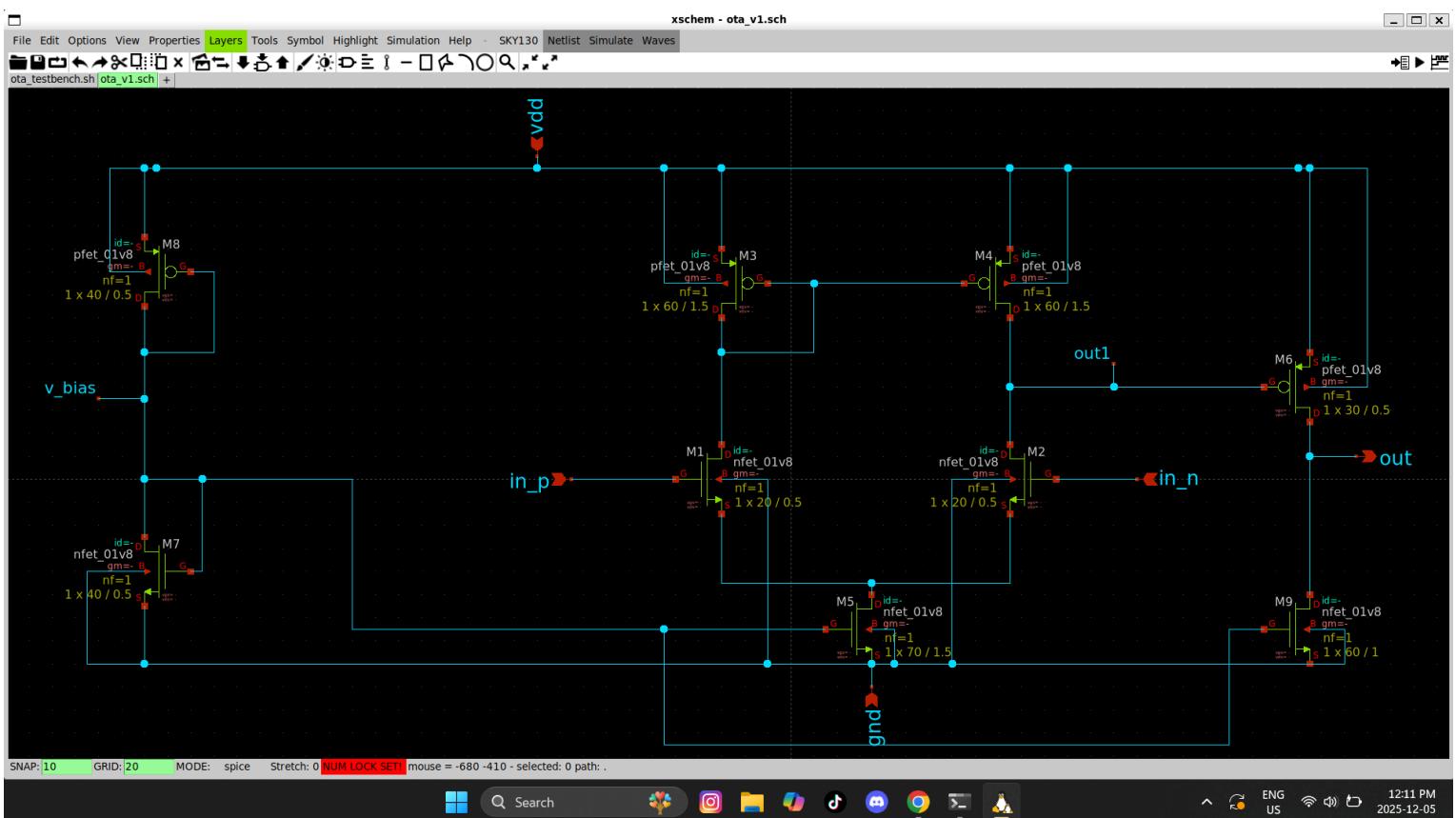
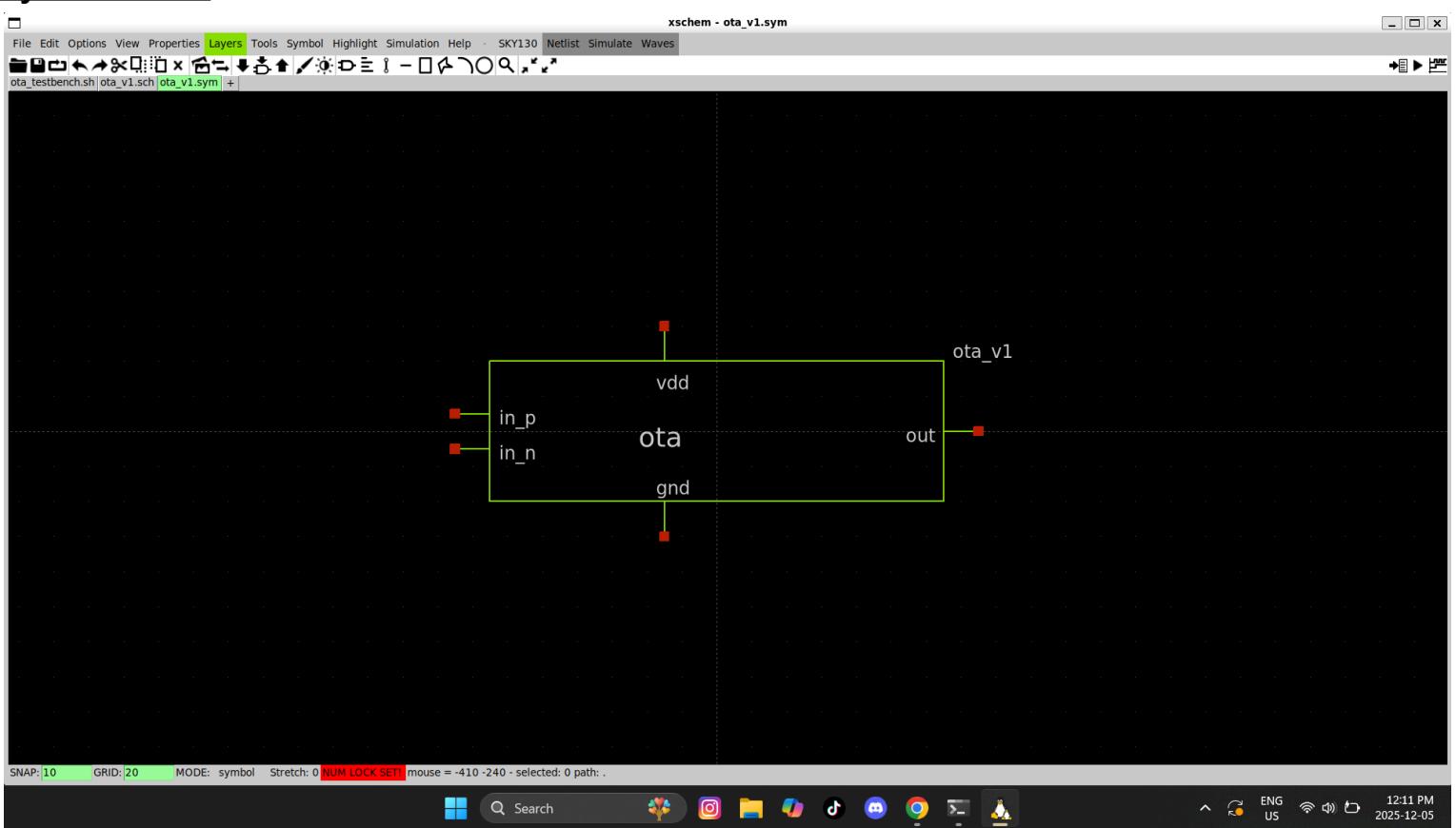


