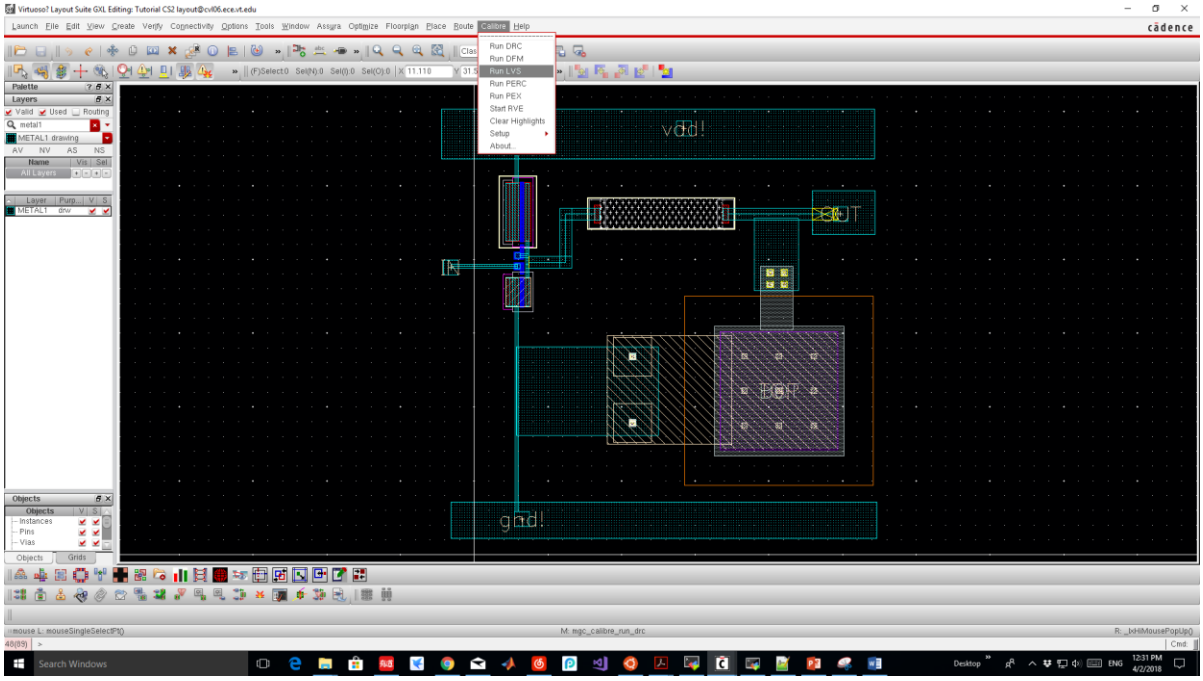
Layout Versus Schematic

Author: Chenyuan Zhao

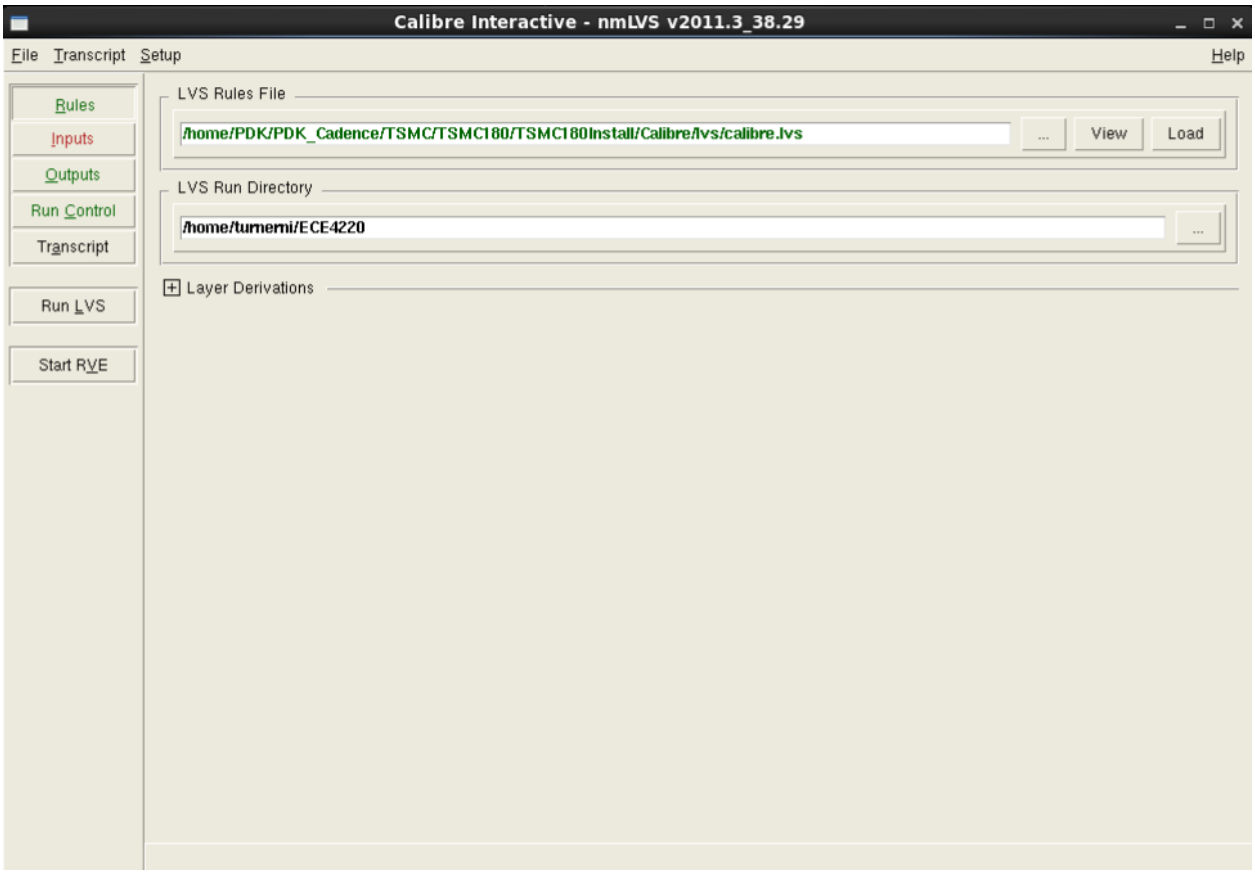
1. In this tutorial, the layout versus schematic (LVS) checking process would be introduced. Once the DRC