A Review on Pipe Line Analog to Digital Converter using 0.18µm CMOS Technology

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Abstract

This work describes a 12-bit pipeline ADC (Analog-to-Digital Converter) for CMOS (Complementary Metal Oxide Semiconductor) that is implemented in a TSMC 0.18µm CMOS process. The proposed ADC utilizes the Threshold Inverter Quantization (TIQ) technique that uses two cascaded CMOS inverters as a comparator. The TIQ flash ADC achieves high speed, small size, low power consumption, and low voltage operation compared to other ADCs. The sample and hold circuit have high Sampling rate. This Design is implemented and Fabricated in TSMC 0.18µm CMOS verified on the LT SPICE in 0.18µm Technology.

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Index Terms

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