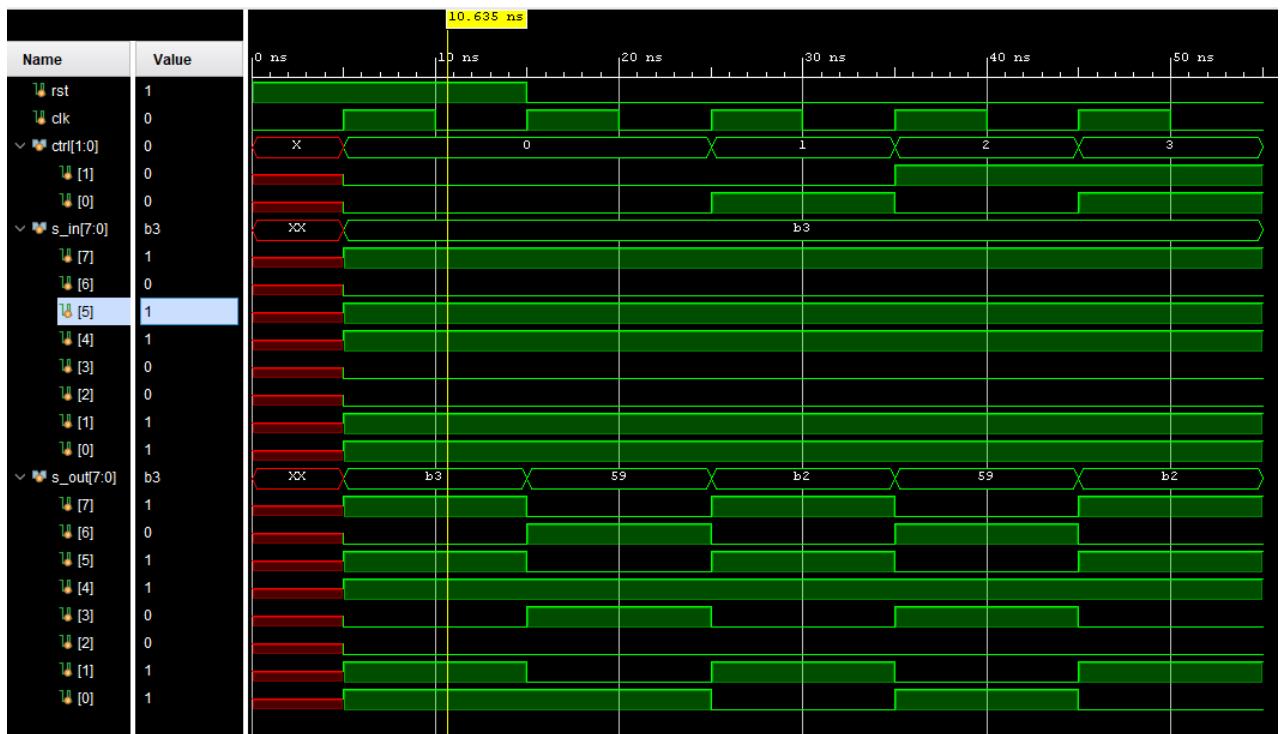


Schematic Diagram:



