عنوان مقاله:

A Four-Quadrant Current Mode Square-Root Domain Low Pass Filter

محل انتشار:

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نویسندگان:

Saman Kaedi - *Department of Electrical and Computer Engineering Chamran University of Technology Ahvaz, Iran*

Ebrahim Farshidi - *Department of Electrical and Computer Engineering Chamran University of Technology Ahvaz, Iran*

خلاصه مقاله:

In this paper a four-quadrant current mode square-root domain low pass filters (SRD) is presented. The circuit includes a current squarer that is designedby using up-down translinear loop and using of MOSFET transistors that operate in saturation region. This circuit offer advantage of very low THD (totalharmonic distortion), low circuit complexity, large dynamic range, low power supply (1.8 v), immunity of body effect and maximum power consumption less than 250 μW. This circuit doesn't require extra biasing for input stage transistors. The circuit has been simulated .by HSPICE with 0.18 μm CMOS technology. Simulation results are shown at end of novel

کلمات کلیدی:

Current mode, Quadrant, low pass filter, up-down translinear loop