check is passed, the next step is to perform the LVS to verify the connection. From the top menu, select **“Calibre” → “Run LVS”.**



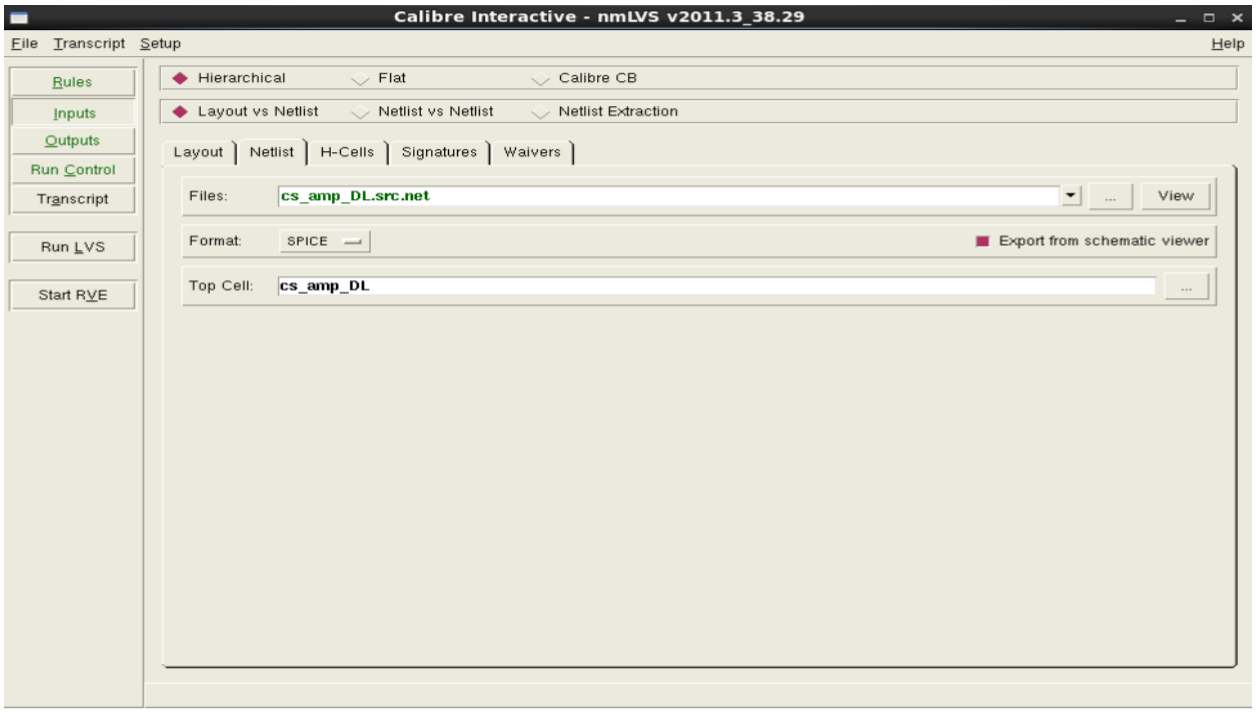
2. Click “Cancel” when the “Load Runset File” window pops up.

