عنوان مقاله:

A High-Speed High-Input Range Voltage-Input Current-Output Four Quadrant Analog Multiplier

محل انتشار:

شانزدهمین کنفرانس مهندسی برق ایران (سال: 1387)

تعداد صفحات اصل مقاله: 5

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خلاصه مقاله:

In this paper, a CMOS four quadrant multiplier based on flipped voltage follower and differential squaring circuit is presented. The proposed circuit has a compact architecture operating at higher speed and higher input voltage range compared to previously presented structures. The transistors operate in the both saturation and ohmic regions. The circuit operates with a single supply voltage of 3.3V in a 0.35 $m CMOS technology the total harmonic distortion (THD) is less than 1.1%, the linearity error is also less than 3%, -3db frequency is more than 180 MHz and the voltage .input range is 3 p p V . Simulation results are given to verify the functionality of the proposed multiplier

کلمات کلیدی:

;analog multiplier; four quadrant multiplier; defuzzification; CMOS

لینک ثابت مقاله در پایگاه سیویلیکا: