



RF Microelectronics (2nd Edition) (Prentice Hall Communications Engineering and Emerging Technologies Series from Ted Rappaport)

By Behzad Razavi

[Download now](#)

[Read Online](#) 

RF Microelectronics (2nd Edition) (Prentice Hall Communications Engineering and Emerging Technologies Series from Ted Rappaport) By Behzad Razavi

The Acclaimed RF Microelectronics Best-Seller, Expanded and Updated for the Newest Architectures, Circuits, and Devices

Wireless communication has become almost as ubiquitous as electricity, but RF design continues to challenge engineers and researchers. In the 15 years since the first edition of this classic text, the demand for higher performance has led to an explosive growth of RF design techniques. In ***RF Microelectronics, Second Edition***, Behzad Razavi systematically teaches the fundamentals as well as the state-of-the-art developments in the analysis and design of RF circuits and transceivers.

Razavi has written the second edition to reflect today's RF microelectronics, covering key topics in far greater detail. At nearly three times the length of the first edition, the second edition is an indispensable tome for both students and practicing engineers. With his lucid prose, Razavi now

- Offers a stronger tutorial focus along with hundreds of examples and problems
- Teaches design as well as analysis with the aid of step-by-step design procedures and a chapter dedicated to the design of a dual-band WiFi transceiver
- Describes new design paradigms and analysis techniques for circuits such as low-noise amplifiers, mixers, oscillators, and frequency dividers

This edition's extensive coverage includes brand new chapters on mixers, passive devices, integer-N synthesizers, and fractional-N synthesizers. Razavi's teachings culminate in a new chapter that begins with WiFi's radio specifications and, step by step, designs the transceiver at the transistor level.

Coverage includes

- Core RF principles, including noise and nonlinearity, with ties to analog design, microwave theory, and communication systems
- An intuitive treatment of modulation theory and wireless standards from the standpoint of the RF IC designer
- Transceiver architectures such as heterodyne, sliding-IF, directconversion, image-reject, and low-IF topologies.
- Low-noise amplifiers, including cascode common-gate and commonsource topologies, noise-cancelling schemes, and reactance-cancelling configurations
- Passive and active mixers, including their gain and noise analysis and new mixer topologies
- Voltage-controlled oscillators, phase noise mechanisms, and various VCO topologies dealing with noise-power-tuning trade-offs
- All-new coverage of passive devices, such as integrated inductors, MOS varactors, and transformers
- A chapter on the analysis and design of phase-locked loops with emphasis on low phase noise and low spur levels
- Two chapters on integer-N and fractional-N synthesizers, including the design of frequency dividers
- Power amplifier principles and circuit topologies along with transmitter architectures, such as polar modulation and outphasing

 [Download RF Microelectronics \(2nd Edition\) \(Prentice Hall C ...pdf](#)

 [Read Online RF Microelectronics \(2nd Edition\) \(Prentice Hall ...pdf](#)

RF Microelectronics (2nd Edition) (Prentice Hall Communications Engineering and Emerging Technologies Series from Ted Rappaport)

By Behzad Razavi

RF Microelectronics (2nd Edition) (Prentice Hall Communications Engineering and Emerging Technologies Series from Ted Rappaport) By Behzad Razavi

The Acclaimed RF Microelectronics Best-Seller, Expanded and Updated for the Newest Architectures, Circuits, and Devices

Wireless communication has become almost as ubiquitous as electricity, but RF design continues to challenge engineers and researchers. In the 15 years since the first edition of this classic text, the demand for higher performance has led to an explosive growth of RF design techniques. In ***RF Microelectronics, Second Edition, Behzad Razavi systematically teaches the fundamentals as well as the state-of-the-art developments in the analysis and design of RF circuits and transceivers.***

Razavi has written the second edition to reflect today's RF microelectronics, covering key topics in far greater detail. At nearly three times the length of the first edition, the second edition is an indispensable tome for both students and practicing engineers. With his lucid prose, Razavi now

- Offers a stronger tutorial focus along with hundreds of examples and problems
- Teaches design as well as analysis with the aid of step-by-step design procedures and a chapter dedicated to the design of a dual-band WiFi transceiver
- Describes new design paradigms and analysis techniques for circuits such as low-noise amplifiers, mixers, oscillators, and frequency dividers

This edition's extensive coverage includes brand new chapters on mixers, passive devices, integer-N synthesizers, and fractional-N synthesizers. Razavi's teachings culminate in a new chapter that begins with WiFi's radio specifications and, step by step, designs the transceiver at the transistor level.

Coverage includes

- Core RF principles, including noise and nonlinearity, with ties to analog design, microwave theory, and communication systems
- An intuitive treatment of modulation theory and wireless standards from the standpoint of the RF IC designer
- Transceiver architectures such as heterodyne, sliding-IF, directconversion, image-reject, and low-IF topologies.
- Low-noise amplifiers, including cascode common-gate and commonsource topologies, noise-cancelling schemes, and reactance-cancelling configurations
- Passive and active mixers, including their gain and noise analysis and new mixer topologies
- Voltage-controlled oscillators, phase noise mechanisms, and various VCO topologies dealing with noisepower-tuning trade-offs
- All-new coverage of passive devices, such as integrated inductors, MOS varactors, and transformers
- A chapter on the analysis and design of phase-locked loops with emphasis on low phase noise and low spur

levels

- Two chapters on integer-N and fractional-N synthesizers, including the design of frequency dividers
- Power amplifier principles and circuit topologies along with transmitter architectures, such as polar modulation and outphasing