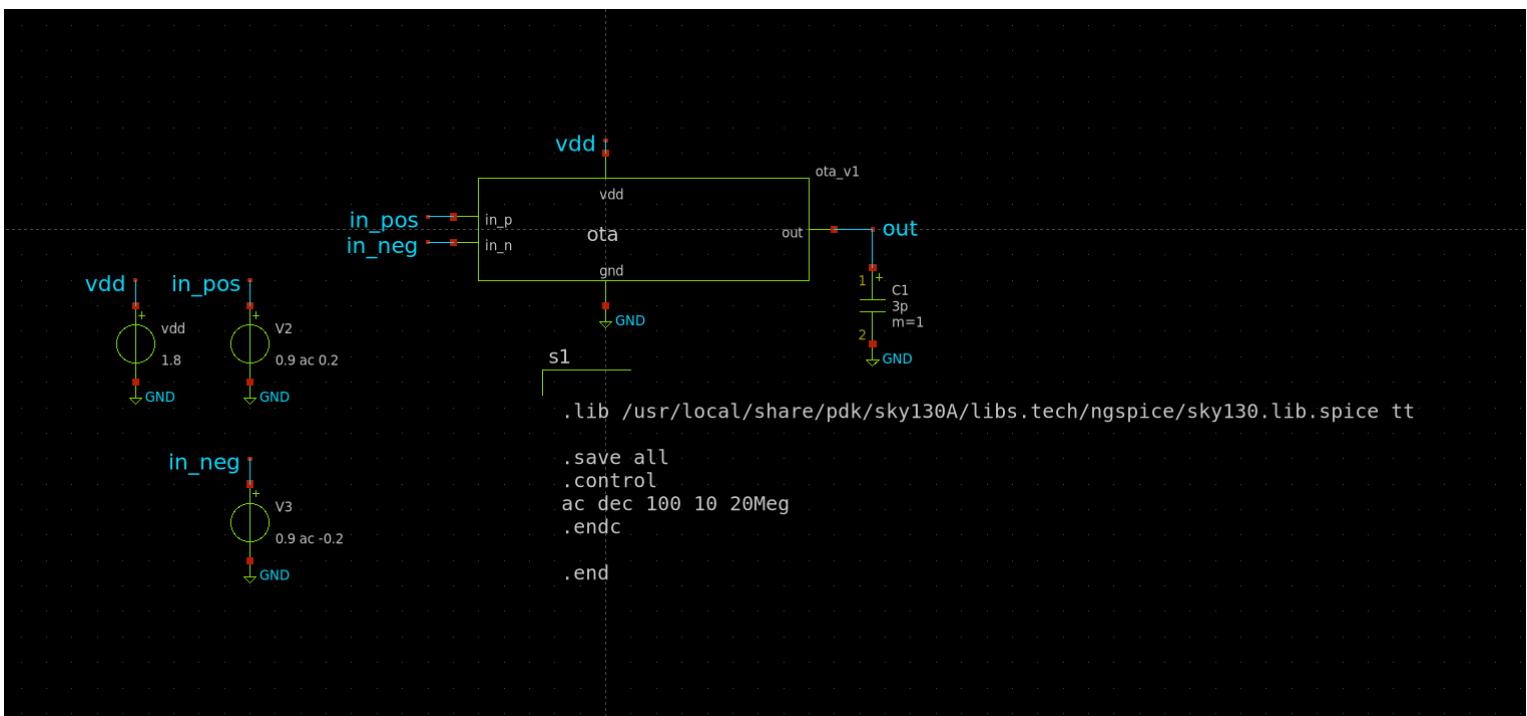
Schematic Block:



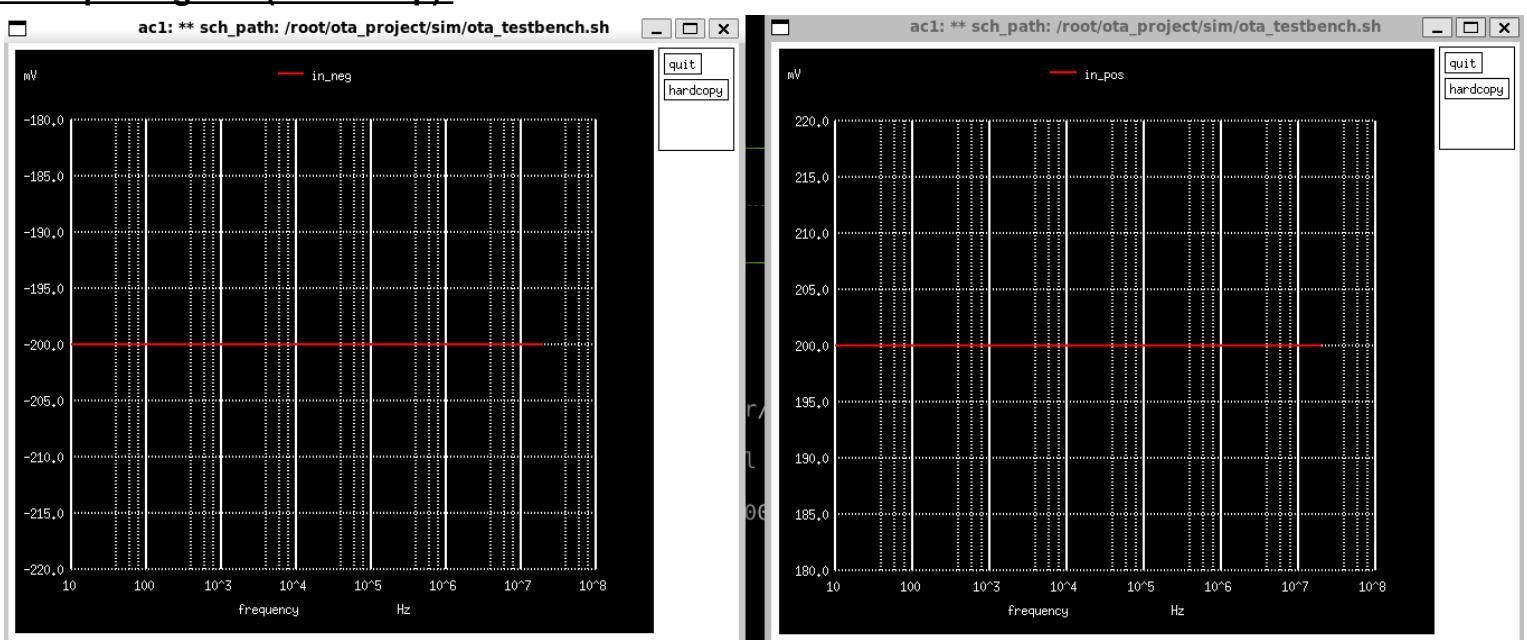
Symbol Block:



Testbench Block (AC Sweep):

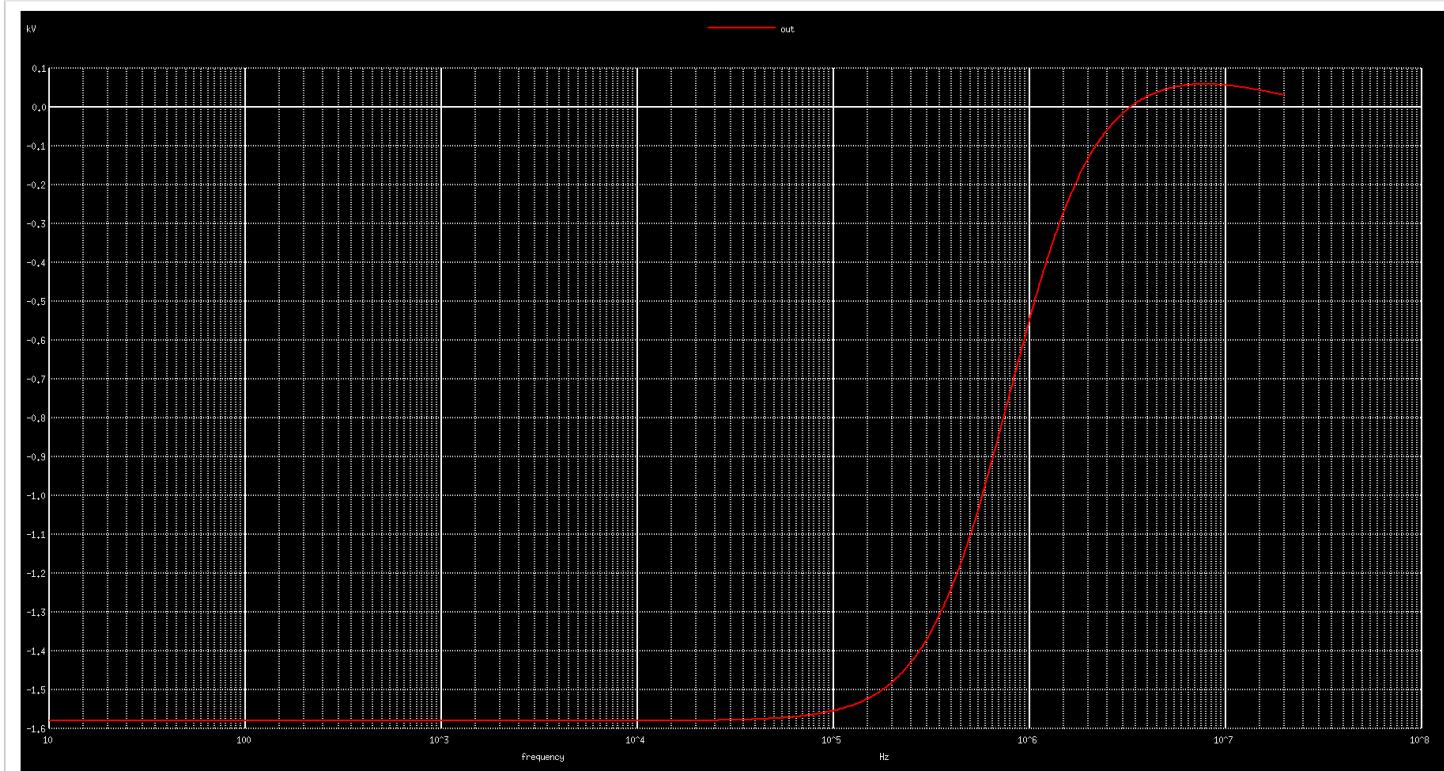


AC Input Signals (AC Sweep):



