

Abstract

A High-Speed Analog Comparator in 0.5 μ m CMOS Technology

This paper describes a design of a high-speed analog comparator that is realized in 0.5- μ m CMOS technology. A response time of 1.62 ns was recorded at an average power consumption of 0.58 mW and a supply voltage of 3V. The comparator has been employed in the realization of an 8-bit flash type ADC where a maximum sampling rate of 300Mb/s was reached.