



CMOS cascade sigma-delta modulators for sensors and telecom : error analysis and practical design /

Río, R. del

Springer,
2006

Electronic books

Monografía

"CMOS Cascade Sigma-Delta Modulators for Sensors and Telecom: Error Analysis and Practical Design presents architectures, circuits, models, methods and practical considerations for the design of high-performance low-pass switch-capacitor (SC) sigma-delta A/D interfaces for mixed-signal CMOS ASICs. Main focus is on cascade architectures, although considerations pertaining to circuits and error analysis are general and hence valid for other architectures." "The book differs from others in the complete, in-depth coverage of SC circuit errors, in the detailed elaboration and description of practical design plan, and in the thorough presentation of considerations leading to practical high-performance designs. Another differentiating feature of this book is the coverage into a unified description of largely different application areas. On the one hand, sensor front-ends, where the limiting factor is thermal noise. On the other, wire-line telecom front-ends, where the limiting factor is linked to the dynamic behavior of the building blocks." "The book starts with a tutorial presentation of the fundamentals of low-pass sigma-delta modulators, their applications, and their most common architectures. This presentation is both complete and comprehensive. It then presents an exhaustive analysis of SC circuit errors with twofold outcome. On the one hand, compact expressions are derived to support design plans and quick top-down design. On the other, detailed behavioral models are presented to support accurate verification. This set of models allow the designer to determine the required specifications for the different modulator building blocks and form the basis of a systematic design approach. The book is completed in subsequent chapters with the detailed presentation of three high-performance modulator ICs: the first two are intended for DSL-like applications, whereas the third one is intended for automotive sensors."--
Jacket

<https://rebiunoda.pro.baratznet.cloud:38443/OpacDiscovery/public/catalog/detail/b2FpOmNlbGVicmF0aW9uOmVzLmJhcmF0ei5yZW4vMjUyNzE0MTE>

Título: CMOS cascade sigma-delta modulators for sensors and telecom error analysis and practical design by R. del Rio [and others]

Editorial: Dordrecht Springer 2006

Descripción física: 1 online resource (xxi, 299 pages) illustrations

Mención de serie: Analog circuits and signal processing series 0893-3405

Bibliografía: Includes bibliographical references and index

Contenido: ?? ADCs: Principles, Architectures, and State of the Art -- Non-Ideal Performance of?? Modulators -- A Wideband?? Modulator in 3.3-V 0.35-?m CMOS -- A?? Modulator in 2.5-V 0.25-?m CMOS for ADSL/ADSL+ -- A?? Modulator with Programmable Signal Gain for Automotive Sensor Interfaces

Copyright/Depósito Legal: 79872543 148849893 228162004 228162005 228383965 320965193 436368143 647598343 756423060 880095133 994779122 1005809589 1035716701 1044191732 1044194205 1056303242 1056396597 1077267110 1086845751 1097278816 1102280155 1110921210 1111031184 1112507585

ISBN: 9781402047763 1402047762 1402047754 Cloth) 9781402047756 Cloth) 6610619530 9786610619535

Materia: Metal oxide semiconductors, Complementary Application-specific integrated circuits COMPUTERS- Machine Theory. COMPUTERS- Computer Engineering. COMPUTERS- Hardware- General. Application-specific integrated circuits. Metal oxide semiconductors, Complementary. Ingénierie. Application-specific integrated circuits. Metal oxide semiconductors, Complementary.

Autores: Río, R. del

Enlace a formato físico adicional: Print version CMOS cascade sigma-delta modulators for sensors and telecom. Dordrecht : Springer, 2006 1402047754 9781402047756 (DLC) 2007462450 (OCOLC)71255985

Punto acceso adicional serie-Título: Analog circuits and signal processing series. 0893-3405

Baratz Innovación Documental

- Gran Vía, 59 28013 Madrid
- (+34) 91 456 03 60
- informa@baratz.es