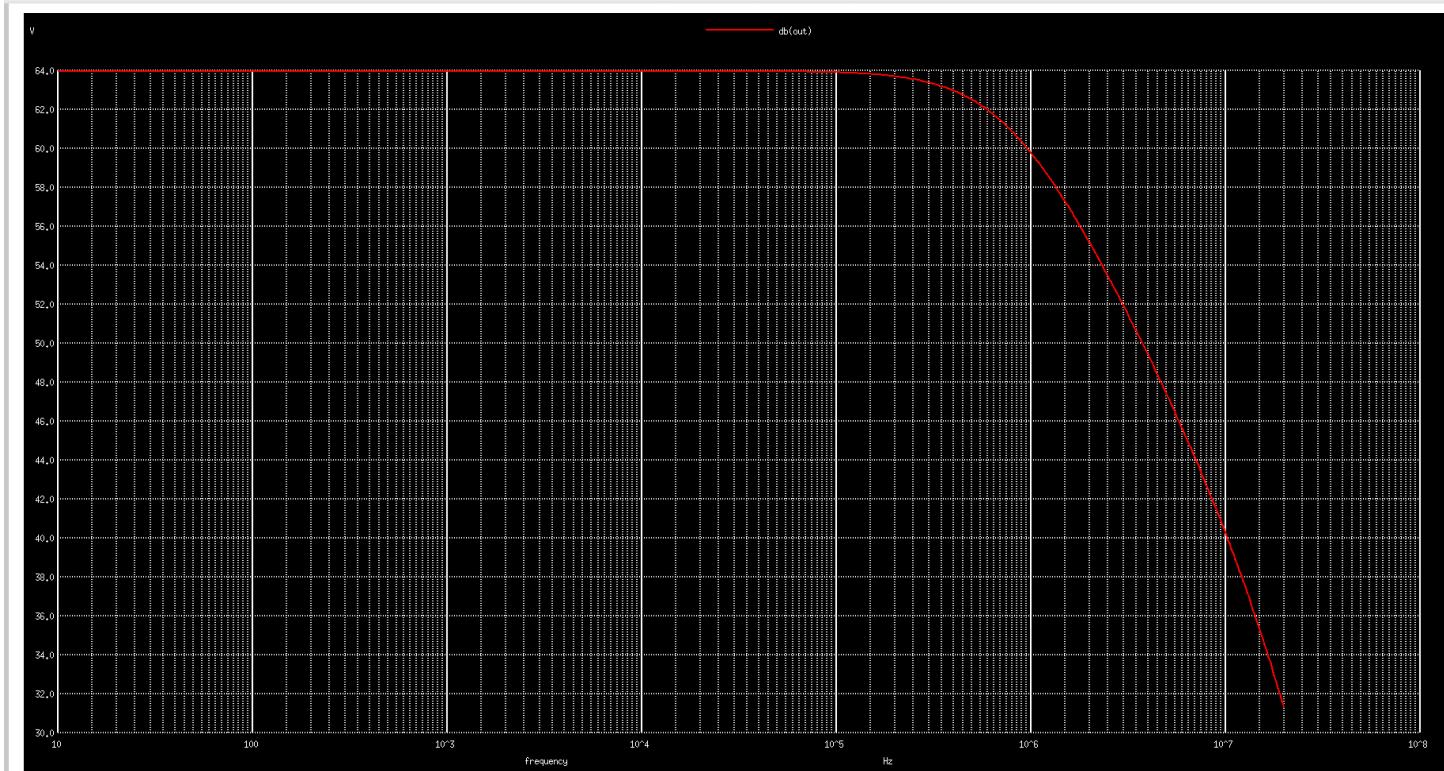
AC Output Signal (AC Sweep):

