Design Rule Check

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- 1. All IC designs need to pass **DRC** for later fabrication. The DRC file is usually provided by the foundry. In this tutorial, the DRC file is provided by **tsmc**.
- 2. In the Layout Editing window, click **Calibre** from the top menu, followed by **Run nmDRC**.
- 3. Click **Cancel** when the **Load Runset File** window pops up. You may save a **runset** after finishing this tutorial for later use.



4. Set the **DRC Rules File** path to

/home/ece4220/PDK/180nm_TSMC/Required_LIB_Files/calibre.drc

	Calibre Interactive - nmDRC v2017.3_38.30 : DRC_runset _ 🛛 🖛 🗙
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- 5. Then, click **Run DRC** on the left side of the window.
- 6. When the DRC is done, the **DRC Report** window should pop up. To view all the DRC errors, click **Show All**, and select **Show Unresolved**.



7. Fix all errors except for

Check PO.R.5 Check PO.R.4 Check PO.R.3 Check M1.R.1 Check M2.R.1 Check M3.R.1 Check M4.R.1 Check M5.R.1 Check UTM40K.R.1 Check DRM.R.1 Check DRM.R.1 Check OD.R.3 Check MOM.R.2 These errors are related to the mental density of the chip, which can be waived for now.