

Homework 6

Characterize the basic two-stage OTA that you designed in the previous homework. Test specifications are as follows;

- a. Open Loop Gain
- b. 3db Bandwidth
- c. Unity Gain Bandwidth
- d. Input/output impedances
- e. Common Mode Rejection Ratio (CMRR)
- f. Slew rate
- g. Input offset Voltage
- h. Output offset Voltage
- i. Power Supply Rejection Ratio (PSRR)
- j. Output voltage swing

During simulations, define the OTA circuit as subcircuit and call it in the netlist for each test set-up. You must write a single testbench that includes all measurement set-ups.

Date Assigned: December 20, 2018
Date Due: January 2, 2019

Notes: Please remember that homeworks are an essential part of the class. You are free to discuss the homeworks with your classmates or the instructor. However, the questions should be solved individually at the end. Handing in the same homeworks will have consequences.

For questions, please contact Engin Afacan

Engin Afacan

e-mail: engin.afacan@gmail.com.
Office phone: 3390