3. In LVS configuration window, set the LVS Rules File path as **“/home/PDK/PDK_Cadence/TSMC/TSMC180/TSMC180Install/Calibre/lvs/calibre.lvs”** and set the LVS Run Directory as your working directory.

4. This example uses a cell name of cs_amp_DL, so anywhere you see cs_amp_DL that should be the name of whatever your cell name is.



5. In the Inputs Section go to Netlist and check the Export From the Schematic Viewer Option*

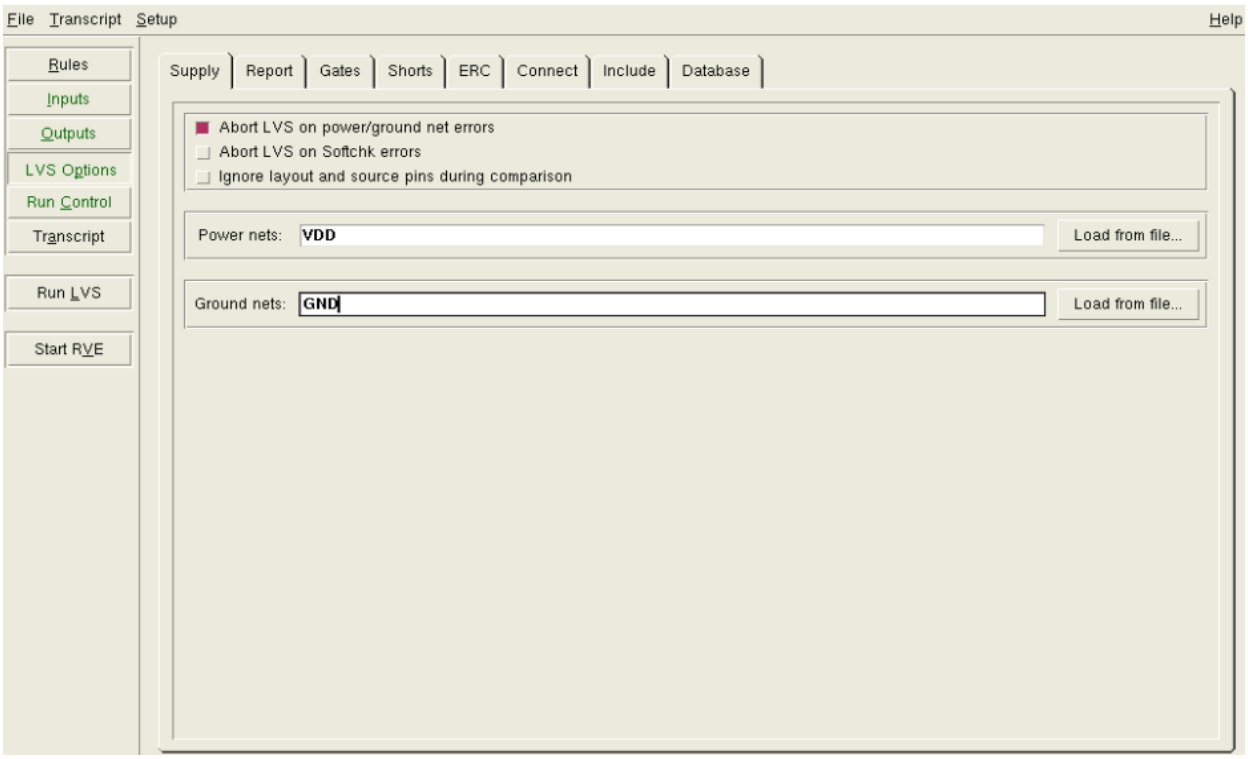


a. *It is important that the schematic also be open, and that whenever you launch the layout editor it should be from the schematic window.

