

Tutorial on PTM 45nm SAR ADC KGD

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1. Unzip tb_chip_core_TI2.zip and copy folder tb_chip_core_TI_2 to your workarea
2. Open tb_chip_core_TI_2/spectre/schematic/netlist. Find oceanScript.ocn
3. In oceanScript.ocn, you can change simulation time:

```
analysis('tran ?stop "3u" ?errpreset "moderate" ?tranNoise "Transient Noise"
?noiseifmax "100G" ?noiseifmin "1k" ?noiseseed "1" ?noisescale ""
?noisetmin "" ?noiseupdate "" ?noiseonoff "" ?noiseinst ""')
```

You can change ADC input frequency:

```
desVar( "fin" 946.5332031M ?noisetmin "" ?noiseupdate "" )
desVar( "fs" 1G )
```

4. In your terminal, type “ocean -restore oceanScript.ocn”. The simulation will start immediately.
5. After simulation, you can check performance metrics in tb_chip_core_TI_2/spectre/schematic/netlist/sim_results

