Abstract

In this paper, a digitally controlled single input multi-output voltage mode multifunctional biquadratic filter is presented. The circuit makes use of only a single DVCC, two grounded capacitors, one grounded and two floating resistors. The digital control is incorporated using a current-summing network (CSN). Tuning of cut-off frequency is carried out with the help of a 3–bit digital control word. PSPICE simulations using TSMC 0.25 micron CMOS technology have been performed to validate the theoretically predicted results.

References

A Versatile Digitally Programmable Voltage Mode Multifunctional Biquadratic Filter

1990.

Index Terms

Computer Science
Circuits And Systems
Keywords
Current-mode; Voltage-mode; Differential Voltage Current Conveyor (DVCC); multifunctional filter; digitally controlled circuits; cut off frequency; single input multi output (S. I. M. O).