

عنوان مقاله:

Wide Tuning Range Gm-C Low-Pass Filter Optimization with 10 MHz Cut-off Frequency for Wireless Applications

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خلاصه مقاله:

Time continuous filters are suitable for use at medium speeds and low power consumption. One of these filters which is designed by MOSFET transistors based on CMOS technology, is the Gm-C filters that have been used in the industry for a long time. Such transistors are biased in the inverted area and creating a wide bandwidth to several hundred MHz. In this paper, we simulate the Gm-C low pass filter with a 10 MHz cut-off frequency for Bluetooth and CMOS applications with a power consumption of 110 VW for a single-volt source in wide tuning range. The use of the MOSFET and its bias in the downstream area is considered in this study in order to reduce the power consumption significantly. This operation will lead to the application of this method in wireless technology

کلمات کلیدی:

MOSFET, CMOS, Gm-C Low-Pass Filter, Cut-off Frequency, Wireless Application

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