Low Power and High Gain Operational Transconductance Amplifier

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Abstract

A Positive feedback method for operational transconductance amplifiers is proposed operating at subthreshold region. In this paper a differential amplifier has designed with gain enhancement technique using positive feedback. The proposed circuit has improved specifications such as high DC gain, low power dissipation as compared to previous work. We designed CMOS OTA in a UMC 180nm technology powered with 1.8V exhibits 91.23-dB DC gain while consuming 35.72nW.

References


**Index Terms**

Computer Science  
Power Electronics

**Keywords**

Gain Enhancement, Inverter, Differential Amplifier, Operational Transconductance.