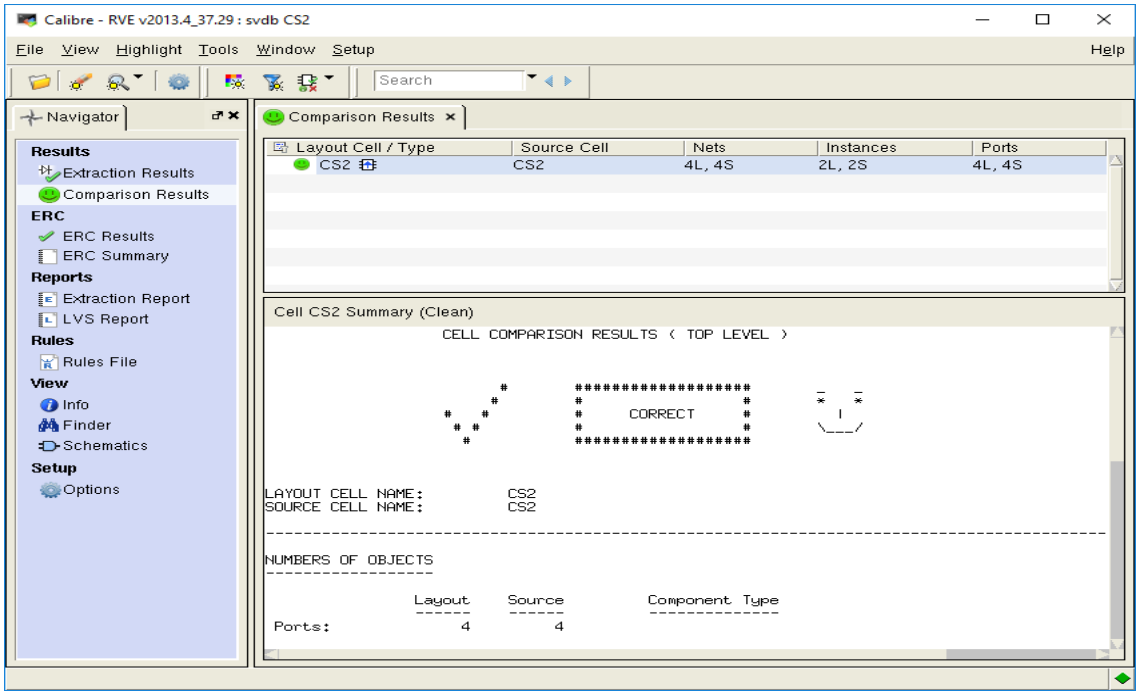
6. Go to Setup → LVS Options, Navigate to the Include Tab Under LVS Options. Make sure to include the following scripts in the SVRF Commands

LAYOUT CASE YES
SOURCE CASE YES
LVS COMPARE CASE NAMES

7. Go to Supply → And Type in the Power Nets and the Ground Nets. These need to match the power and ground pins in the schematic and the layout. In this example they are VDD and GND



8. Then click “Run LVS” to run LVS checking. The pop up window would show you the information about if your layout design matching your schematic design or not.



Correct your layout design if any errors been reported.