ac1: ** sch_path: /root/ota_project/sim/ota_testbench.sh

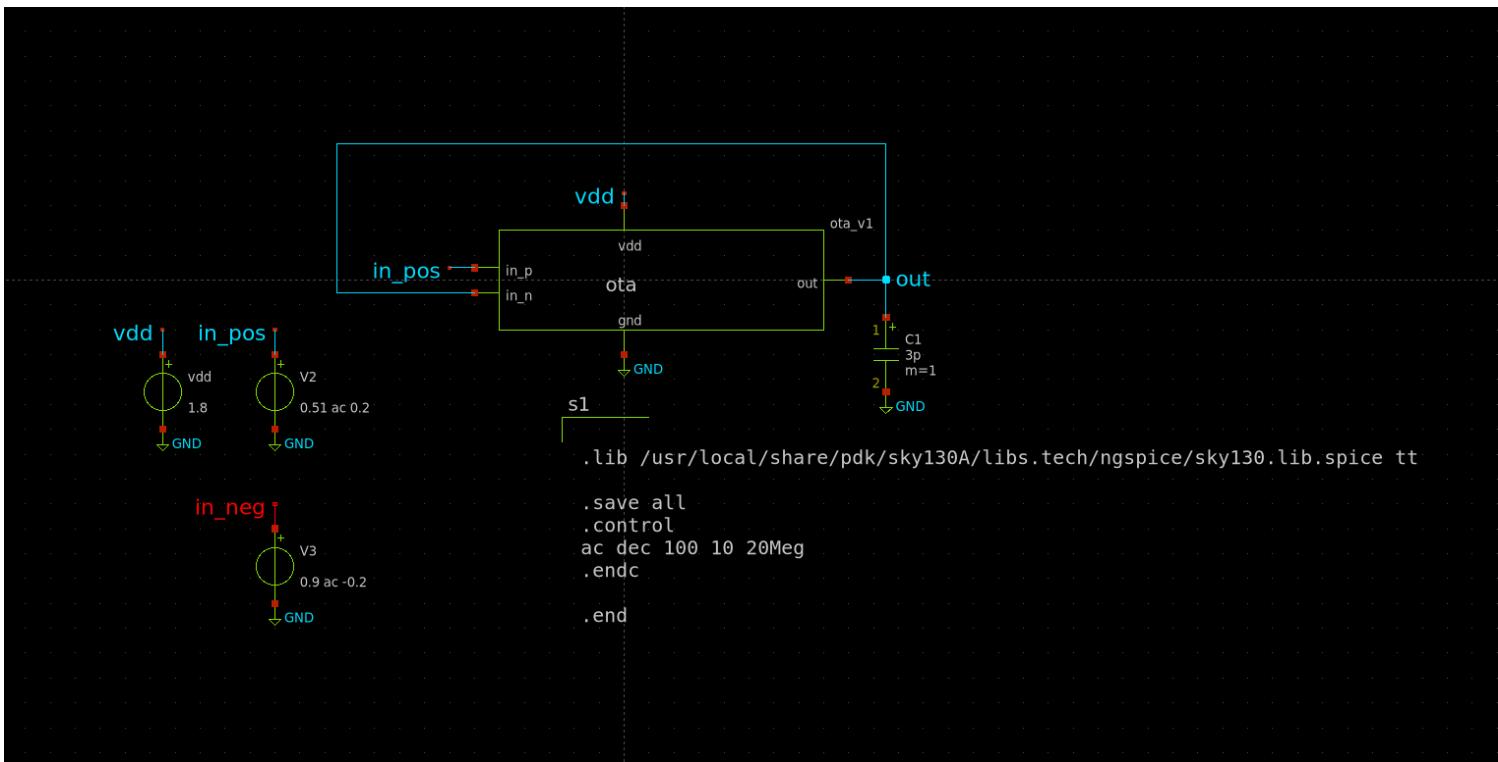


AC Gain[dB] at Output (AC Sweep):

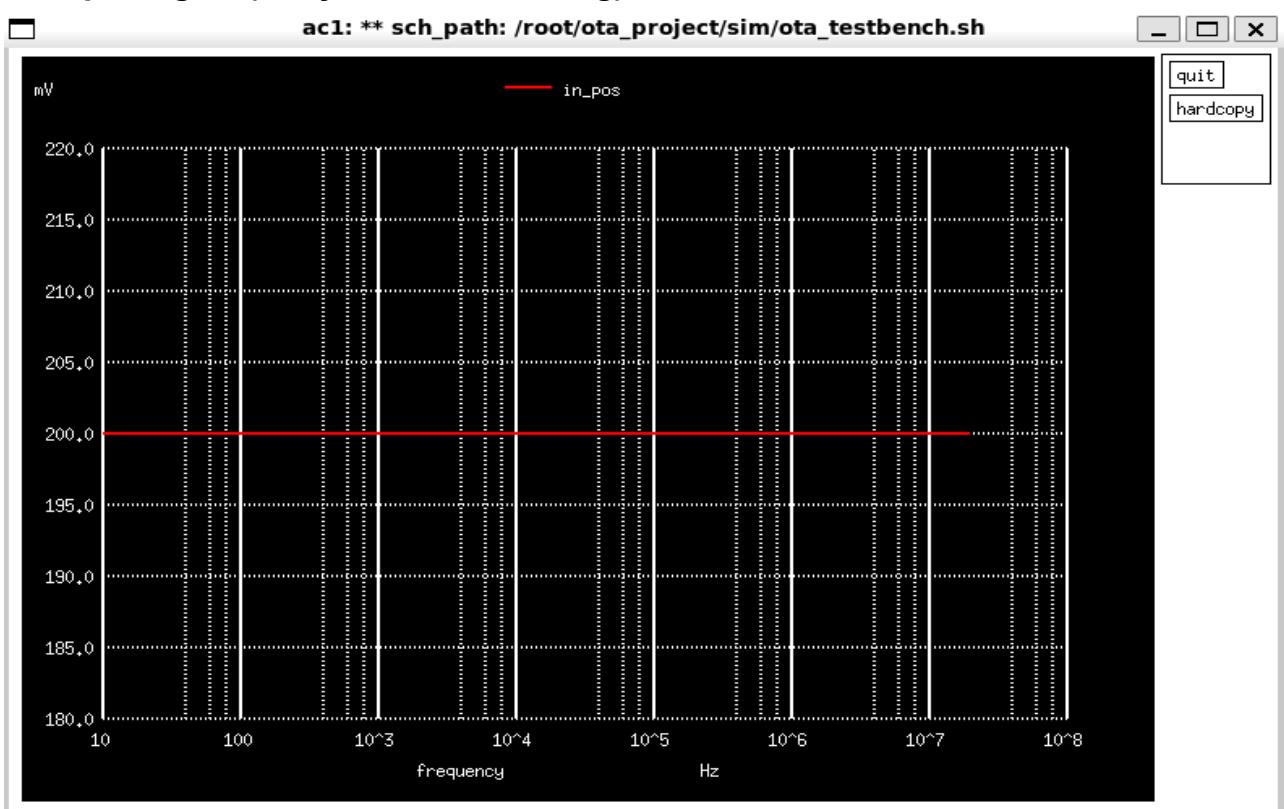
ac1: ** sch_path: /root/ota_project/sim/ota_testbench.sh



