

UNIVERSITY OF CALIFORNIA AT BERKELEY
College of Engineering
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Homework #9
(Due 11/20/02)

EECS 140
Fall 2002

- 1) For the circuits in figure 1, figure 2 and figure 3:
 - a) Identify the feedback loop.
 - b) What kind of feedback is it ?
 - c) Find expressions for the forward gain A , the feedback gain f and the loop gain T .
 - d) Using feedback theory, find expressions for the closed loop gain v_{out}/i_{in} (figure 1), or v_{out}/v_{in} (figure 2 and 3), the input impedance and the output impedance.

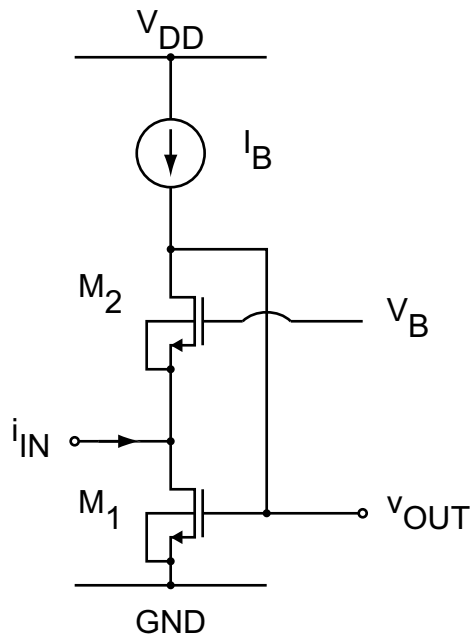


Figure 1.

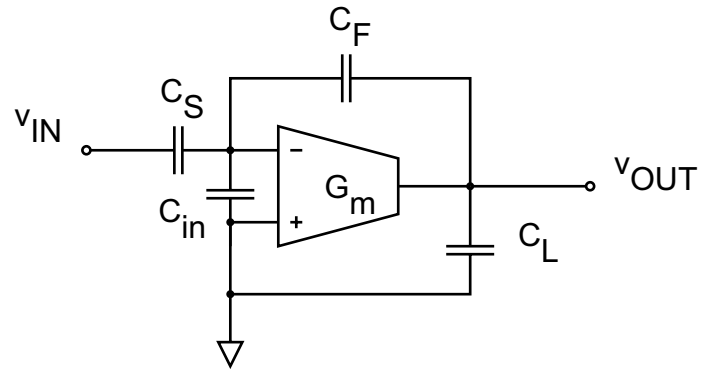


Figure 2.

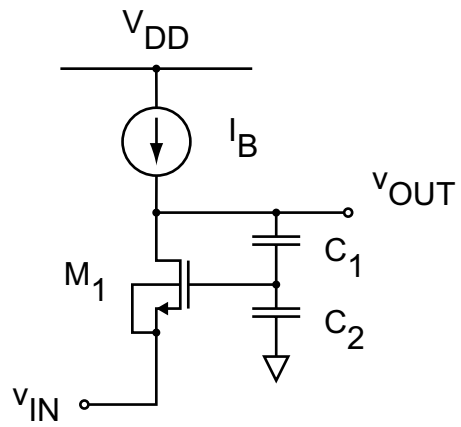


Figure 3.