The Effect of Process Deviations on Analog Integrated Circuits and Circuit Level Compensation Methods

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Abstract

This paper presents the results of an extensive study on statistical deviations of basic analog building blocks, such as simple current source, simple and cascode current mirror and the differential amplifier with current source load, and their effect on the performance of analog integrated circuits. It has been observed what parameters mostly affect the performances of these blocks and how these performances can be improved at the circuit designing stage.

Biography

The author has chosen the Technical University of Cluj-Napoca not only because she was passionate for electronics, but also out as a desire to become familiar with a domain she finds very interesting. After four years she can affirm that this was her best choice, electronics has challenged her to curiosity and assiduity! She can only say what Aldous Huxley used to say: "We can only love what we know, and we can never know completely what we do not love."

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