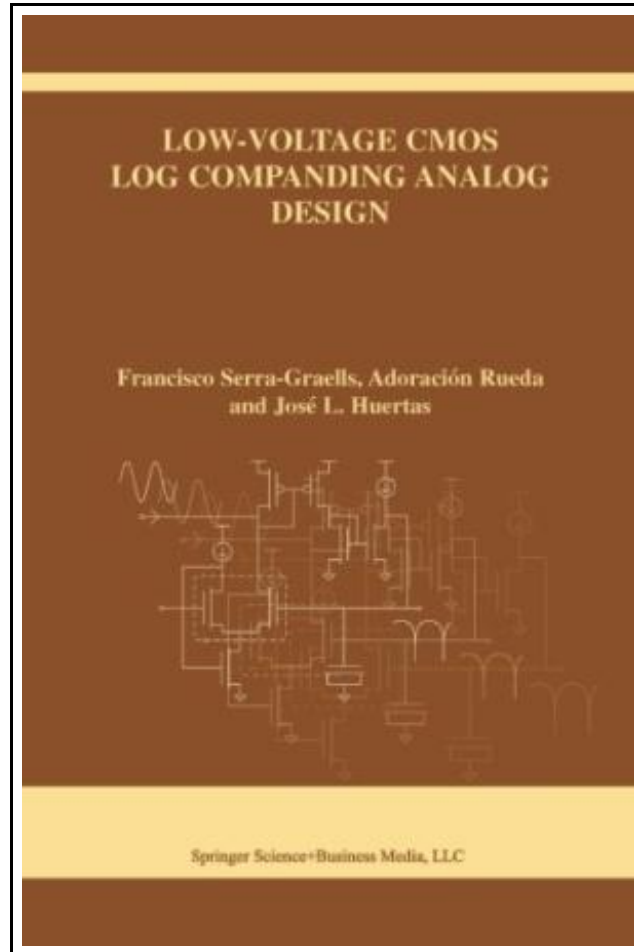


Low-voltage CMOS Log Companding Analog Design



Filesize: 6.6 MB

Reviews

Extensive manual! Its this type of great read through. This can be for all who statte there was not a worth reading. It is extremely difficult to leave it before concluding, once you begin to read the book.
(Dr. Furman Becker V)

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 μm and 0.35 μm 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 μA) 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 μA 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](#)

Related Books



Two Treatises: The Pearle of the Gospell, and the Pilgrims Profession to Which Is Added a Glasse for Gentlewomen to Dresse Themselves 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...

[Read Document »](#)



Two Treatises: The Pearle of the Gospell, and the Pilgrims Profession to Which Is Added a Glasse for Gentlewomen to Dresse Themselves 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...

[Read Document »](#)



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...

[Read Document »](#)



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.

[Read Document »](#)



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.

[Read Document »](#)



Talking Digital: A Parent s Guide for Teaching Kids to Share Smart and Stay Safe Online

Createspace, United States, 2014. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book. It is time for the digital talk. Today, kids are growing up in a wired world. Their

[Download eBook »](#)



A Smarter Way to Learn JavaScript: The New Approach That Uses Technology to Cut Your Effort in Half

Createspace, United States, 2014. Paperback. Book Condition: New. 251 x 178 mm. Language: English . Brand New Book ***** Print on Demand *****.The ultimate learn-by-doing approachWritten for beginners, useful for experienced developers who want to

[Download eBook »](#)



The Well-Trained Mind: A Guide to Classical Education at Home (Hardback)

WW Norton Co, United States, 2016. Hardback. Book Condition: New. 4th Revised edition. 244 x 165 mm. Language: English . Brand New Book. The Well-Trained Mind will instruct you, step by step, on how to

[Download eBook »](#)



Found around the world : pay attention to safety(Chinese Edition)

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment.Paperback. Pub Date :2013-04-01 Pages: 24 Publisher: Popular Science Press How to ensure online

[Download eBook »](#)



Klara the Cow Who Knows How to Bow (Fun Rhyming Picture Book/Bedtime Story with Farm Animals about Friendships, Being Special and Loved. Ages 2-8) (Friendship Series Book 1)

Createspace, United States, 2015. Paperback. Book Condition: New. Apoorva Dingar (illustrator). Large Print. 214 x 149 mm. Language: English . Brand New Book ***** Print on Demand *****.Klara is a little different from the other

[Download eBook »](#)