

CND 121: Introduction to Silicon Process & VLSI

Assignment #: 6

Section #: 16

Submitted by:

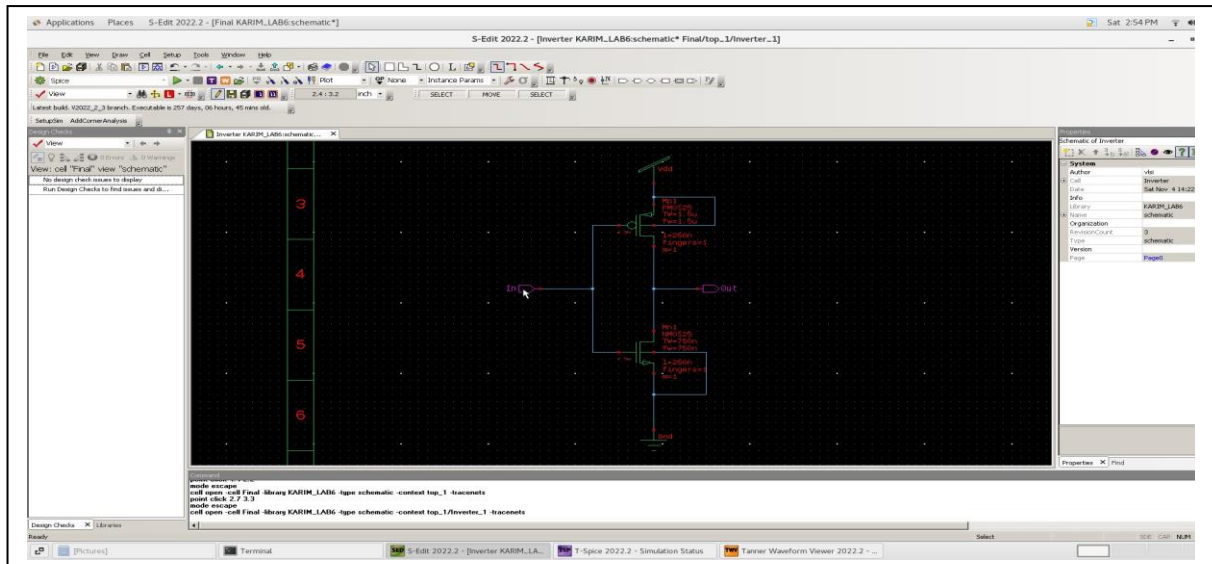
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Submitted to TA: **Mariam Taher**

