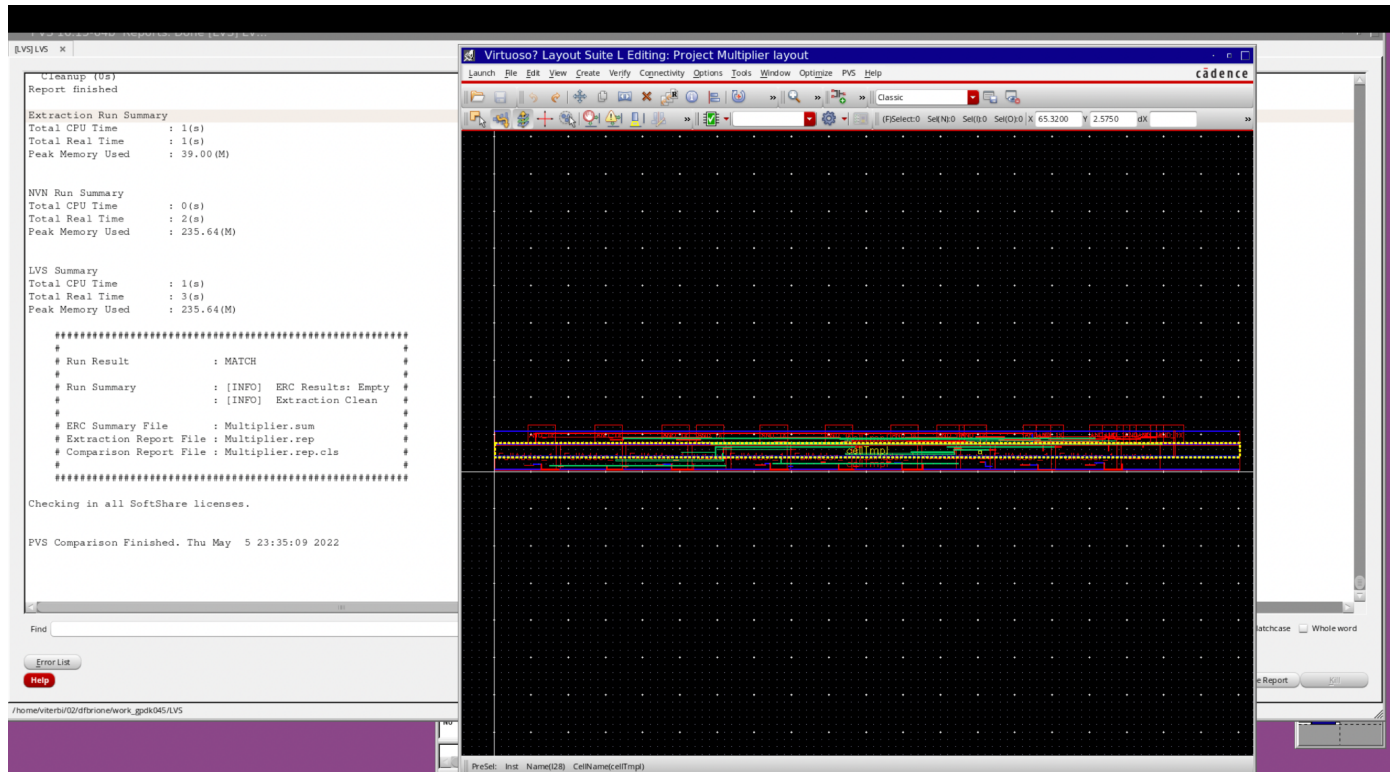# Readme Phase 3

Teammates:
- Varin Jaggi
- Daniel Briones
- Tarik Wilkinson

Multiplier Layout

While the LVS matched and the extraction was successful, I was unable to simulate on the extracted layout. I worked with TA Akshay Mysore Nataraj and he suggested the following:

"1. Did you try to run the simulation without using saved states?. Just setting up the ADE from scratch. (Rules out saved state issues if any)
2. Can you give this layout to your partner and ask him to run the sims?. (Rules out any model file issues).
3. Can you close the virtuoso and refire, and then retry to simulating it? (Rules out any simulator setthing issue)
4. Can you create a separate directory and set up the work_gpdk045 just like you did in the first lab and then try to run this?. (Worst Case- Rules out any modification to your setup files)
5. If none of them are working just submit how much ever you did till now and report the issue you are having in the readme file or in your report."

I tried all of the above troubleshooting steps but still got the error "Error found by spectre during initial setup:

ERROR (CMI-2942): +515: Instance length width or area does not fit the given lmax-lmin, wmax-wmin or areamax-areamin range for any model in the `+515.nch' group. The nearest model could be chosen by setting option soft_bin=allmodels."