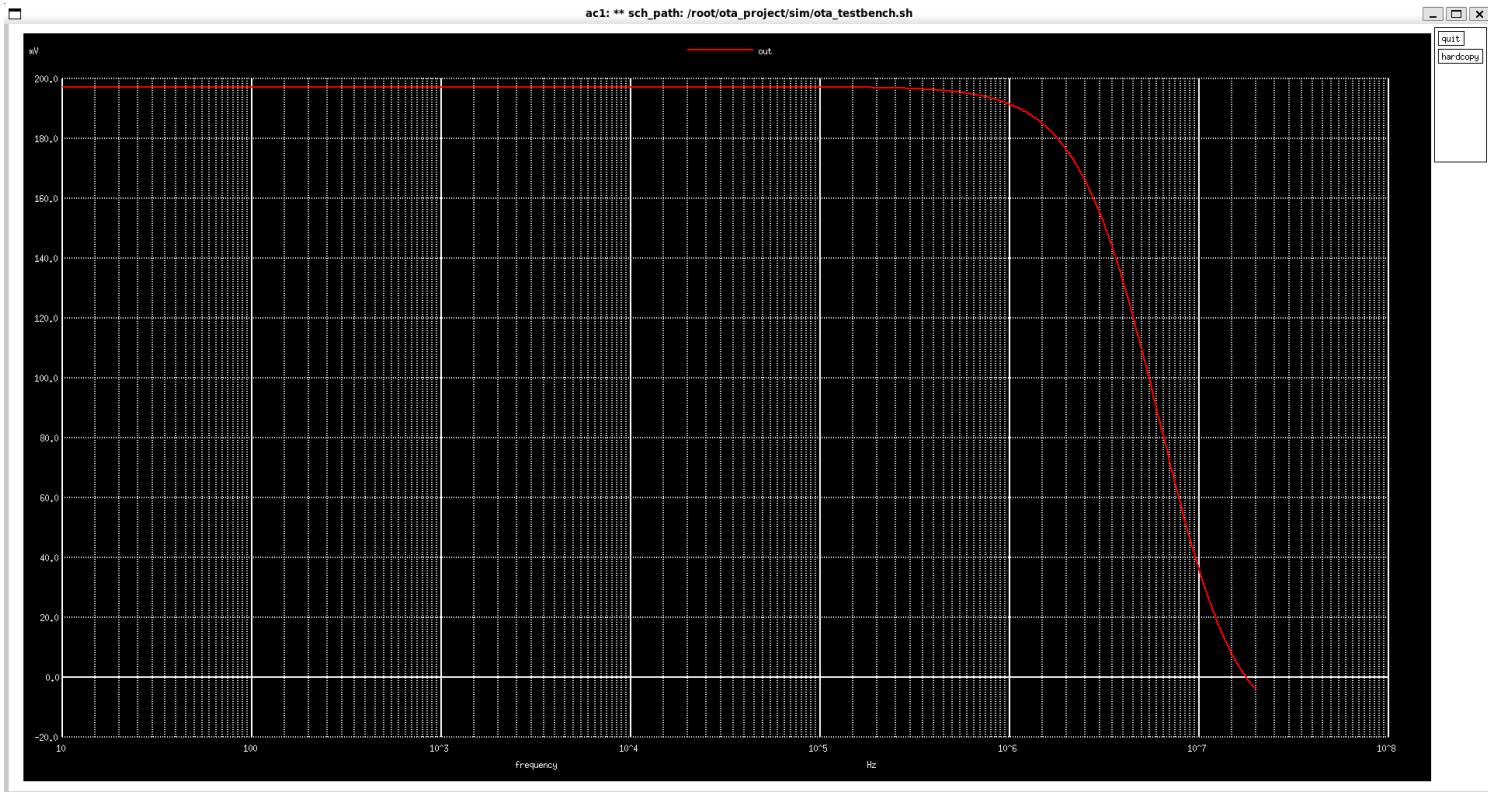
Testbench Block (Unity Feedback Testing):



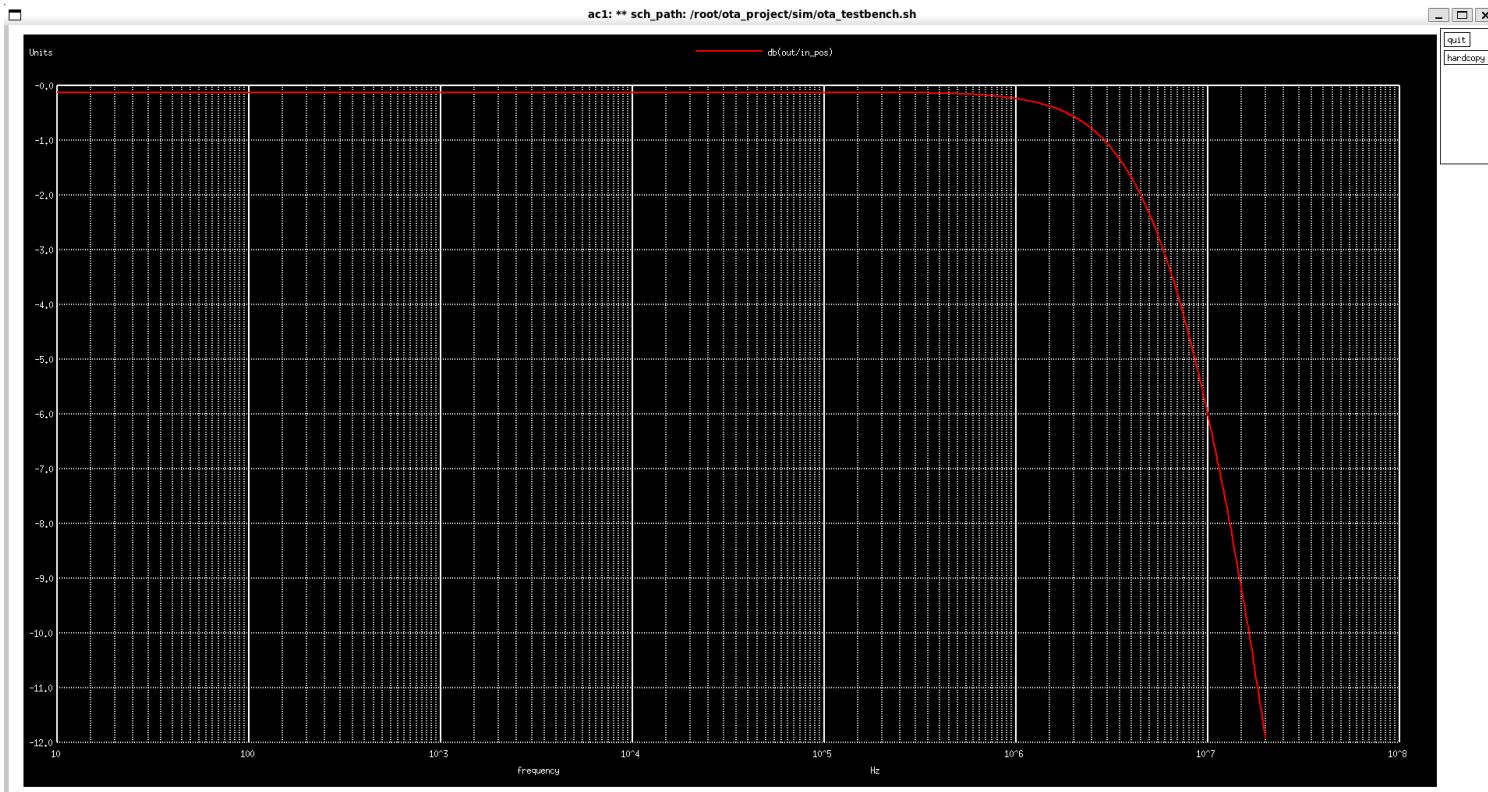
AC Input Signal (Unity Feedback Testing):



