Abstract

A novel digitally programmable floating impedance converter circuit is realized using two CMOS digitally programmable differential voltage current conveyors and three grounded passive elements. The realized impedance converter can provide digitally programmable floating impedances like ideal floating resistor, capacitor, inductor and frequency dependent negative resistor through appropriate selection of three grounded passive elements without any component matching constraint. The realized digitally programmable floating impedance converter is designed and verified using PSPICE and the results thus obtained justify the theory.

References

- Khan, I. A. and Maheshwari, S. 2000, Simple first order all-pass section using a single
Digitally Programmable Floating Impedance Converter using CMOS-DVCC

- Khan, I. A. and Nahhas, A. M. 2012, Reconfigurable voltage mode first order

Index Terms

Computer Science
Circuits And Systems
Keywords

Current conveyors  DVCC  impedance converter