Radio-Frequency Electronics: Circuits and Applications

Jon B. Hagen
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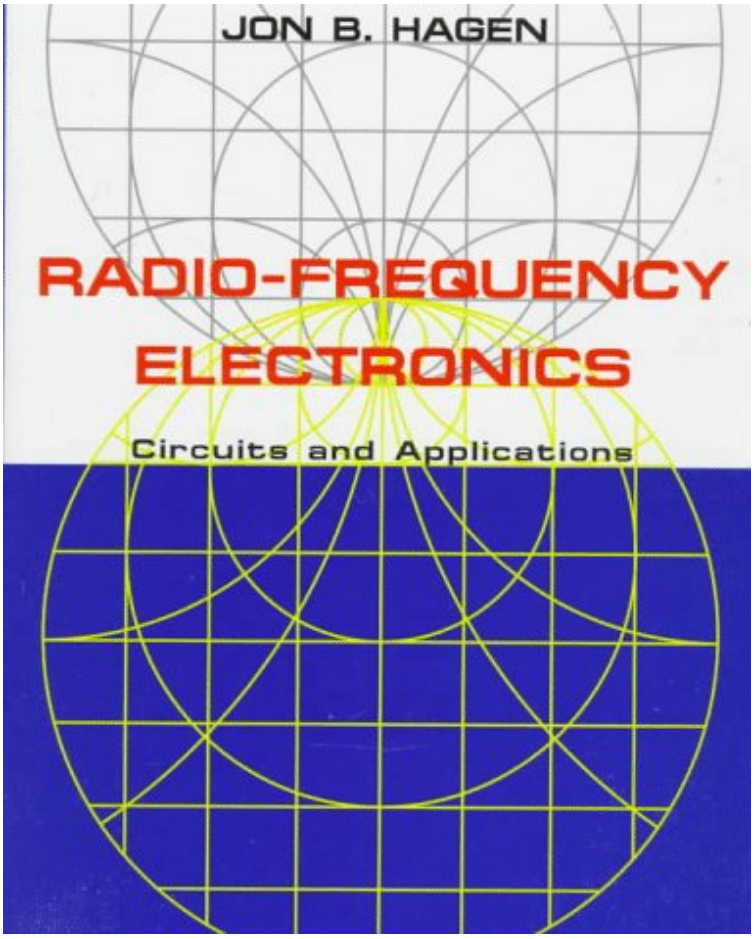

#107710 in Books Cambridge University Press 1996-11-13Original language:EnglishPDF # 1 9.96 x 1.02 x 7.99l, #File Name: 0521553563372 pages | File size: 61.Mb

Jon B. Hagen : Radio-Frequency Electronics: Circuits and Applications before purchasing it in order to gage whether or not it would be worth my time, and all praised Radio-Frequency Electronics: Circuits and Applications:

0 of 0 people found the following review helpful. Good RF backgrounder/primerBy Jeffrey L. CooperI suppose this is a technician-level book but for anyone who doesn't work with RF day-in/day-out, books of this genre (Bowick's, "RF Circuit Design", ARRL-and-Wes-Hayward's "Experimental Methods in RF Design", "Radio Frequency Design", "UHF/Microwave Experimenter's Manual", etc.) and several of the Artech House books and so on are great source for getting context and background and design ideas in the RF circuits world.7 of 8 people found the following review helpful. Great for RF Basics and Intro to Smith Charts WaveguidesBy CustomerWe use this book in refreshing/training all of our new engineers that will be working with RF magnetics. The book is written across a very broad variety of topics and is therefore lacking in penetrating detail as others have mentioned. Therin lies the books only real sin - that of trying to cover too much.If, however, your quest is to dust the cobwebs or get your mind around the 'mysterious' world of RF electronics, this book will be very usefull. Jon's vast experience shows through in the

diversity of information, not necessarily the depth of it, which is good for people like me that want to know a little of everything in order to properly frame what I am about to immerse myself in.In the case of RF Electronics, I would highly recommend Chris Bowick's book "RF Circuit Design" as a companion to this book for those wanting more in depth information at the design/circuit level for those seeking some more testing guidance to Joseph J. Carr's book "Practical Radio Frequency Test Measurement". Lastly, if you are either HAM or magnetics-centric, I Highly recommend Jerry Sevick's book "Transmission Line Trasformers". These four books will give you a very solid library if you are doing PCB layouts, spend the money on Tim Williams "Circuit Designers Companion", it will pay for itself in your first layout with a new engineer. In our experience, these have been the "Fabulous Five", so to speak, of RF Electronics.15 of 15 people found the following review helpful. Good coverage of a hard-to-find topicsBy JAMES D MEANSBefore purchasing this book I read all the previous reviews and I was very surprised at the disparate views expressed. As I read more and more of the book, I was amazed at the topics covered. While this book may not be ideal as a textbook, it is a book that could profitably be on the bookshelf of every RF engineer. Many textbooks will not even cover such useful topics as impedance matching, hybrid transformers, baluns, and coupled-resonator filters, all of which and much more are covered here. I wish I'd had this book sooner, it would have saved a lot frustration trying to find answers to my own questions over the last four years. I think those reviewers that did not recommend this book probably were comparing it to ordinary textbooks--I think it's true utility is for the practicing engineer.

This accessible and comprehensive book provides an introduction to the basic concepts and key circuits of radio frequency systems, covering fundamental principles that apply to all radio devices, from wireless data transceivers on semiconductor chips to high-power broadcast transmitters. Topics covered include filters, amplifiers, oscillators, modulators, low-noise amplifiers, phase-locked loops, and transformers. The author describes applications of radio frequency systems in such areas as communications, radio and television broadcasting, radar, and radio astronomy. The book contains many exercises, and assumes only a knowledge of elementary electronics and circuit analysis. It will be an ideal textbook for junior and senior courses in electrical engineering, as well as an invaluable reference for researchers and professional engineers in this area, or for those moving into the field of wireless communications.

"I especially like the style...cutting to the core of the issue without hiding behind unnecessary levels of math." Mark S. Conradi, Washington University"This book is wonderfully informative, and refreshingly different from the usual rehash of standard engineering topics. Hagen has put his unique insights, gleaned from a lifetime of engineering and radio science, into this volume and it shows. There's an insight per page, at least for me, that makes it truly enjoyable reading, even for those of us who think we know something about the field!" Paul Horowitz, Harvard University"The bad news about Radio-Frequency Electronics: Circuits and Applications by Jon B. Hagen is that the title is somewhat misleading, but that is also the good news...It naturally covers impedance and matching, class A through D amplifiers, receivers, filters, and modulation, and other RF topices...It will help engineers who are exploring new areas in RF design and need a baseline understanding and insight regarding various techniques as a prelude to more detailed study and design." Bill Schweber, EDN Magazine"...a good starting place for engineers seeking to enhance their RF education...The concise explanations throughout the book underscore Hagen's command of this material...Math is presented sparingly and intelligently...Although Radio-Frequency Electronics: Circuits and Applications may be similar to an undergraduate engineering textbook for an experienced RF design engineer, it provides pages of ideas and solutions for electrical engineers who lack strong RF backgrounds." Microwaves and RF"The illustrations are well chosen and nicely complement the author's writing, which I found to be both informative and enjoyable to read...I can and do recommend Hagen's book." Lawrence G. Rubin, Physics Today"Highly recommended for its unique insights into and wide range of topics covered." I.L. Kosow, Choice"...this is an outstanding book which should be widely used as an undergraduate text." Philip Mars, The Times Higher