Divider Layout:

- Full subtractor layout:
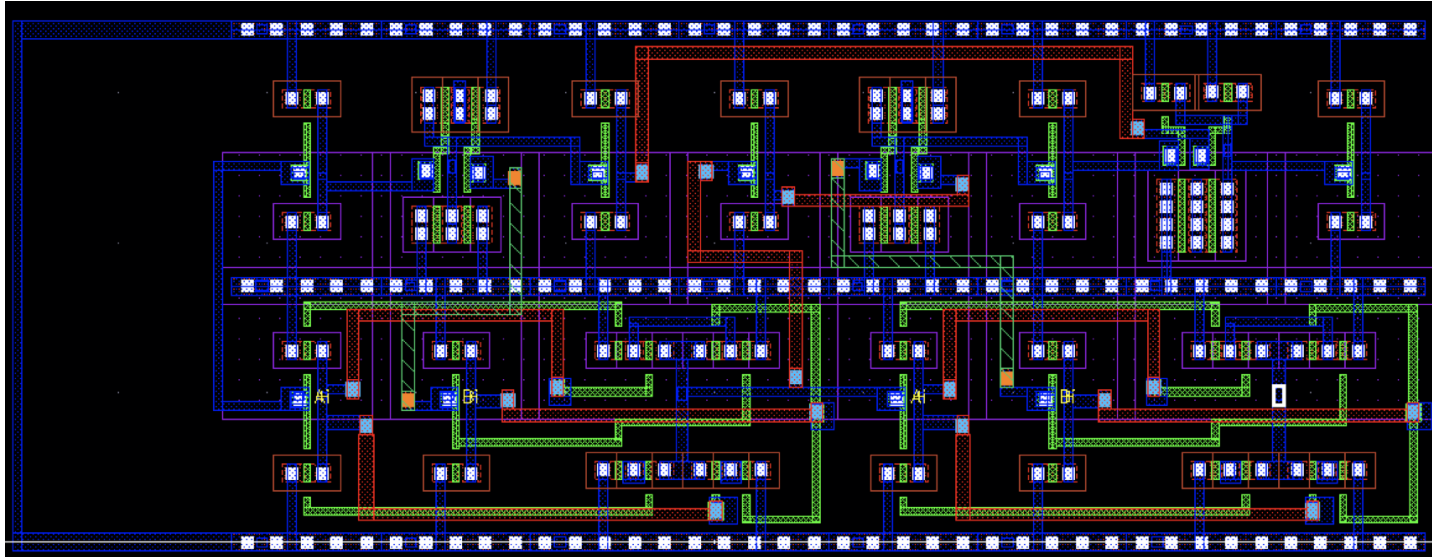
- Full subtractor LVS:

- Half sub mux layout:

- Half sub mux LVS:


```
##########################################################
#                                                        #
# Run Result            : MATCH                          #
#                                                        #
# Run Summary           : [INFO]   ERC Results: Empty    #
#                        : [INFO]   Extraction Clean      #
#                                                        #
# ERC Summary File       : Half_Sub_MUX.sum             #
# Extraction Report File : Half_Sub_MUX.rep             #
# Comparison Report File : Half_Sub_MUX.rep.cls         #
#                                                        #
##########################################################

Checking in all SoftShare licenses.


PVS Comparison Finished. Fri May  6 23:34:33 2022
```
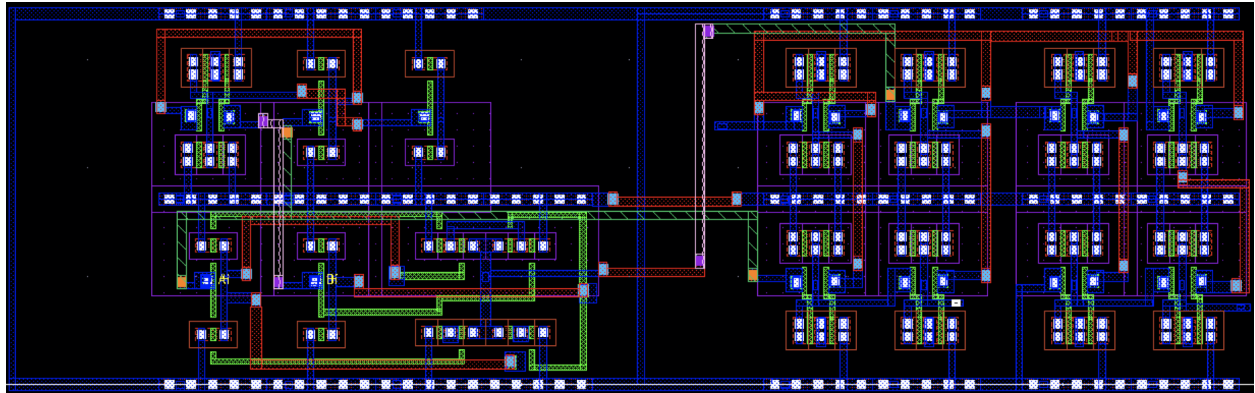
- Full sub mux layout:

- Full sub mux LVS:

```
###########################################################
#                                                         #
# Run Result              : MATCH                         #
#                                                         #
# Run Summary             : [INFO]  ERC Results: Empty    #
#                         : [INFO]   Extraction Clean     #
#                                                         #
# ERC Summary File        : Full_Sub_MUX.sum              #
# Extraction Report File  : Full_Sub_MUX.rep              #
# Comparison Report File  : Full_Sub_MUX.rep.cls          #
#                                                         #
###########################################################
Checking in all SoftShare licenses.


PVS Comparison Finished. Fri May  6 23:36:53 2022
```
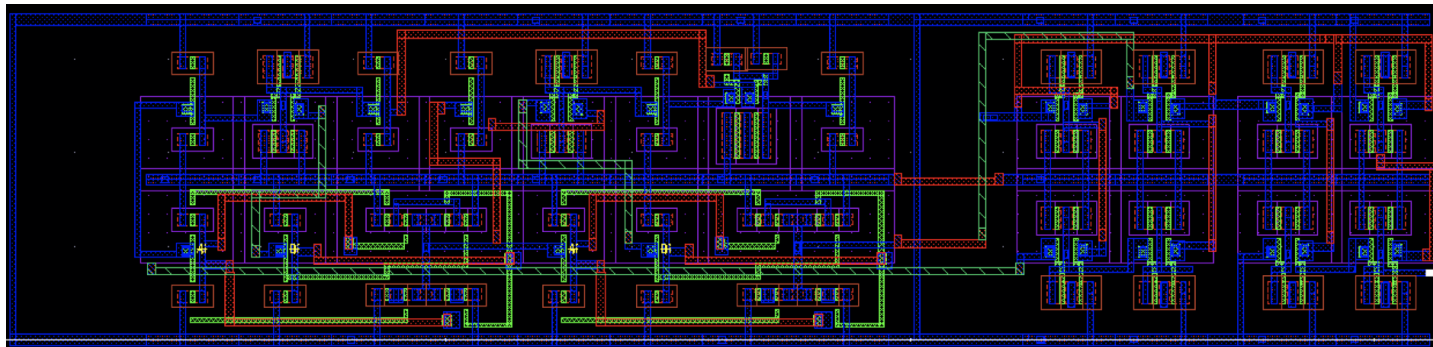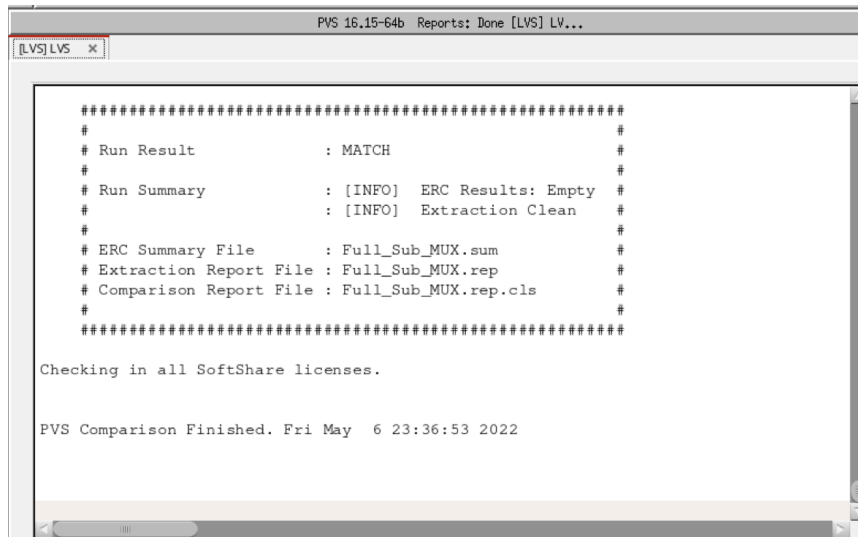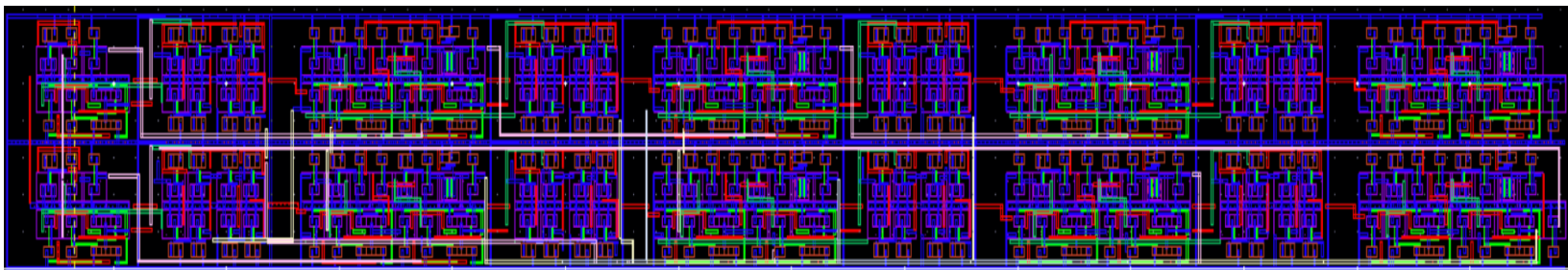
- **Divider Layout:**

Could not finish the full divider layout until the deadline. We did two layers of the divider layout (the top 2 layers where half sub mux has input D3 and D2). This is the layout for the two layers^ sorry :)