

Problem Set

Using MOSIS TSMC 180 nm technology, design an inverter with the following transistor sizing: $M_n = 4/2$ and $M_p=8/2$.

Use HSPICE/Cosmoscope to plot the Voltage Transfer Characteristic of the inverter.

Use .MEASURE to find the static characteristics of your inverter:
VIL, VIH, VOL, VOH, VTH

Provide:

- 1) HSPICE netlist
- 2) VTC plot (Vout vs. Vin)
- 3) The measured parameters (either from your list file or your measurement file)