Abstract

The advent of differential voltage current conveyor (DVCC) has opened up new avenues in analog circuit design. In the present work, a DVCC has been employed to design current-mode first-order continuous-time analog filters. Parameter tunability is achieved by the use of a two-MOSFET electronic resistor which exhibits variation in resistance in accordance with a control voltage. The proposed circuits are amenable for monolithic integration by virtue of the fact that only MOSFETs and grounded capacitors are utilized. Circuit simulations using PSPICE yielded promising results.

References


**Index Terms**

Computer Science

Integrated Circuits

**Keywords**

Differential Voltage Current Conveyor  
Dvcc  
electronic Filters  
Electronically Tunable  
Mosfet-based  
Resistor