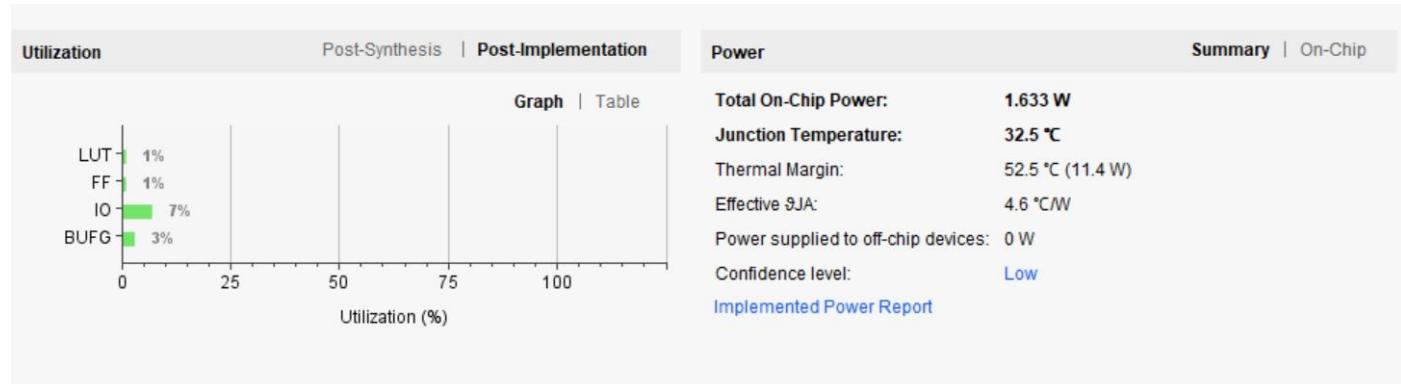
Waveform:

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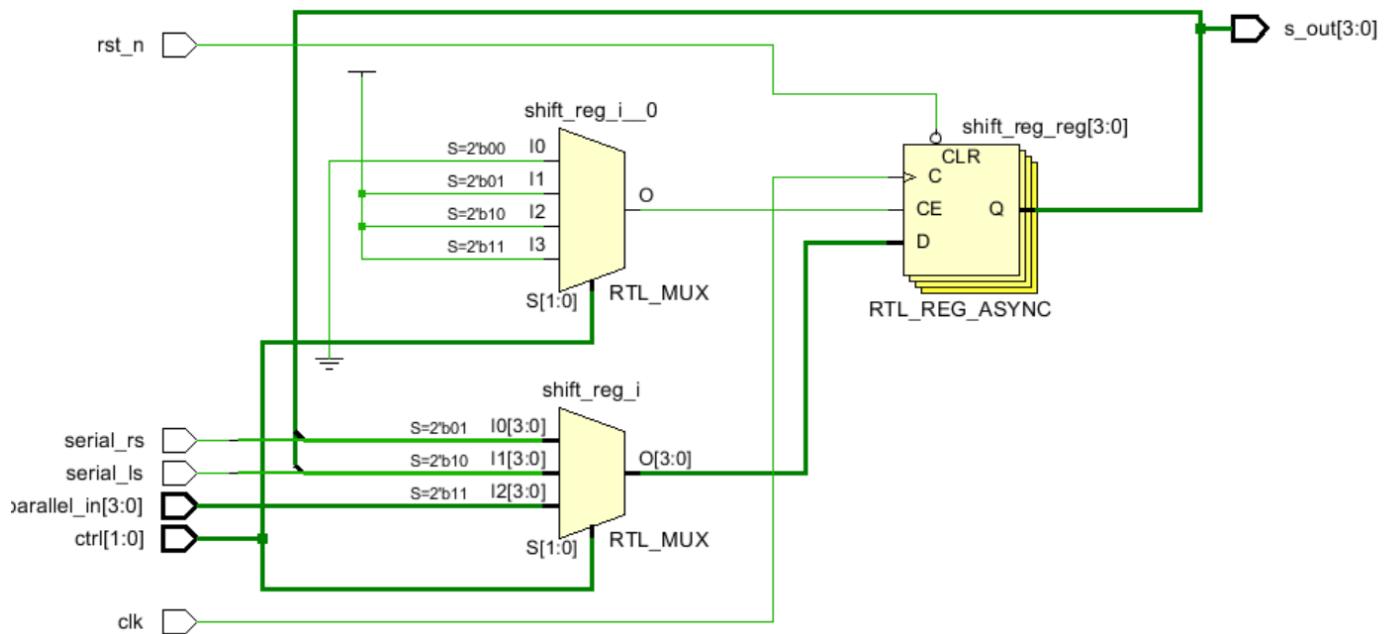


ii. Task 2:

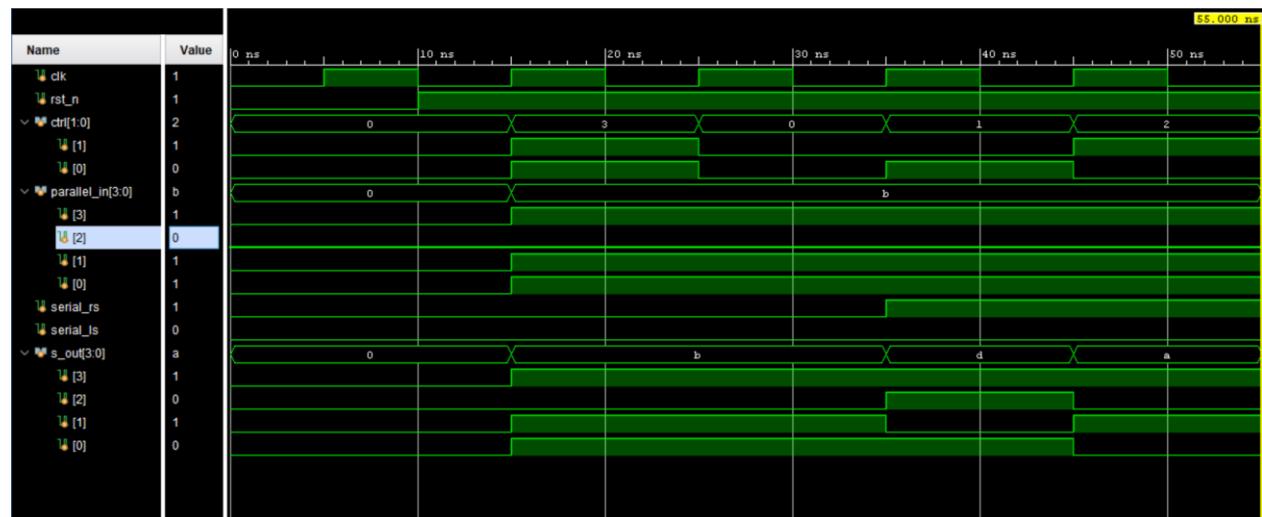
Power Report:



Schematic Diagram:



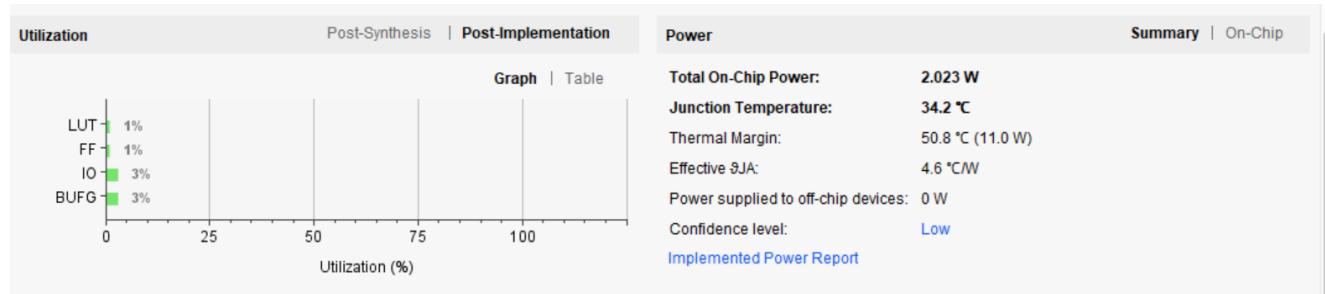
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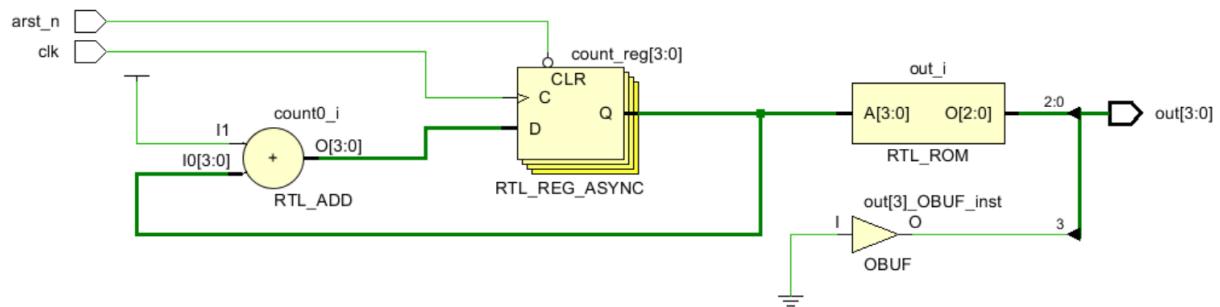
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iii. Task 3:

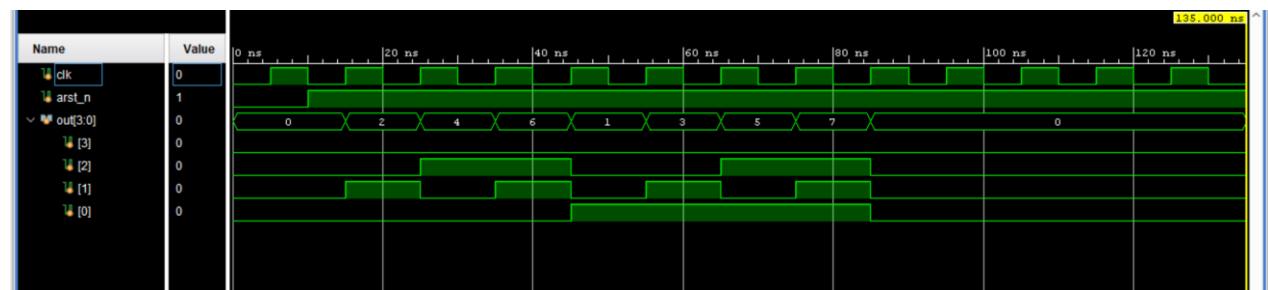
Power Report:



Schematic Diagram:



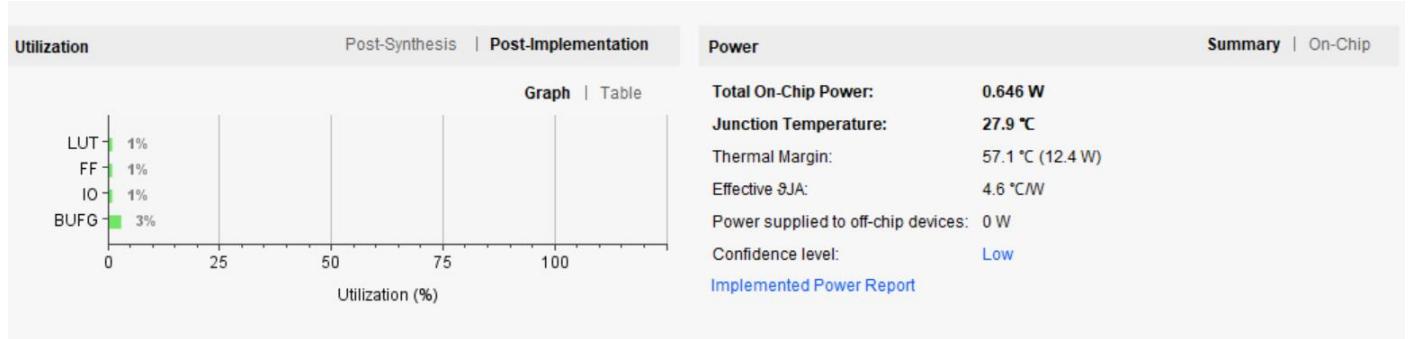
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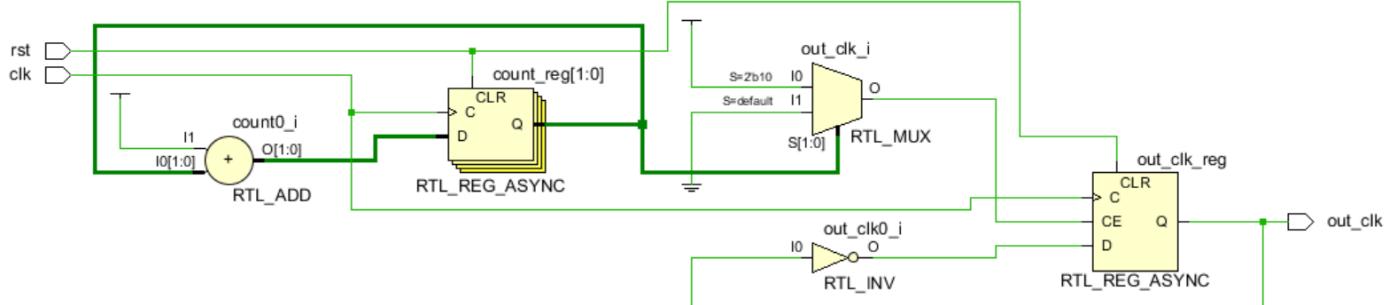
iv. Task 4:

4.1

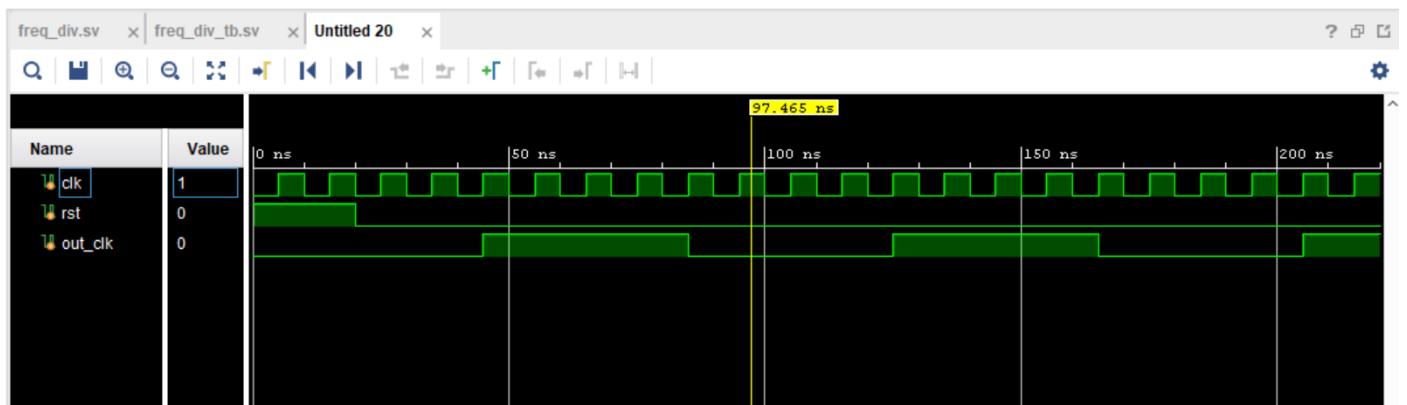
Power Report:



Schematic Diagram:

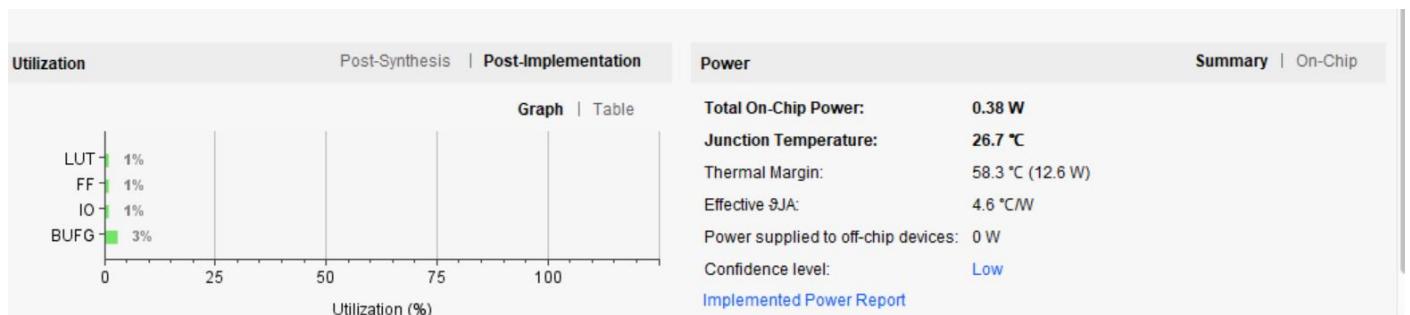


Waveform:

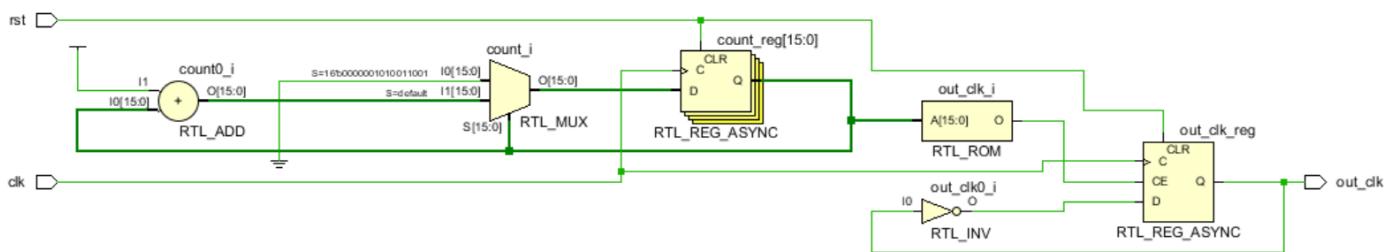


4.2

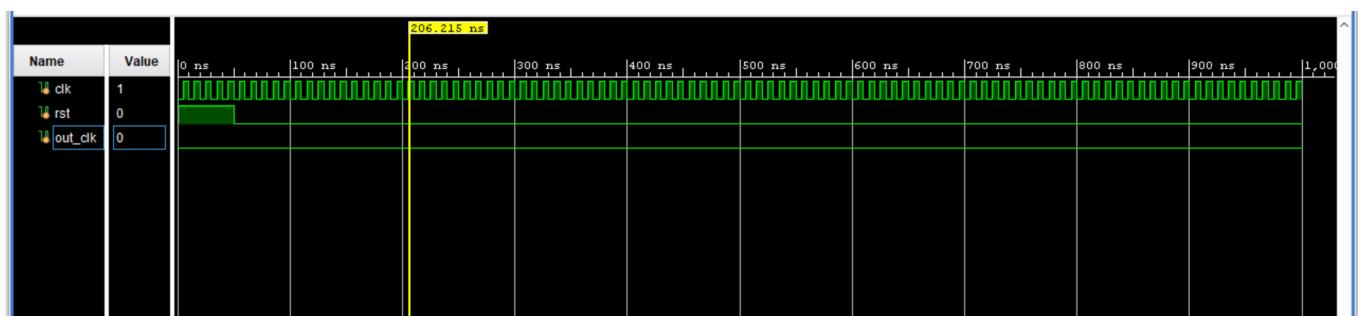
Power Report:



Schematic Diagram:



Waveform:



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v. Task 5: