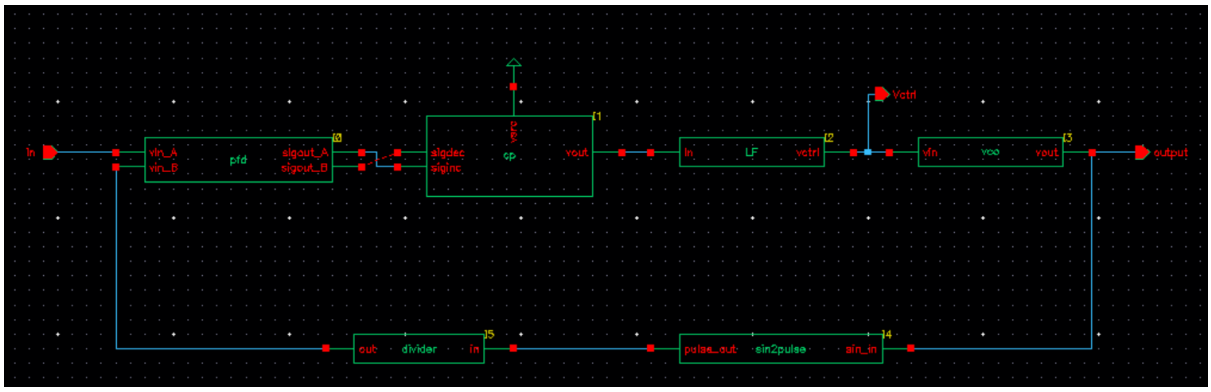
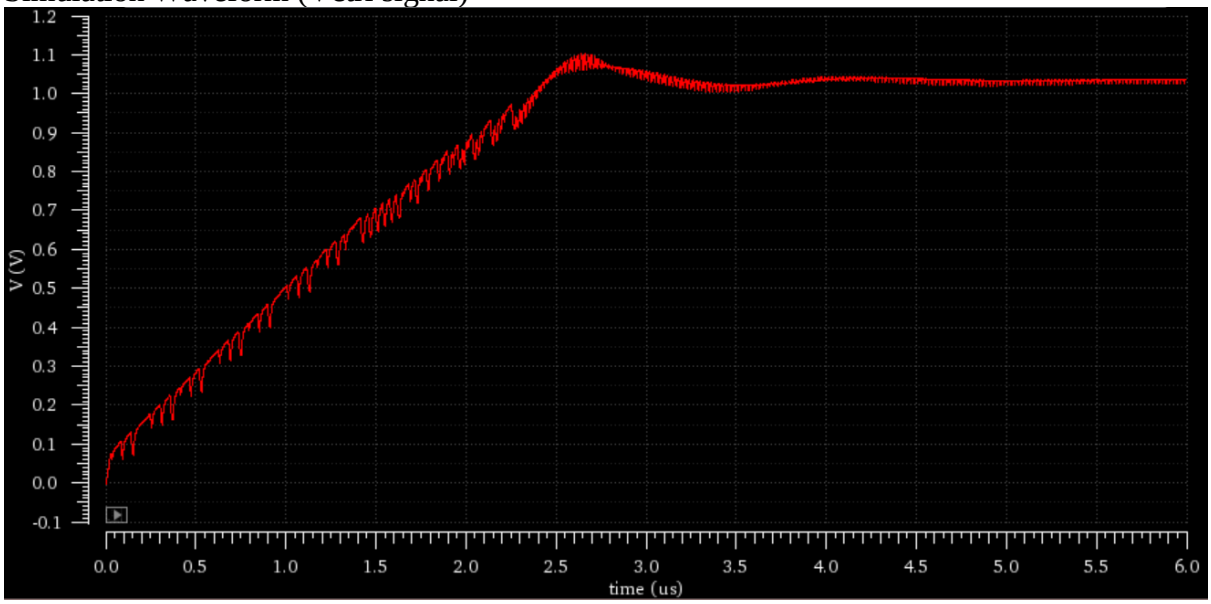
Lab1 Analog Simulation

