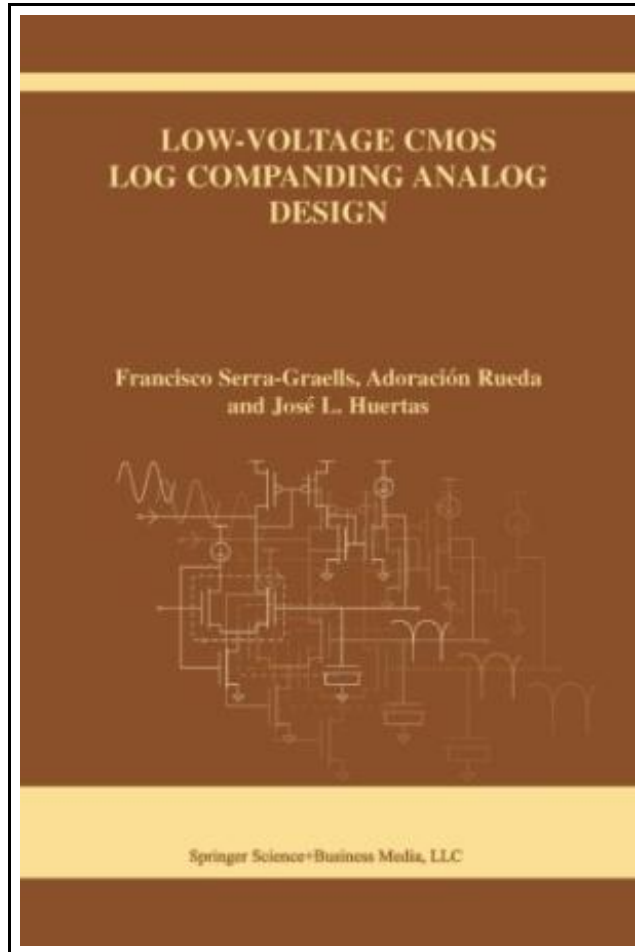


Low-voltage CMOS Log Companding Analog Design



Filesize: 1.11 MB

Reviews

*This book is definitely not easy to get going on reading through but extremely exciting to see. I am quite late in start reading this one, but better then never. I am pleased to explain how here is the finest book i actually have read inside my individual daily life and may be he best book for ever.
(Mrs. Ellie Yost II)*

LOW-VOLTAGE CMOS LOG COMPANDING ANALOG DESIGN

DOWNLOAD



Springer-Verlag New York Inc. Paperback. Book Condition: New. Paperback. 192 pages. Dimensions: 9.2in. x 6.1in. x 0.5in. Low-Voltage CMOS Log Companding Analog Design presents in detail state-of-the-art analog circuit techniques for the very low-voltage and low-power design of systems-on-chip in CMOS technologies. The proposed strategy is mainly based on two bases: the Instantaneous Log Companding Theory, and the MOSFET operating in the subthreshold region. The former allows inner compression of the voltage dynamic-range for very low-voltage operation, while the latter is compatible with CMOS technologies and suitable for low-power circuits. The required background on the specific modeling of the MOS transistor for Companding is supplied at the beginning. Following this general approach, a complete set of CMOS basic building blocks is proposed and analyzed for a wide variety of analog signal processing. In particular, the covered areas include: amplification and AGC, arbitrary filtering, PTAT generation, and pulse duration modulation (PDM). For each topic, several case studies are considered to illustrate the design methodology. Also, integrated examples in 1.2 μ m and 0.35 μ m CMOS technologies are reported to verify the good agreement between design equations and experimental data. The resulting analog circuit topologies exhibit very low-voltage (i. e. 1V) and low-power (few tenths of μ A) capabilities. Apart from these specific design examples, a real industrial application in the field of hearing aids is also presented as the main demonstrator of all the proposed basic building blocks. This system-on-chip exhibits true 1V operation, high flexibility through digital programmability and very low-power consumption (about 300 μ A including the Class-D amplifier). As a result, the reported ASIC can meet the specifications of a complete family of common hearing aid models. In conclusion, this book is addressed to both industry ASIC designers who can apply its contents to the synthesis of very low-power systems-on-chip in standard CMOS...



[Read Low-voltage CMOS Log Companding Analog Design Online](#)



[Download PDF Low-voltage CMOS Log Companding Analog Design](#)

See Also



Two Treatises: The Pearle of the Gospell, and the Pilgrims Profession to Which Is Added a Glasse for Gentlewomen to Dresse Themselues By. by Thomas Taylor Preacher of Gods Word to the Towne of Reding. (1624-1625)

Proquest, Eebo Editions, United States, 2010. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.EARLY HISTORY OF RELIGION. Imagine holding history in your hands. Now...

[Download eBook »](#)



Two Treatises: The Pearle of the Gospell, and the Pilgrims Profession to Which Is Added a Glasse for Gentlewomen to Dresse Themselues By. by Thomas Taylor Preacher of Gods Word to the Towne of Reding. (1625)

Proquest, Eebo Editions, United States, 2010. Paperback. Book Condition: New. 246 x 189 mm. Language: English Brand New Book ***** Print on Demand *****.EARLY HISTORY OF RELIGION. Imagine holding history in your hands. Now you...

[Download eBook »](#)



Index to the Classified Subject Catalogue of the Buffalo Library; The Whole System Being Adopted from the Classification and Subject Index of Mr. Melvil Dewey, with Some Modifications .

Rarebooksclub.com, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.This historic book may have numerous typos and missing text. Purchasers can usually...

[Download eBook »](#)



Games with Books : 28 of the Best Childrens Books and How to Use Them to Help Your Child Learn - From Preschool to Third Grade

Book Condition: Brand New. Book Condition: Brand New.

[Download eBook »](#)



Games with Books : Twenty-Eight of the Best Childrens Books and How to Use Them to Help Your Child Learn - from Preschool to Third Grade

Book Condition: Brand New. Book Condition: Brand New.

[Download eBook »](#)



Who Am I in the Lives of Children? an Introduction to Early Childhood Education with Enhanced Pearson Etext -- Access Card Package

Pearson, United States, 2015. Paperback. Book Condition: New. 10th. 251 x 203 mm. Language: English . Brand New Book. NOTE: Used books, rentals, and purchases made outside of Pearson If purchasing or renting from companies

[Download Document »](#)



Who am I in the Lives of Children? An Introduction to Early Childhood Education

Pearson Education (US), United States, 2015. Paperback. Book Condition: New. 10th Revised edition. 254 x 201 mm. Language: English . Brand New Book. Note: This is the bound book only and does not include access

[Download Document »](#)



Studyguide for Introduction to Early Childhood Education: Preschool Through Primary Grades by Brewer, Jo Ann

CRAM101, United States, 2013. Paperback. Book Condition: New. 279 x 210 mm. Language: English . Brand New Book ***** Print on Demand *****.Never HIGHLIGHT a Book Again! Includes all testable terms, concepts, persons, places, and

[Download Document »](#)



A Parent s Guide to STEM

U.S. News World Report, United States, 2015. Paperback. Book Condition: New. 214 x 149 mm. Language: English . Brand New Book ***** Print on Demand *****.This lively, colorful guidebook provides everything you need to know

[Download Document »](#)



Some of My Best Friends Are Books : Guiding Gifted Readers from Preschool to High School

Book Condition: Brand New. Book Condition: Brand New.

[Download Document »](#)