NUST CHIP DESIGN CENTRE

Digital Logic Design

DLD Task: 4-bit ALU

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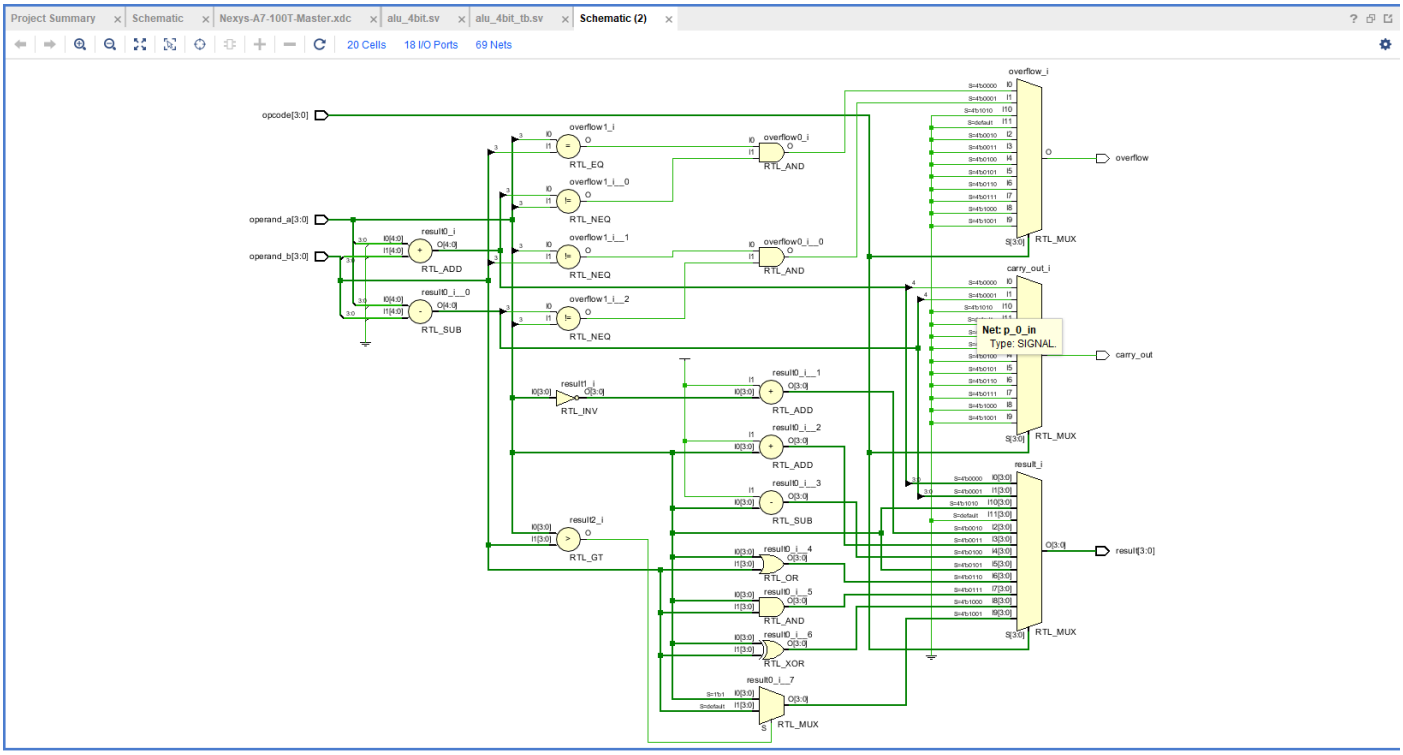
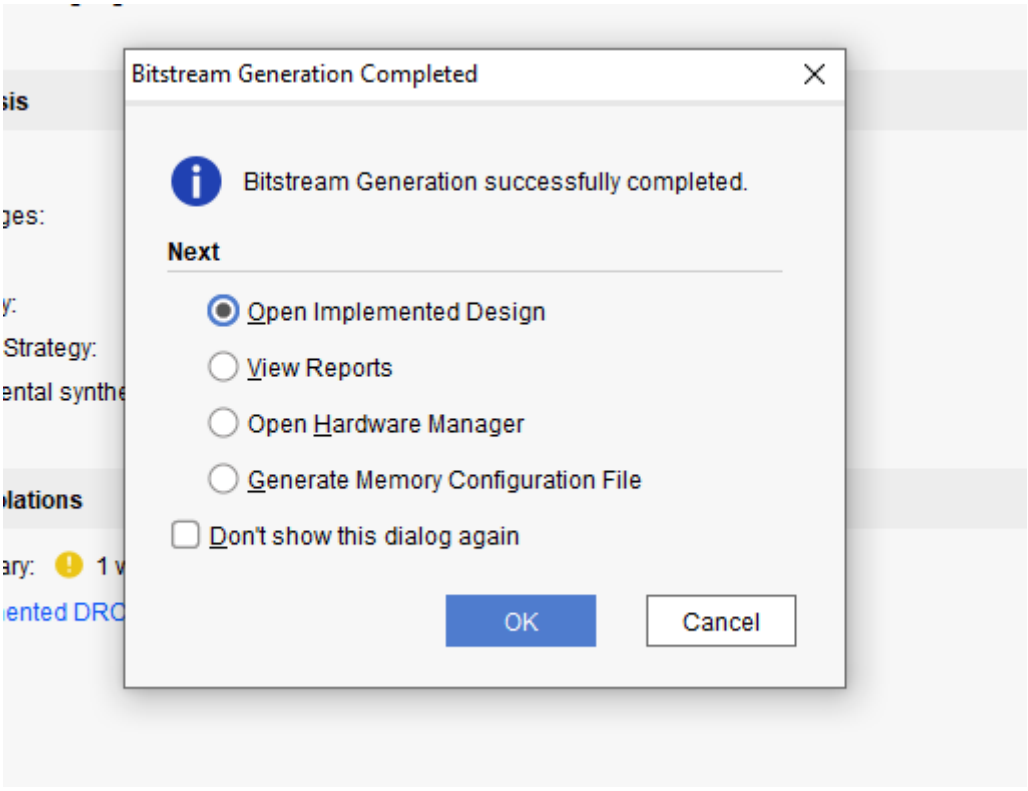
1. In-Lab Tasks: (*Write your lab task & screenshots here*)