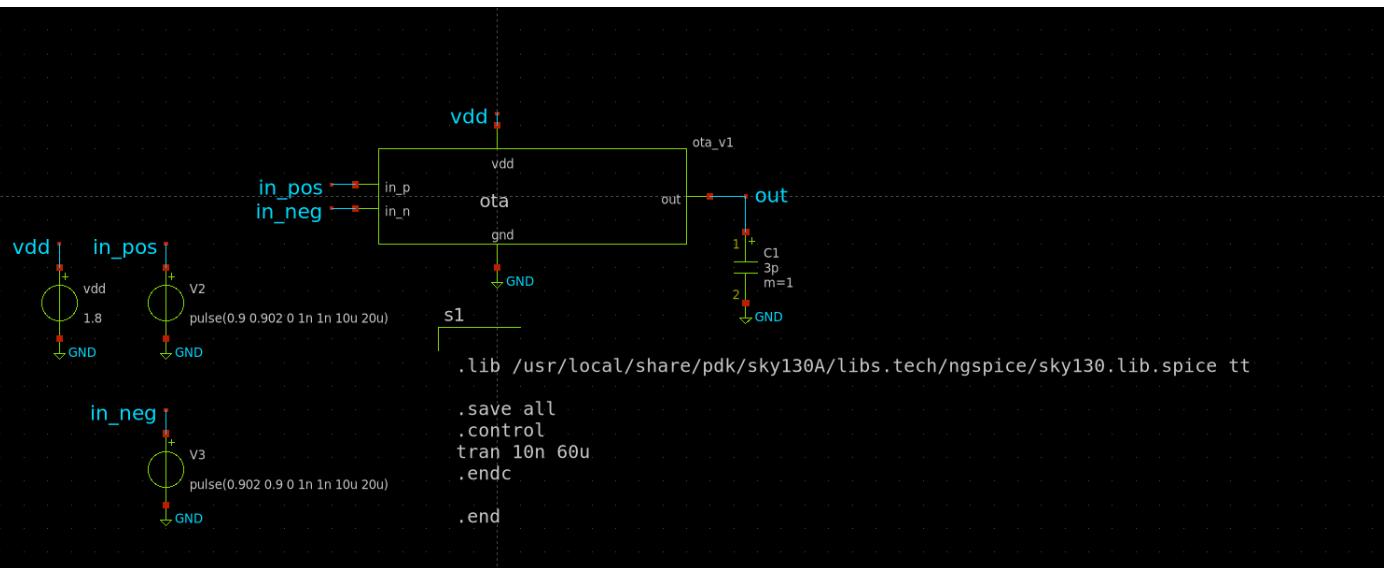
AC Output Signal (Unity Feedback Testing):



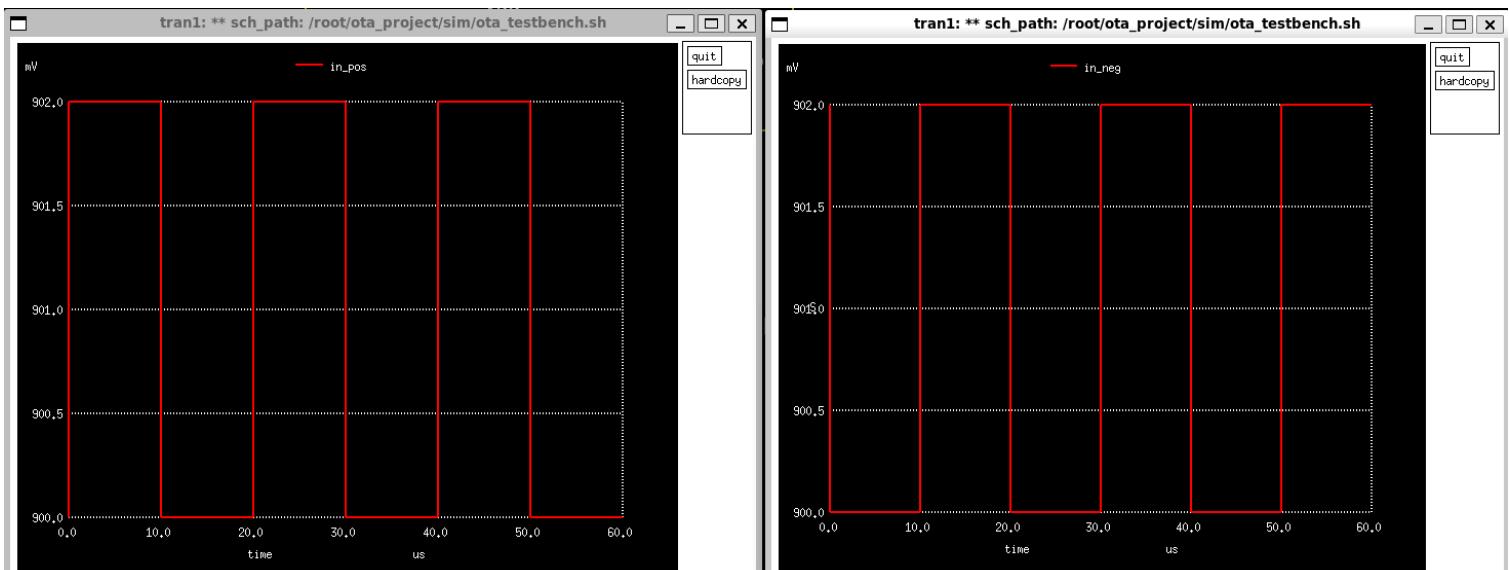
AC Gain[dB] at Output (Unity Feedback Testing):