Schematic

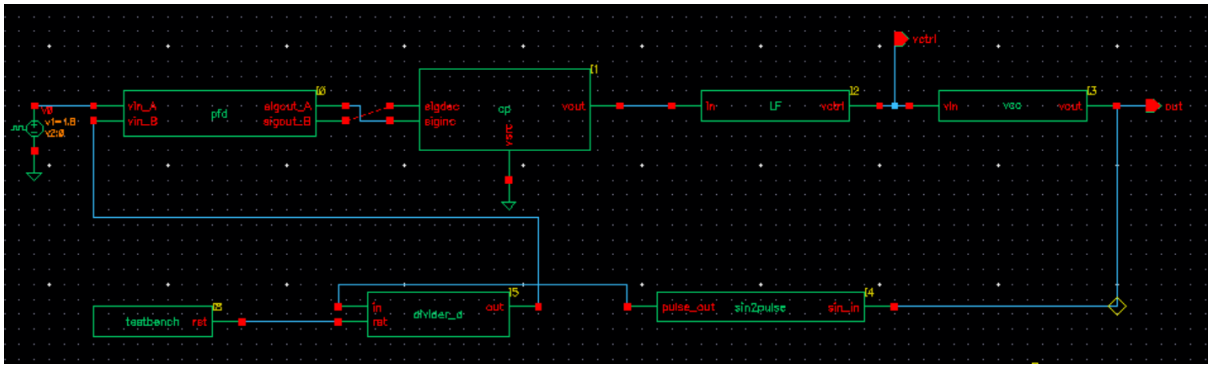


Simulation Waveform (Vctrl signal)

