Design and Analysis of Gain Boosted Recycling Folded Cascode OTA

International Journal of Computer Applications
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Volume 76 - Number 7
Year of Publication: 2013

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10.5120/13257-0735

Abstract

In this paper, a low Power, Gain Boosted Recycling Folded Cascode Operational Transconductance Amplifier (GB-RFC OTA) is described. The proposed GB-RFC OTA is designed using 130nm CMOS technology and achieves enhanced gain, unity gain bandwidth and slew rate with the low Power budget. The proposed circuit operates on 1V supply voltage and 200 µA bias current and consumes a power of 798µW. The GB-RFC has about 24dB higher gain and 37MHz higher unity Gain Bandwidth (GBW) compare to Double Recycling Folded cascode OTA (DRFC).

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Index Terms
Computer Science
Circuits And Systems

Keywords
Operational Transconductance Amplifier (OTA)  Current recycling  Gain Boosting
Folded-cascode
CMOS

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