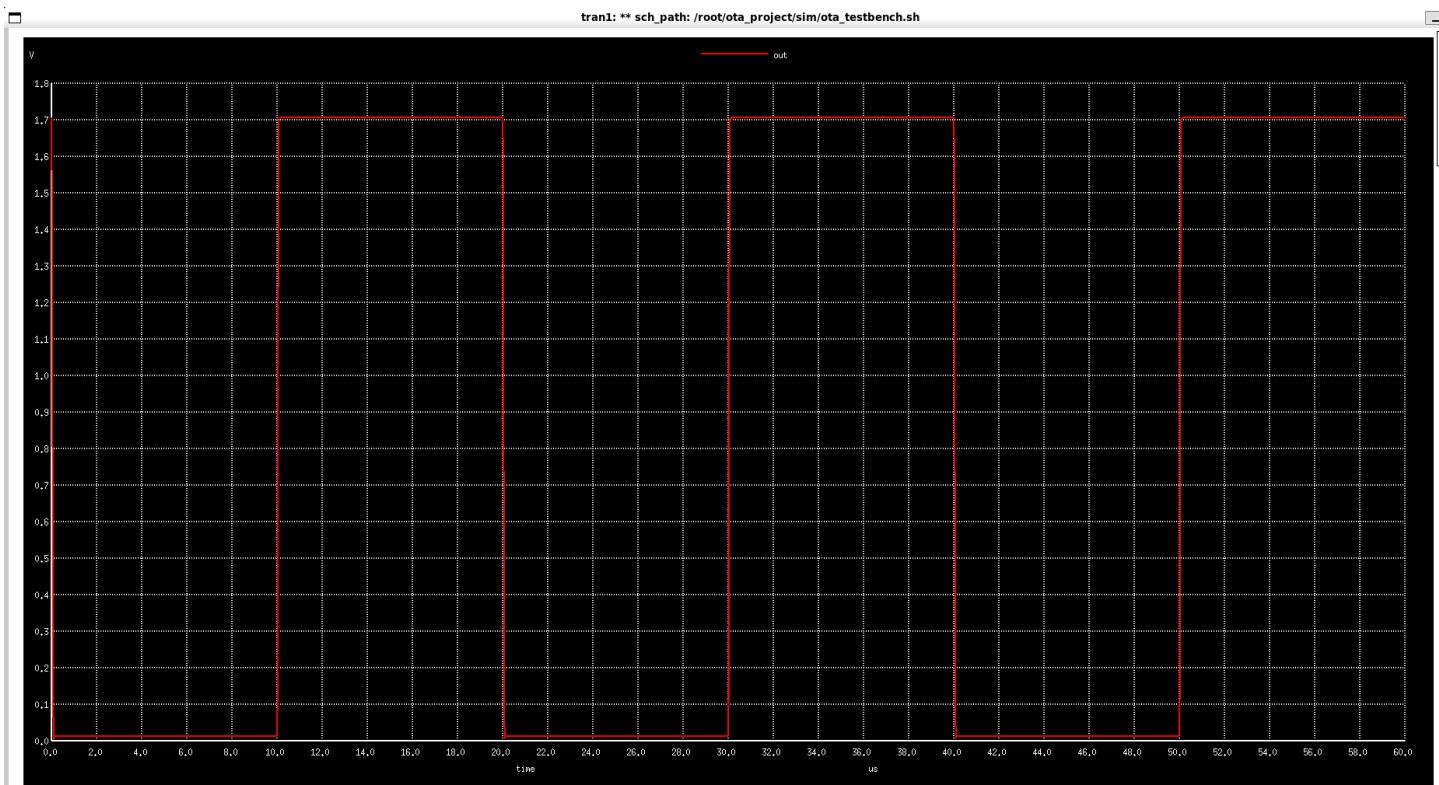
Testbench (DC Transient Analysis):



Input Signals (DC Transient Analysis):



Output Signal (DC Transient Analysis):



Coordinates for Slew Rate Calculation (DC Transient Analysis):

```
ota_testbench.spice" -a || sh
in_pos          0.9
x1.net2        0.185774
vdd            1.8
x1.v_bias      0.666296
x1.out1        0.482433
in_neg          0.902
out            1.70542
v3#branch      0
v2#branch      0
vdd#branch    -0.000278041

Reference value : 0.00000e+00

No. of Data Rows : 6082
Doing analysis at TEMP = 27.000000 and TNOM = 27.000000

Warning: v3; no DC value, transient time 0 value used
Warning: v2; no DC value, transient time 0 value used
ngspice 1 -> plot out
ngspice 2 ->
x0 = 1.99655e-05, y0 = 1.69362
x0 = 2.0069e-05, y0 = 0.729787
```

$$\text{Slew Rate} = |(0.729787V - 1.69362V) / (2.0069e-05s - 1.99655e-05s)|$$

$$\text{Slew Rate} = 9.3124\text{V/us}$$