

Sigma-Delta ADCs Converter a Study Case

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Abstract : The Sigma-Delta A/D converters have been proposed as a practical application for A/D conversion at high rates because of its simplicity and robustness to imperfections in the circuit, also because the traditional converters are more difficult to implement in VLSI technology. These difficulties with conventional conversion methods need precise analog components in their filters and conversion circuits, and are more vulnerable to noise and interference. This paper aims to analyze the architecture, function and application of Analog-Digital converters (A/D) Sigma-Delta to overcome these difficulties, showing some simulations using the Simulink software and Multisim.

Keywords : analysis, oversampling modulator, A/D converters, sigma-delta

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