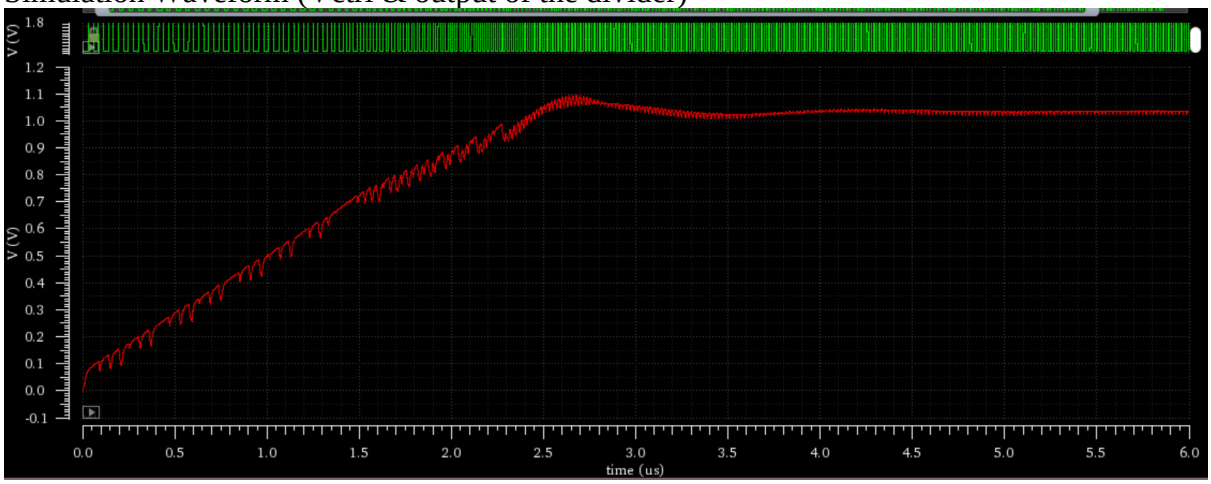


Lab2 Mixed-signal simulation

Schematic

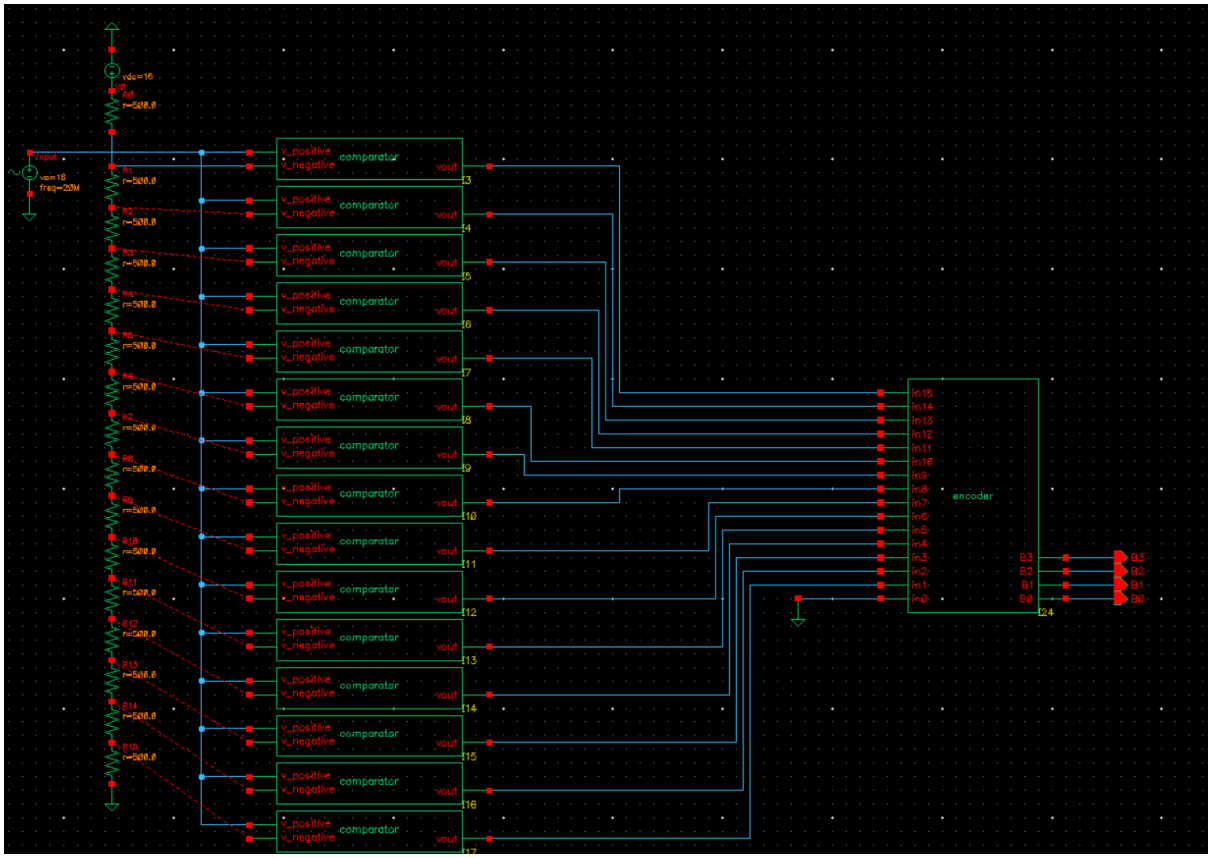


Simulation Waveform (Vctrl & output of the divider)