RF Microelectronics (2nd Edition) (Prentice Hall Communications Engineering and Emerging Technologies Series from Ted Rappaport) By Behzad Razavi Bibliography

- Sales Rank: #492021 in Books
- Published on: 2011-10-02
- Original language: English
- Number of items: 1
- Dimensions: 10.10" h x 1.40" w x 8.20" l, 3.40 pounds
- Binding: Hardcover
- 960 pages



[Download RF Microelectronics \(2nd Edition\) \(Prentice Hall C ...pdf](#)



[Read Online RF Microelectronics \(2nd Edition\) \(Prentice Hall ...pdf](#)

Download and Read Free Online RF Microelectronics (2nd Edition) (Prentice Hall Communications Engineering and Emerging Technologies Series from Ted Rappaport) By Behzad Razavi

Editorial Review

About the Author

Behzad Razavi, Professor of Electrical Engineering at UCLA, leads the Communication Circuits Laboratory (CCL). Emphasizing the use of mainstream CMOS technologies, CCL's research seeks and exploits new devices, circuits, and architectures to push the performance envelope. Razavi holds a BSEE from Sharif University of Technology and MSEE and Ph.D. degrees from Stanford. He was with ATT Bell Laboratories and HP Labs until 1996. An IEEE Distinguished Lecturer and IEEE Fellow, his books include *Design of Analog CMOS Integrated Circuits*, *Design of Integrated Circuits for Optical Communications*, and *Fundamentals of Microelectronics*.

Users Review

From reader reviews:

Mary Jones:

Do you have favorite book? For those who have, what is your favorite's book? Guide is very important thing for us to learn everything in the world. Each e-book has different aim or perhaps goal; it means that book has different type. Some people experience enjoy to spend their time and energy to read a book. They can be reading whatever they have because their hobby is usually reading a book. Consider the person who don't like reading through a book? Sometime, individual feel need book once they found difficult problem or exercise. Well, probably you'll have this RF Microelectronics (2nd Edition) (Prentice Hall Communications Engineering and Emerging Technologies Series from Ted Rappaport).

Tonia Lee:

Nowadays reading books be than want or need but also turn into a life style. This reading behavior give you lot of advantages. The huge benefits you got of course the knowledge your information inside the book this improve your knowledge and information. The data you get based on what kind of publication you read, if you want have more knowledge just go with schooling books but if you want feel happy read one having theme for entertaining for instance comic or novel. Typically the RF Microelectronics (2nd Edition) (Prentice Hall Communications Engineering and Emerging Technologies Series from Ted Rappaport) is kind of guide which is giving the reader unforeseen experience.

Lynn Hardie:

That publication can make you to feel relax. This specific book RF Microelectronics (2nd Edition) (Prentice Hall Communications Engineering and Emerging Technologies Series from Ted Rappaport) was colorful and of course has pictures on the website. As we know that book RF Microelectronics (2nd Edition) (Prentice Hall Communications Engineering and Emerging Technologies Series from Ted Rappaport) has many kinds or style. Start from kids until adolescents. For example Naruto or Detective Conan you can read

and think that you are the character on there. So , not at all of book tend to be make you bored, any it offers you feel happy, fun and unwind. Try to choose the best book for you personally and try to like reading which.

Bruce Smith:

Reading a e-book make you to get more knowledge from it. You can take knowledge and information originating from a book. Book is written or printed or descriptive from each source which filled update of news. In this modern era like now, many ways to get information are available for anyone. From media social similar to newspaper, magazines, science reserve, encyclopedia, reference book, book and comic. You can add your understanding by that book. Are you hip to spend your spare time to spread out your book? Or just looking for the RF Microelectronics (2nd Edition) (Prentice Hall Communications Engineering and Emerging Technologies Series from Ted Rappaport) when you needed it?

**Download and Read Online RF Microelectronics (2nd Edition)
(Prentice Hall Communications Engineering and Emerging
Technologies Series from Ted Rappaport) By Behzad Razavi
#UXA87NDQG39**

Read RF Microelectronics (2nd Edition) (Prentice Hall Communications Engineering and Emerging Technologies Series from Ted Rappaport) By Behzad Razavi for online ebook

RF Microelectronics (2nd Edition) (Prentice Hall Communications Engineering and Emerging Technologies Series from Ted Rappaport) By Behzad Razavi 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 RF Microelectronics (2nd Edition) (Prentice Hall Communications Engineering and Emerging Technologies Series from Ted Rappaport) By Behzad Razavi books to read online.

Online RF Microelectronics (2nd Edition) (Prentice Hall Communications Engineering and Emerging Technologies Series from Ted Rappaport) By Behzad Razavi ebook PDF download

RF Microelectronics (2nd Edition) (Prentice Hall Communications Engineering and Emerging Technologies Series from Ted Rappaport) By Behzad Razavi Doc

RF Microelectronics (2nd Edition) (Prentice Hall Communications Engineering and Emerging Technologies Series from Ted Rappaport) By Behzad Razavi MobiPocket

RF Microelectronics (2nd Edition) (Prentice Hall Communications Engineering and Emerging Technologies Series from Ted Rappaport) By Behzad Razavi EPub

UXA87NDQG39: RF Microelectronics (2nd Edition) (Prentice Hall Communications Engineering and Emerging Technologies Series from Ted Rappaport) By Behzad Razavi