Abstract

In this paper, a current-mode all-pass filter employing single multi-output dual-X second-generation current conveyor, a grounded resistor and a grounded capacitor is proposed. The circuit is as good as ideal for current-mode cascading by possessing low input and high output impedances. The use of grounded passive components makes the circuit, ideal for IC implementation. The effect of non-idealities and parasitics associated with the real MO-DXCCII implementation is also considered. The theoretical results are validated through PSPICE simulation program using 0.35µm CMOS process parameters.

References

- J. Mohan, S. Maheshwari, "Cascadable current-mode first-order all-pass filter"

- A. Zeki, A. Toker, "DXCCII-based tunable gyrator", International Journal of
Single Active Element based Current-Mode All-Pass Filter


**Index Terms**

Computer Science

Digital Signals

**Keywords**

Active filters  current conveyor  all-pass filter  analog signal processing.