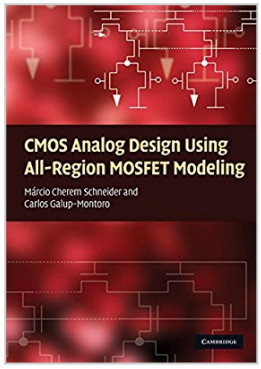

CMOS Analog Design Using All-Region MOSFET Modeling

By Márcio Cherem Schneider, Carlos Galup-Montoro

CMOS Analog Design Using All-Region MOSFET Modeling By Márcio Cherem Schneider, Carlos Galup-Montoro

Covering the essentials of analog circuit design, this book takes a unique design approach based on a MOSFET model valid for all operating regions, rather than the standard square-law model. Opening chapters focus on device modeling, integrated circuit technology, and layout, whilst later chapters go on to cover noise and mismatch, and analysis and design of the basic building blocks of analog circuits, such as current mirrors, voltage references, voltage amplifiers, and operational amplifiers. An introduction to continuous-time filters is also provided, as are the basic principles of sampled-data circuits, especially switched-capacitor circuits. The final chapter then reviews MOSFET models and describes techniques to extract design parameters. With numerous design examples and exercises also included, this is ideal for students taking analog CMOS design courses and also for circuit designers who need to shorten the design cycle.

CMOS Analog Design Using All-Region MOSFET Modeling

By Márcio Cherem Schneider, Carlos Galup-Montoro

CMOS Analog Design Using All-Region MOSFET Modeling By Márcio Cherem Schneider, Carlos Galup-Montoro

Covering the essentials of analog circuit design, this book takes a unique design approach based on a MOSFET model valid for all operating regions, rather than the standard square-law model. Opening chapters focus on device modeling, integrated circuit technology, and layout, whilst later chapters go on to cover noise and mismatch, and analysis and design of the basic building blocks of analog circuits, such as current mirrors, voltage references, voltage amplifiers, and operational amplifiers. An introduction to continuous-time filters is also provided, as are the basic principles of sampled-data circuits, especially switched-capacitor circuits. The final chapter then reviews MOSFET models and describes techniques to extract design parameters. With numerous design examples and exercises also included, this is ideal for students taking analog CMOS design courses and also for circuit designers who need to shorten the design cycle.

CMOS Analog Design Using All-Region MOSFET Modeling By Márcio Cherem Schneider, Carlos Galup-Montoro Bibliography

- Sales Rank: #4304972 in Books
- Published on: 2010-03-15
- Original language: English
- Number of items: 1
- Dimensions: 9.72" h x 1.02" w x 6.85" l, 2.50 pounds
- Binding: Hardcover
- 504 pages

Editorial Review

About the Author
Márcio Cherem Schneider is a Professor in the Electrical Engineering Department at the Federal University of Santa Catarina, Brazil, where he has worked since 1976. He has also spent a year at the Swiss Federal Institute of Technology (EPFL) and has worked as a Visiting Associate Professor in the Department of Electrical and Computer Engineering at Texas A&M University. His current research interests mainly focus on MOSFET modeling and transistor-level design, in particular of analog and RF circuits.

Carlos Galup-Montoro is currently a Visiting Scholar in the Electrical Engineering Department at the University of California, Berkeley, and a Professor in the Electrical Engineering Department at the Federal University of Santa Catarina, Brazil, where he has worked since 1990. His main research interests are in field-effect transistor modeling and transistor-level design.

Users Review

From reader reviews:

Daniel Starnes:

Here thing why this CMOS Analog Design Using All-Region MOSFET Modeling are different and trusted to be yours. First of all reading through a book is good nonetheless it depends in the content of computer which is the content is as tasty as food or not. CMOS Analog Design Using All-Region MOSFET Modeling giving you information deeper and different ways, you can find any e-book out there but there is no book that similar with CMOS Analog Design Using All-Region MOSFET Modeling. It gives you thrill looking at journey, its open up your eyes about the thing which happened in the world which is might be can be happened around you. You can bring everywhere like in park your car, café, or even in your approach home by train. For anyone who is having difficulties in bringing the imprinted book maybe the form of CMOS Analog Design Using All-Region MOSFET Modeling in e-book can be your substitute.

Gayle Meek:

Hey guys, do you desires to finds a new book to learn? May be the book with the headline CMOS Analog Design Using All-Region MOSFET Modeling suitable to you? Typically the book was written by popular writer in this era. Typically the book untitled CMOS Analog Design Using All-Region MOSFET Modelingis one of several books which everyone read now. This book was inspired a lot of people in the world. When you read this book you will enter the new age that you ever know before. The author explained their thought in the simple way, therefore all of people can easily to understand the core of this book. This book will give you a great deal of information about this world now. To help you see the represented of the world with this book.

Louis Chavez:

Don't be worry should you be afraid that this book can filled the space in your house, you may have it in e-book technique, more simple and reachable. This CMOS Analog Design Using All-Region MOSFET Modeling can give you a lot of pals because by you checking out this one book you have thing that they don't and make anyone more like an interesting person. That book can be one of one step for you to get success. This e-book offer you information that possibly your friend doesn't know, by knowing more than other make you to be great men and women. So , why hesitate? We should have CMOS Analog Design Using All-Region MOSFET Modeling.

Brenda Villa:

A lot of publication has printed but it is unique. You can get it by online on social media. You can choose the top book for you, science, amusing, novel, or whatever by simply searching from it. It is identified as of book CMOS Analog Design Using All-Region MOSFET Modeling. You can add your knowledge by it. Without departing the printed book, it could add your knowledge and make you actually happier to read. It is most important that, you must aware about guide. It can bring you from one destination for a other place.

Read CMOS Analog Design Using All-Region MOSFET Modeling By Márcio Cherem Schneider, Carlos Galup-Montoro for online ebook

CMOS Analog Design Using All-Region MOSFET Modeling By Márcio Cherem Schneider, Carlos Galup-Montoro Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read CMOS Analog Design Using All-Region MOSFET Modeling By Márcio Cherem Schneider, Carlos Galup-Montoro books to read online.

Online CMOS Analog Design Using All-Region MOSFET Modeling By Márcio Cherem Schneider, Carlos Galup-Montoro ebook PDF download

CMOS Analog Design Using All-Region MOSFET Modeling By Márcio Cherem Schneider, Carlos Galup-Montoro Doc

CMOS Analog Design Using All-Region MOSFET Modeling By Márcio Cherem Schneider, Carlos Galup-Montoro Mobipocket

CMOS Analog Design Using All-Region MOSFET Modeling By Márcio Cherem Schneider, Carlos Galup-Montoro EPub

W6DN8OJCXI9: CMOS Analog Design Using All-Region MOSFET Modeling By Márcio Cherem Schneider, Carlos Galup-Montoro