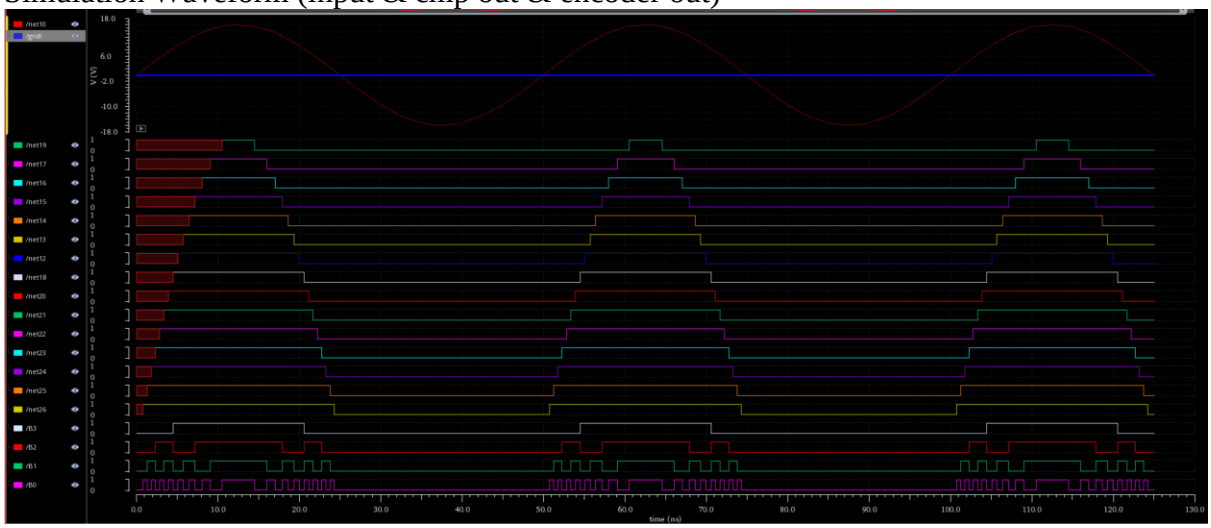


Lab3 ADC

Schematic



Simulation Waveform (input & cmp out & encoder out)



What you have learned from this homework?

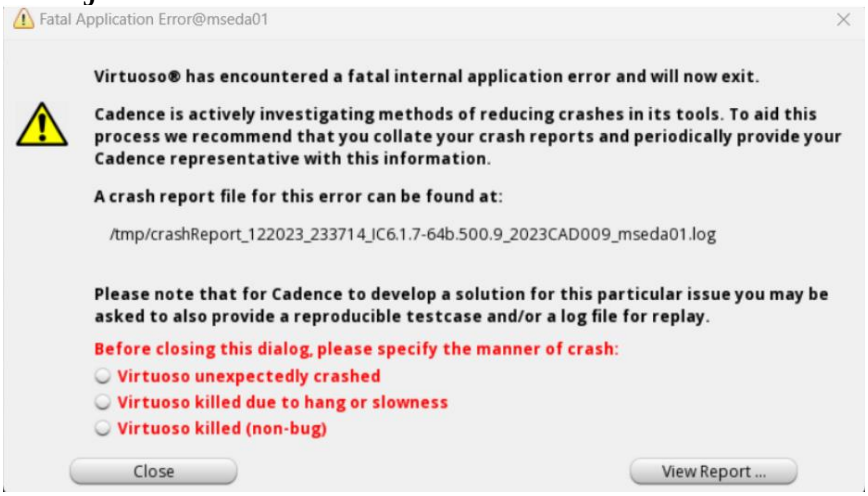
In this lab, I learned how to use Cadence Virtuoso software to simulate analog design. Additionally, I gained proficiency in performing co-simulation for both digital and analog circuits. In lab 3, I was introduced to a new circuit known as a priority encoder, which was previously unfamiliar to me. It's fascinating to explore and learn about these new concepts.

Q&A

- License Check

  I'm unsure about the specifics of the license checker algorithm implemented in Virtuoso. Interestingly, I've noticed that it consistently succeeds in reaching the license when I attempt it for the second time.

- Submit the job with virtuoso crash



  If there are many users concurrently using Virtuoso, submitting a simulation job might lead to Virtuoso crashing, marked as a segmentation fault in the command line. To enhance the experience, consider scheduling your job submissions during off-peak hours, such as midnight