

B06501018 朱紹勳

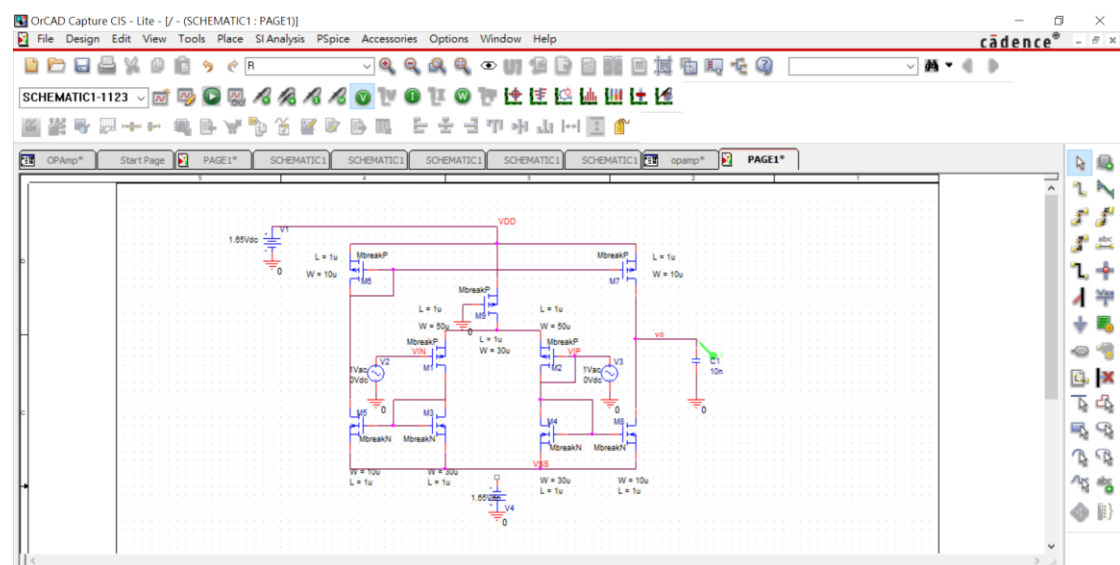
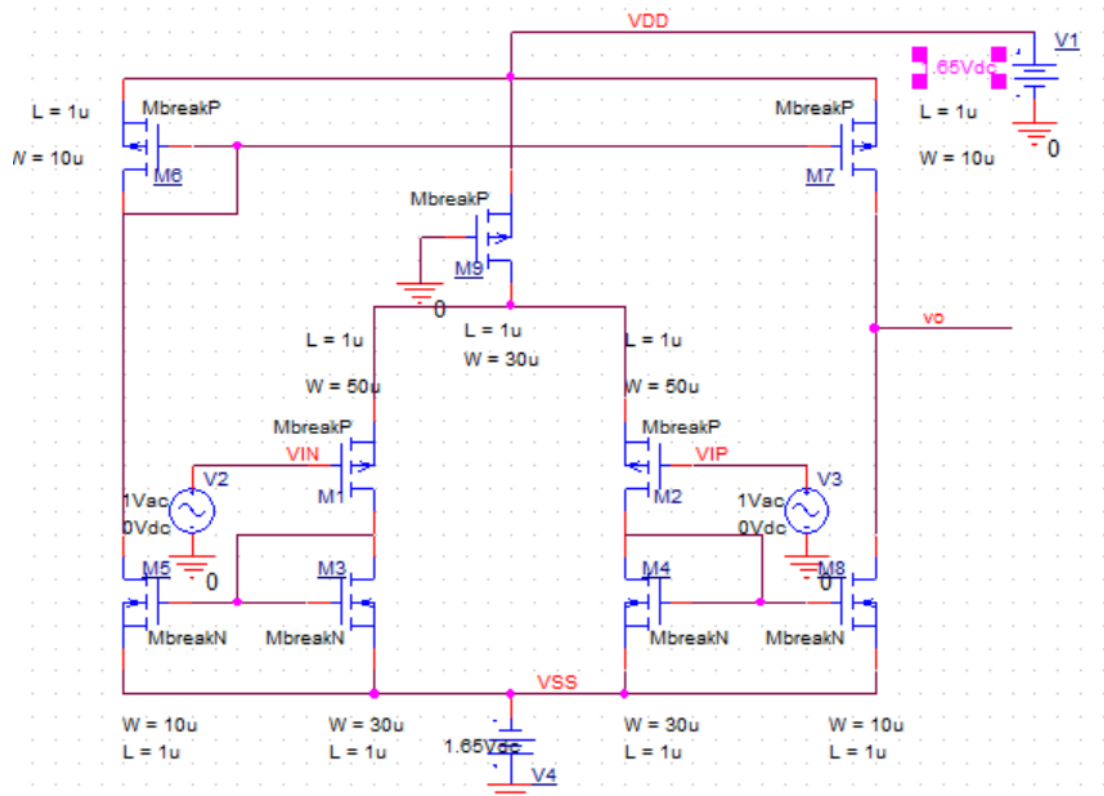
(1) A screen capture like the one above showing your netlist and server calculated results.

**Simulation using the following netlist:**

```
* source OPAMP
M_M1 N06096 VIN N05827 N05827 MbreakP L=1u W=50u
M_M2 N06169 VIP N05827 N05827 MbreakP L=1u W=50u
M_M9 N05827 0 VDD VDD MbreakP L=1u W=30u
M_M3 N06096 N06096 VSS VSS MbreakN L=1u W=30u
M_M4 N06169 N06169 VSS VSS MbreakN L=1u W=30u
M_M5 N06280 N06096 VSS VSS MbreakN L=1u W=10u
M_M8 VO N06169 VSS VSS MbreakN L=1u W=10u
M_M6 N06280 N06280 VDD VDD MbreakP L=1u W=10u
M_M7 VO N06280 VDD VDD MbreakP L=1u W=10u
```

```
Power = 2.1032 mW
Gain = 62.8660 V/V
PM = 90.3015 degree
BW = 111.9 kHz
GBW = 7.0347054 MHz
SR+ = 19.27 V/us
SR- = -19.64 V/us
ICMR+ = 0.2500 V
ICMR- = -1.6000 V
Total Area = 690 um^2
Score = 76.4270889655002
```

(2) A schematic you used for simulation in PSPICE.



(3) The netlist file you copied & pasted to the server.

\* source OPAMP

M\_M1 N06096 VIN N05827 N05827 MbreakP

+ L=1u

+ W=50u

M\_M2 N06169 VIP N05827 N05827 MbreakP

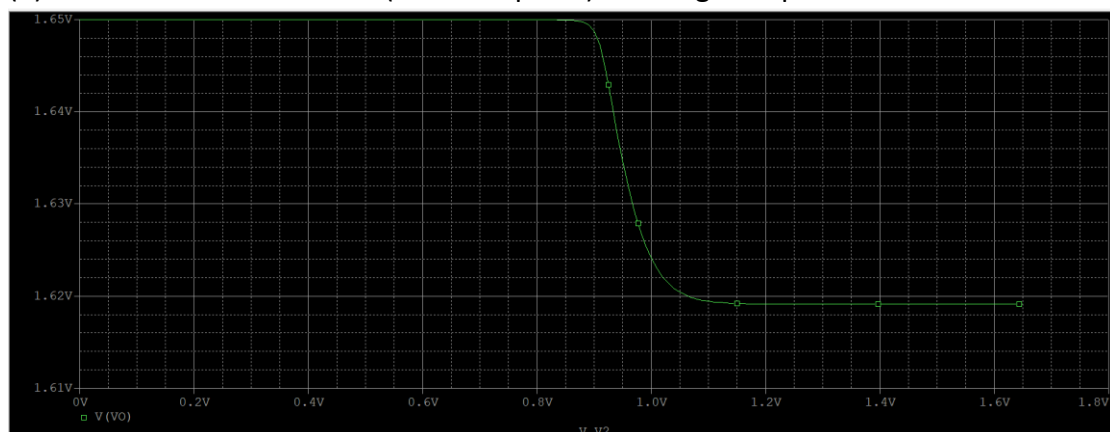
+ L=1u

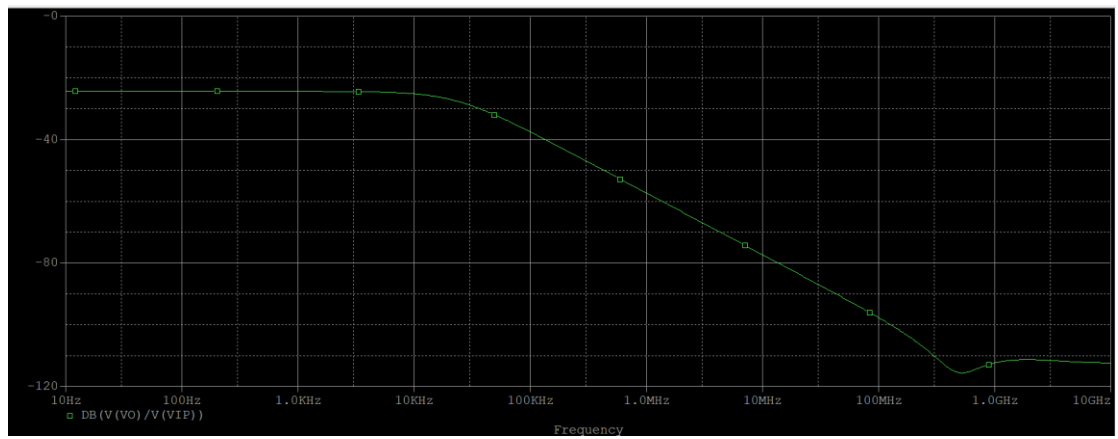
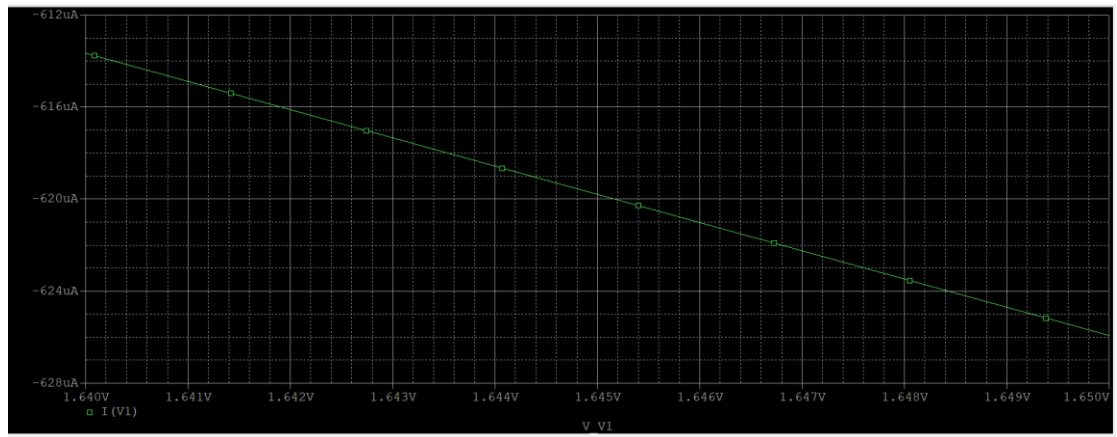
```

+ W=50u
M_M9          N05827 0 VDD VDD MbreakP
+ L=1u
+ W=30u
M_M3          N06096 N06096 VSS VSS MbreakN
+ L=1u
+ W=30u
M_M4          N06169 N06169 VSS VSS MbreakN
+ L=1u
+ W=30u
V_V4          0 VSS 1.65Vdc
M_M5          N06280 N06096 VSS VSS MbreakN
+ L=1u
+ W=10u
M_M8          VO N06169 VSS VSS MbreakN
+ L=1u
+ W=10u
M_M6          N06280 N06280 VDD VDD MbreakP
+ L=1u
+ W=10u
M_M7          VO N06280 VDD VDD MbreakP
+ L=1u
+ W=10u
V_V2          VIN 0 DC 0Vdc AC 1Vac
V_V3          VIP 0 DC 0Vdc AC 1Vac
V_V1          VDD 0 1.65Vdc

```

(4) PSPICE simulation results (screen capture) showing the specifications.





(5) Your self-calculated score.

75