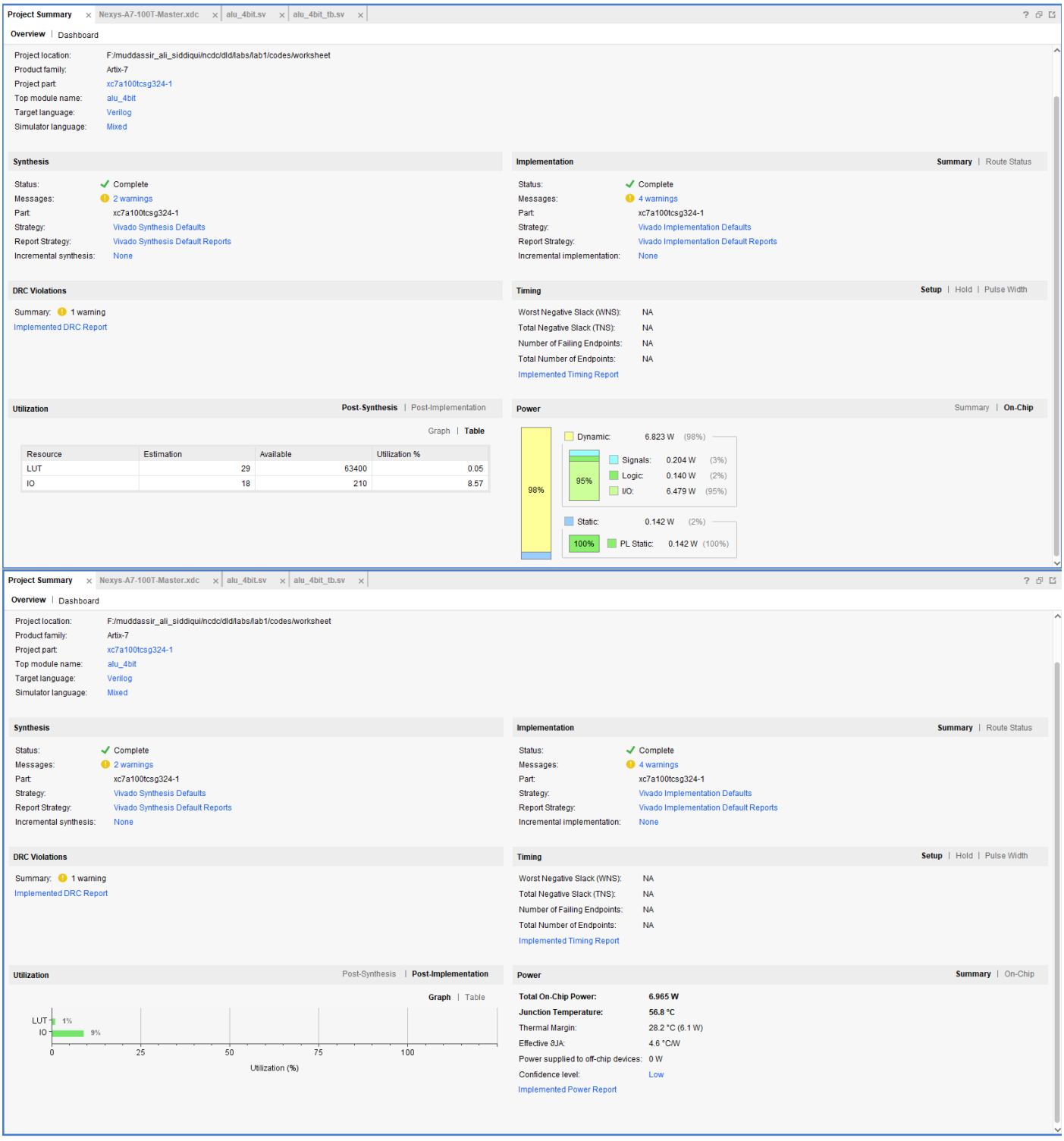
Schematic:



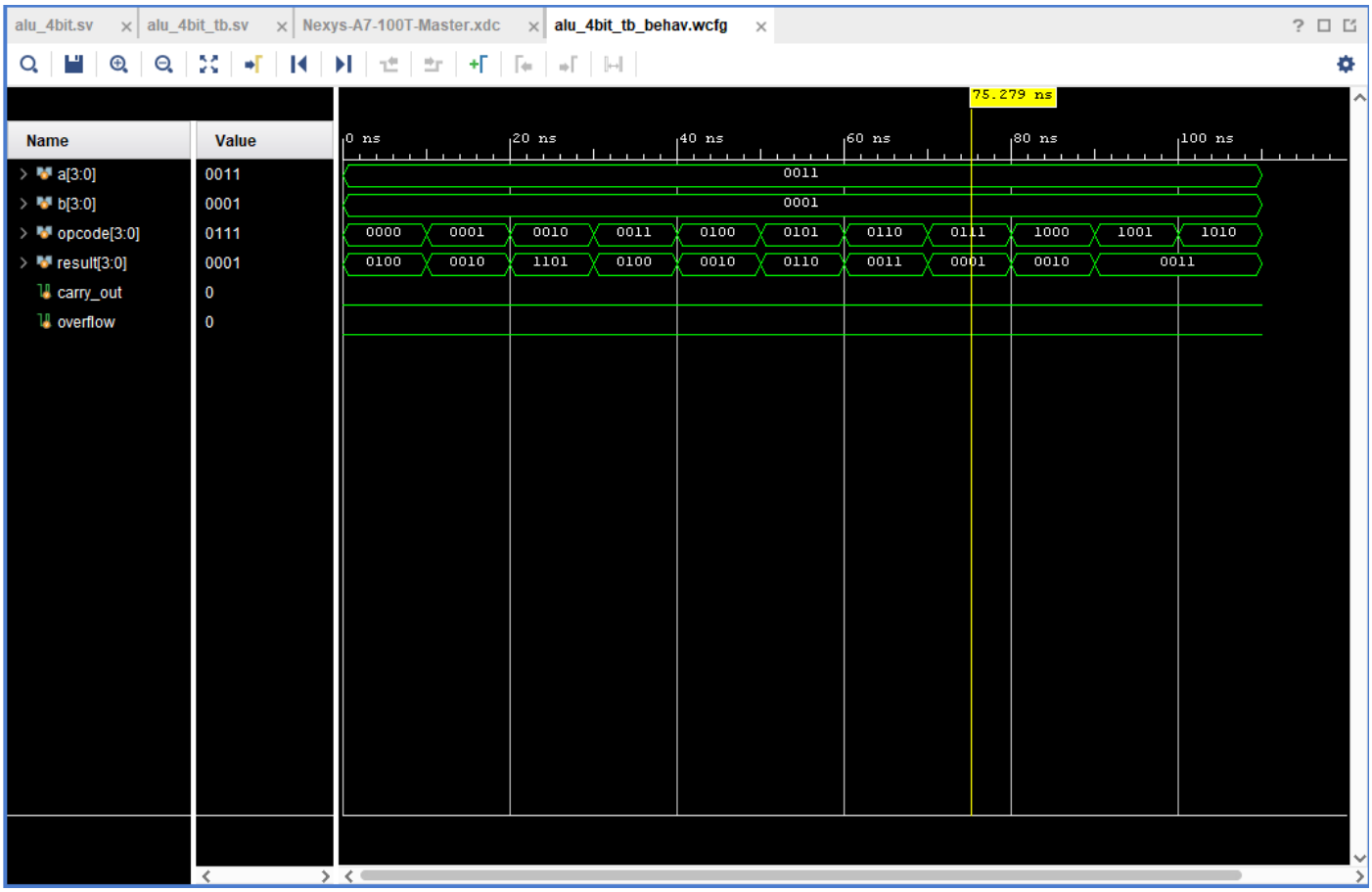
Bitstream Generation Popup:



Area, Timing, and Power Reports:



Waveform:



In the above waveform we assign operand_a = 0011 and operand_b = 0001, and result store the result of the operations.

2. Critical Analysis: (*Write you critical analysis / conclusion here*)

In this task we design a 4-bit alu in which we assign 10 operations given in the manual by mux. The alu is the critical and important section of a processor.