Abstract

In this paper, design of analog circuit using double gate (DG) MOSFET where the front gate output is changed by control voltage on the back gate. The DG devices can be used to improve the performance and reduce the power dissipation when the front gate and back gate both are independently controlled. The analysis of the analog circuits such as CMOS amplifier pair, Schmitt trigger circuit and operational trans-conductance amplifier. Transient response and output DC response of analog tunable circuits are going to be analyzed. These circuit blocks are used for low-noise, high performance integrated circuits for analog and mixed-signal applications. The design and simulation results are predicted by Microwind tool in 32nm
complementary metal oxide semiconductor (CMOS) technology.

References

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Realization of Analog Circuits using Double Gate MOSFET at 32nm CMOS Technology


**Index Terms**

Computer Science

Circuits And System

**Keywords**

Analog Circuits  Double Gate  Transient And Output Dc Response