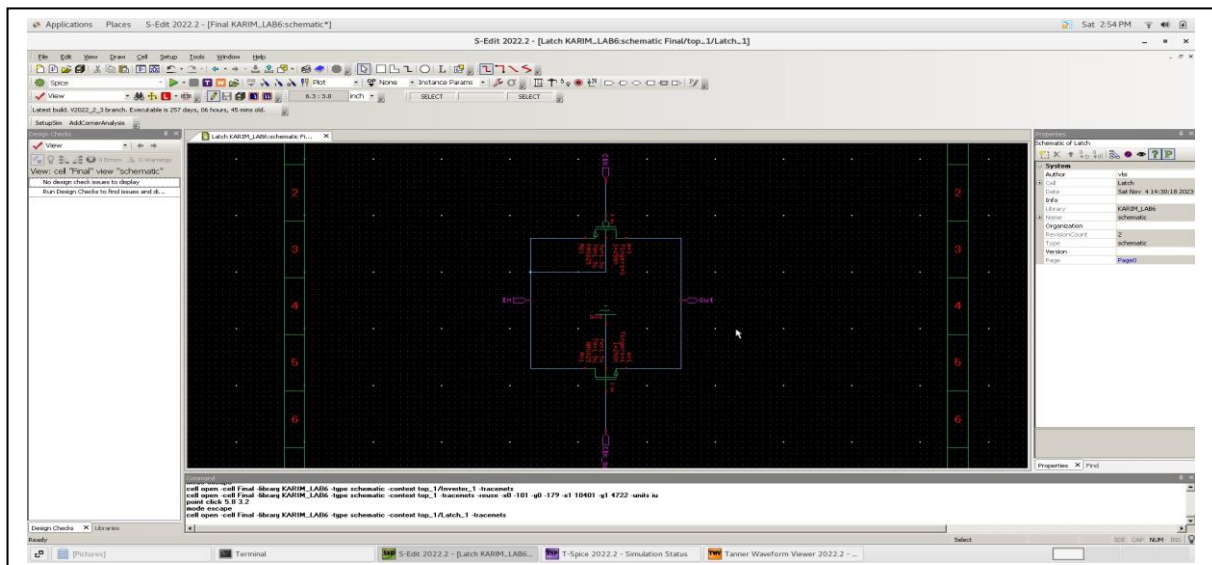
Date: 9/11/2023

1. Frontend flow

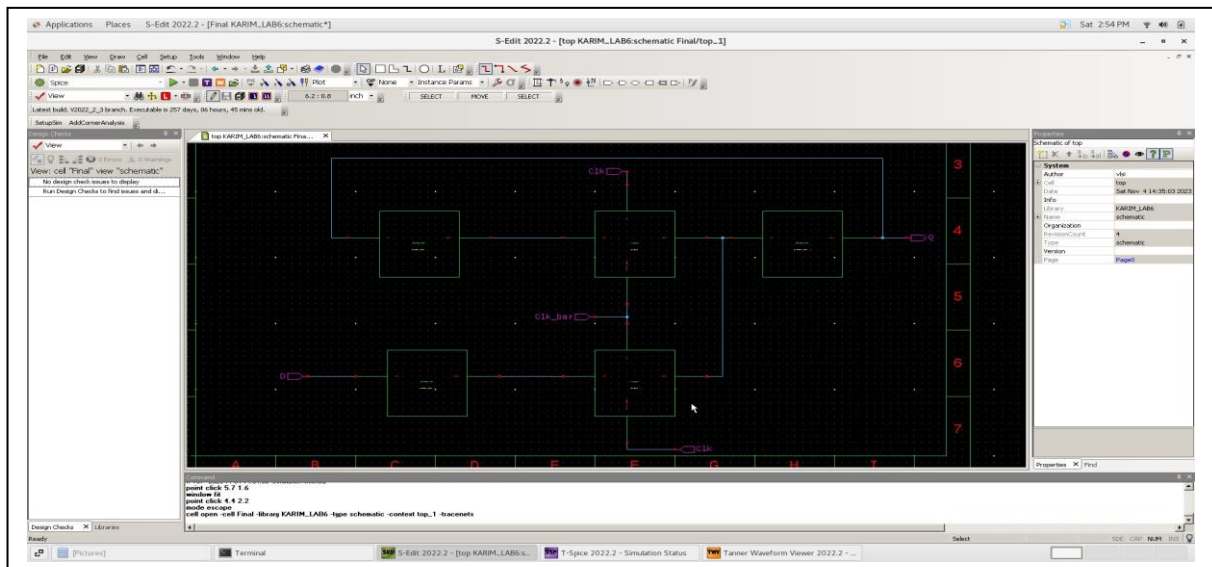
- i. Add screenshot from your inverter schematic:



- ii. Add screenshot from your Transmission gate schematic:



iii. Add screenshot from your latch **schematic**:



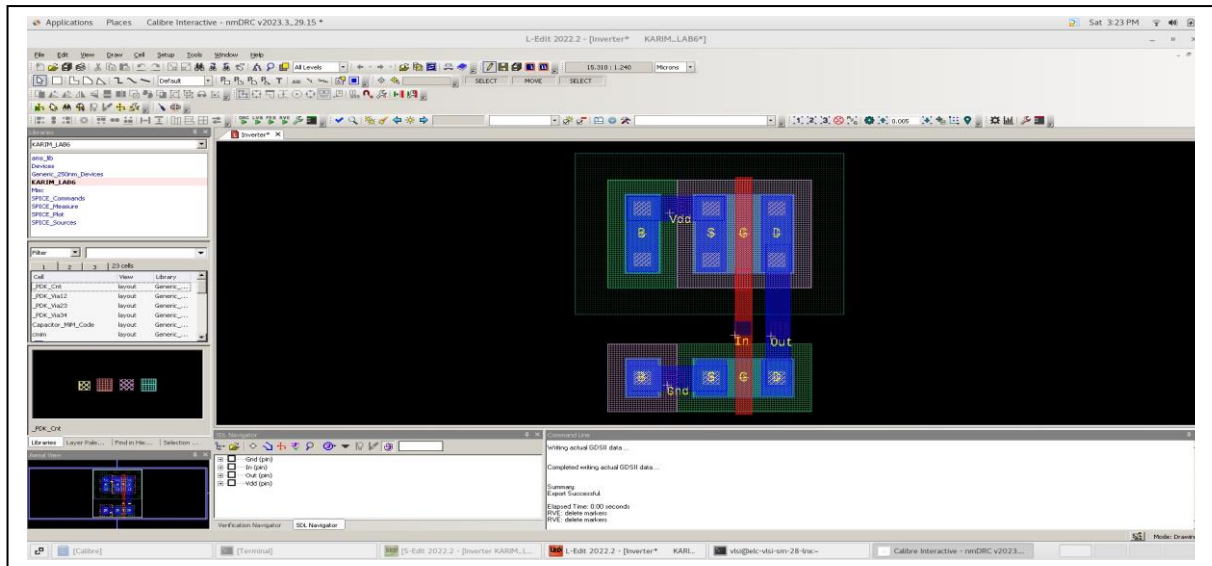
iv. Add screenshot from your **testbench**:



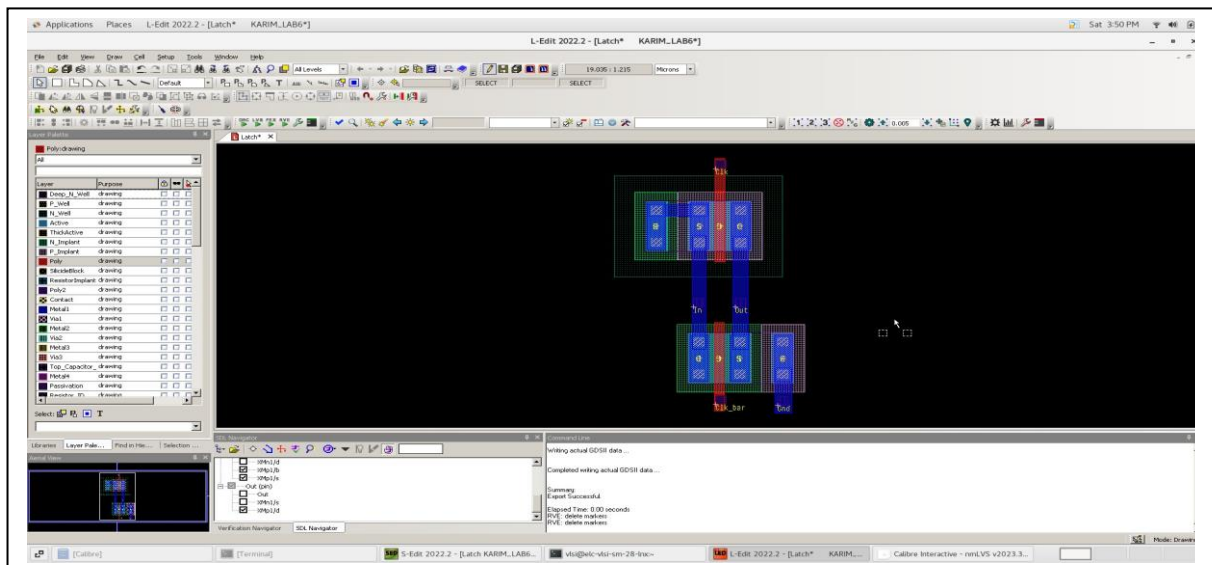
v. Propagation delay = **970.57psec**

2. Backend flow

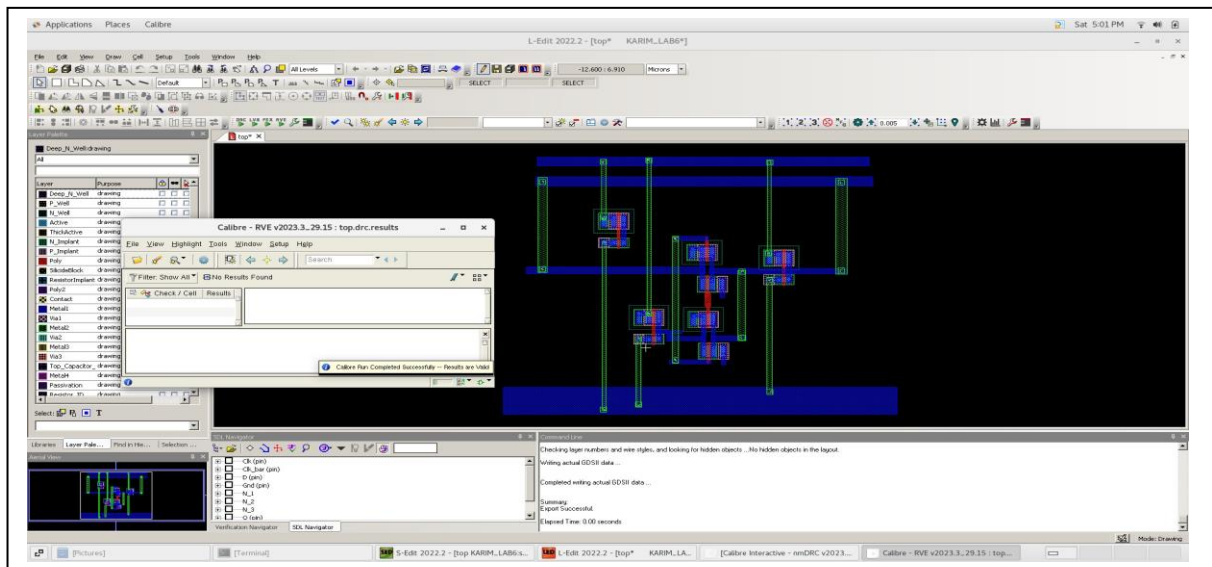
i. Add screenshot from your inverter **Layout**:



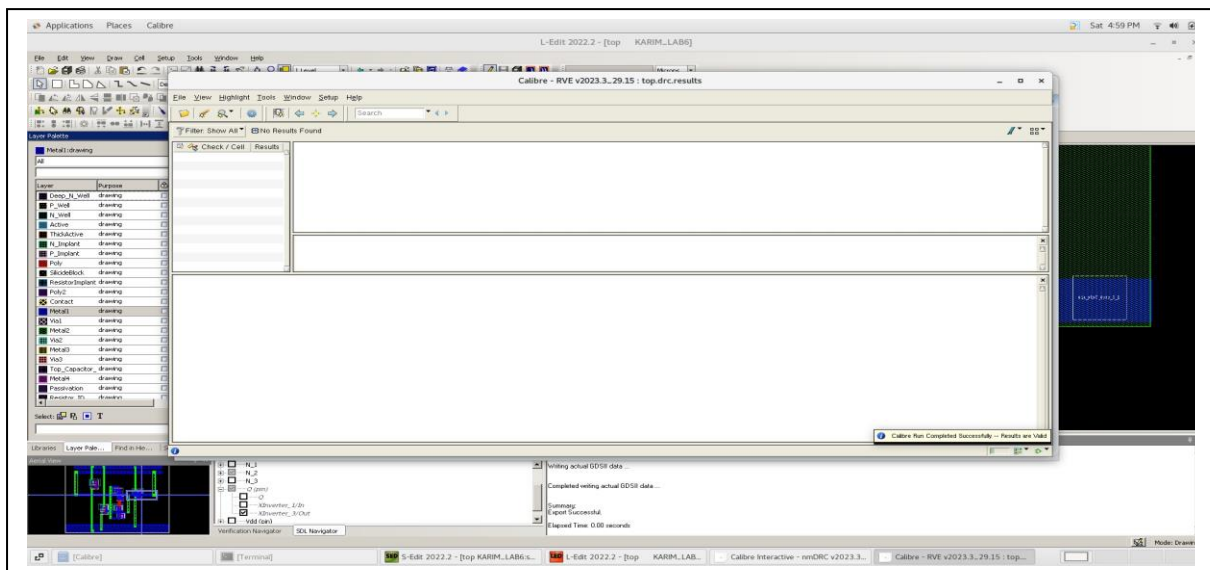
ii. Add screenshot from your Transmission gate **Layout**:



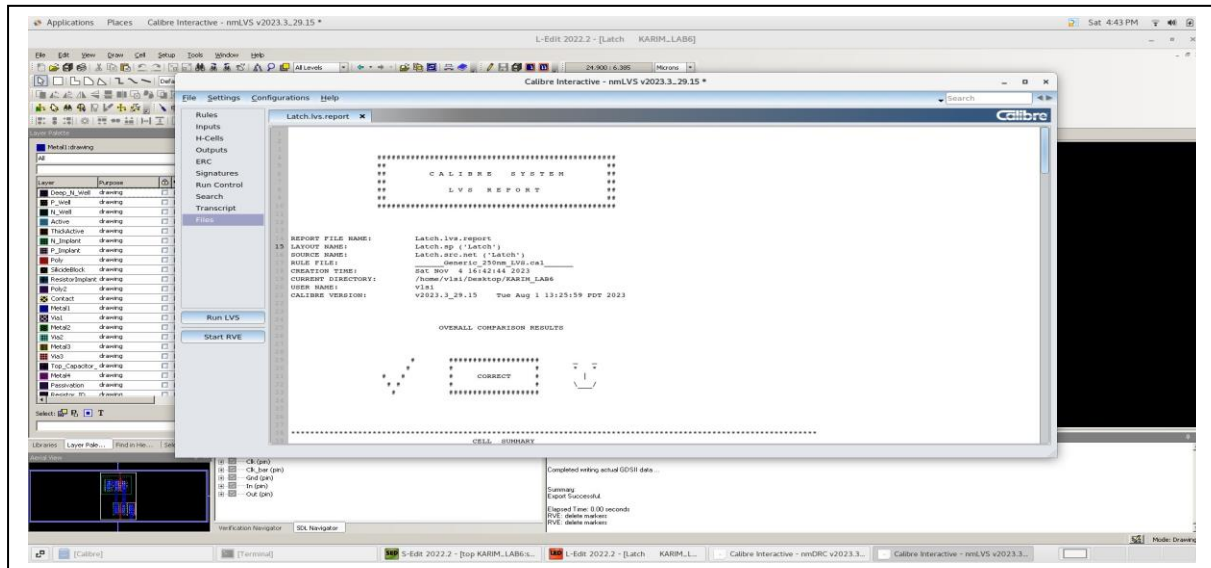
iii. Add screenshot from your latch **Layout**:



iv. Add screenshot after finishing **DRC** to grantee that no errors:



- v. Add screenshot after finishing **LVS** to grantee that your design is matched:



- vi. Propagation delay after post layout simulation = **975.1303psec**