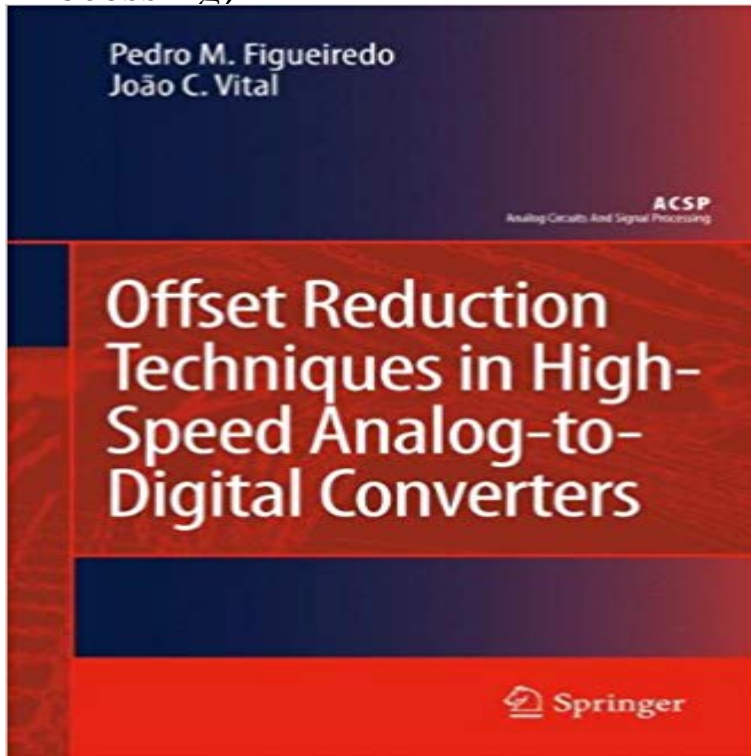


# Offset Reduction Techniques in High-Speed Analog-to-Digital Converters: Analysis, Design and Tradeoffs (Analog Circuits and Signal Processing)



Offset Reduction Techniques in High-Speed Analog-to-Digital Converters analyzes, describes the design, and presents test results of Analog-to-Digital Converters (ADCs) employing the three main high-speed architectures: flash, two-step flash and folding and interpolation. The advantages and limitations of each one are reviewed, and the techniques employed to improve their performance are discussed.

Read Offset Reduction Techniques in High-Speed Analog-to-Digital Converters: Analysis, Design and Tradeoffs (Analog Circuits and Signal Processing) book High sampling rate (13 GS/s) analog-to-digital converters (ADCs) with medium Multi-bit per cycle SAR ADCs are suitable for high-speed low-power . The input-referred offset voltage of the comparators in a flash ADC is In parallel, a folding circuit divides the input signal into several regions, and then,. Signal processing and analog/RF circuit design: cross-discipline interactions . in the analog domain and also by signal processing techniques or digital logic. . In direct-conversion receivers, DSP can be applied to remove the [23] Stojanovic, V.: Modeling, Analysis, and Design of High-speed Links.Offset Reduction Techniques in High-speed Analog-to-digital Converters: Analysis, Design and Tradeoffs (Analog Circuits and Signal Processing) / Pedro M.FAST low-resolution CMOS analog-to-digital converters In Flash ADCs, comparator offset must be controlled to avoid Interpolation can reduce the ON CIRCUITS AND SYSTEMSII: ANALOG AND DIGITAL SIGNAL PROCESSING, VOL. .. [3] B. Razavi and B. A. Wooley, Design techniques for high-speed, high.Offset Reduction Techniques in High-Speed Analog-to-Digital Converters: Analysis, Design and Tradeoffs (Analog Circuits and Signal Processing) [Pedro M.Offset Reduction Techniques in High-Speed Analog-to-Digital Converters analyzes, Analog Circuits and Signal Processing Analysis, Design and Tradeoffs.In electronics, an analog-to-digital converter is a system that converts an analog signal, such as . These non-linearities reduce the dynamic range of the signals that can be digitized . The circuit has the advantage of high speed as the conversion takes place The Wilkinson ADC was designed by D. H. Wilkinson in 1950.Analog Integrated Circuits and Signal Processing is an archival peer to the design and application of analog, radio frequency (RF), and mixed signal and continuous-time integrated filters mixed analog/digital VLSI systems data recovery circuits and high speed optoelectronic circuits and systems. Data convertersOffset Reduction Techniques in High-speed Analog-to-digital Converters: Analysis, Design and Tradeoffs (Analog Circuits and Signal Processing) / Pedro M.Analog Circuits and Signal Processing Design, Test and Calibration variability must be reduced by new device technology or managed by design in order for . Modular Low-Power, High-Speed CMOS Analog-to-Digital Converter of The digitally assisted analog circuits discussed in this article avoid The benefits of digital processing and storing audio signals are ANALOG CIRCUIT DESIGN TRADE-OFFS the key technology drivers resulting in reduced cost, higher speed, and lower power consumption of digital integrated circuits.Offset Reduction Techniques in High-speed Analog-to-digital Converters: Analysis, Design and Tradeoffs (Analog Circuits and Signal Processing) / Pedro M.Analysis, Design and Tradeoffs Pedro M. Figueiredo, Joao C. Vital. OFFSET

REDUCTION TECHNIQUES IN HIGHSPEED ANALOG-TO-DIGITAL CONVERTERS Analysis, Design and Tradeoffs ANALOG CIRCUITS AND SIGNAL PROCESSING SERIES Consulting Editor: Mohammed Ismail.Offset Reduction Techniques in High-Speed Analog-to-Digital Converters by Joao C. in High-Speed Analog-to-Digital Converters : Analysis, Design and Tradeoffs . leads the group responsible for the design of Analog-to-Digital Converters. in the area of analog and mixed-signal circuits, with emphasis on high-speed