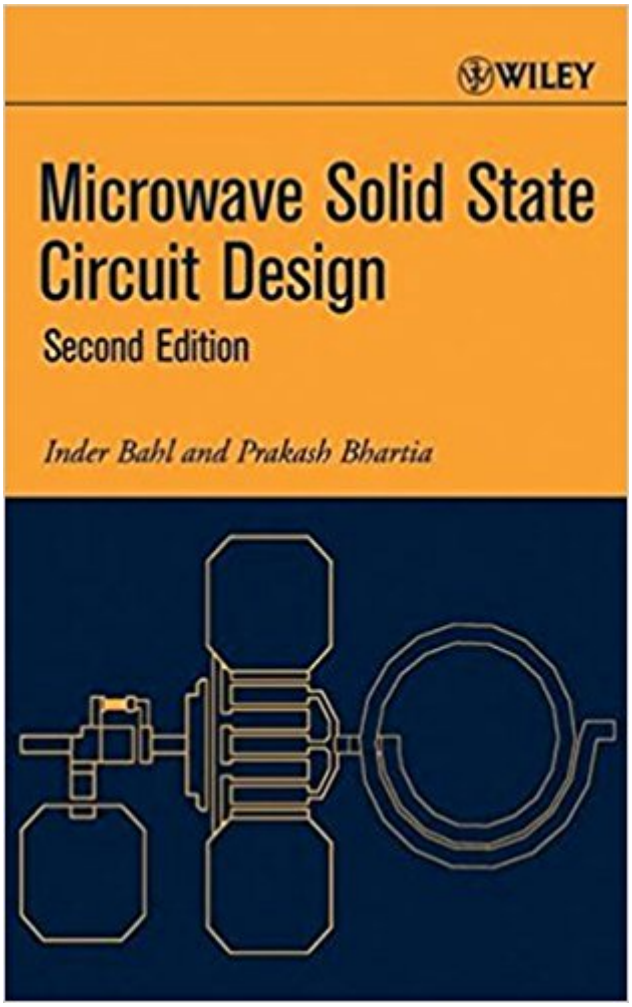
Microwave Solid State Circuit Design



Synopsis

Provides detailed coverage of passive and active RF and microwave circuit design. Discusses the practical aspects of microwave circuits including fabrication technologies. Includes a treatment of heterostructure and wide-band gap devices. Examines compact and low cost circuit design methodologies.

Book Information

Hardcover: 920 pages

Publisher: Wiley-Interscience; 2 edition (April 18, 2003)

Language: English

ISBN-10: 0471207551

ISBN-13: 978-0471207559

Product Dimensions: 6.3 x 1.9 x 9.4 inches

Shipping Weight: 2.9 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars 1 customer review

Best Sellers Rank: #3,296,528 in Books (See Top 100 in Books) #82 inÃ Â Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Solid State #493 inÃ Â Books > Engineering & Transportation > Engineering > Telecommunications & Sensors > Microwaves #971 inÃ Â Books > Engineering & Transportation > Engineering > Electrical & Electronics > Circuits > Design

Customer Reviews

This contributed volume presents a comprehensive discussion of the design of passive circuits, solid state devices, and microwave solid state circuits. Because this is a very diversified area, the subject can only be covered well by a team of authors who are specialists in different topics. The editors of this book have brought together just such a team. Coverage is state-of-the-art and includes extensive references and problems. Topics covered include transmission lines and lumped elements, resonators, impedance matching networks, hybrids and couplers, filters, active and passive solid state devices, oscillators, amplifiers, detectors and mixers, microwave control circuits, frequency multipliers and dividers, computer-aided design, microwave integrated circuits, and future trends in microwave circuits. Appendixes cover S-parameters and ABCD parameters; transfer functions: Bessel, Butterworth, Chebyshev, Gaussian, etc.; nonreciprocal components, and noise. --This text refers to the Digital edition.

The new edition of an essential guide to MMIC Monolithic microwave integrated circuits (MMICs) based on gallium arsenide (GaAs) technology are increasingly important in applications where component size and performance are prime factors. These include electronic systems for satellite communications, phased-array radar systems, electronic warfare, and other military applications, as well as consumer electronics. The new Second Edition of Microwave Solid State Circuit Design presents a comprehensive discussion of the most current trends in RF and microwave circuits technologies. This contributed volume brings together a team of experts to provide state-of-the-art coverage of network theory basics, the design of passive circuits, solid state devices, and microwave solid state circuits. Richly supported by extensive references and problems, the book examines transmission lines and lumped elements, resonators, impedance matching networks, hybrids and couplers, filters, active and passive solid state devices, oscillators, amplifiers, detectors and mixers, microwave control circuits, frequency multipliers and dividers, MEMS, and circuit fabrication technologies. Appendixes cover S-parameters and ABCD parameters, transfer functions, including Butterworth and Chebyshev, units and symbols, as well as physical constants. Features include: * Comprehensive coverage of passive and active RF and microwave circuit design * Treatment of practical aspects of microwave circuits including fabrication technologies * An overview of MEMS technology * Treatment of heterostructure and wide-band gap devices * Inclusion of compact and low-cost circuit design methodologies Thorough and up to date, this Second Edition of a key reference remains a valuable resource for researchers, engineers, and graduate students in RF and microwave engineering.

The book with nearly all about microwaves. If anybody wants facts and knowledge for fast developement of transmission lines, matching networks, resonators, coupling structures, filters,oscilators, mixers, detectors, amplifiers, microwave control circuits ...If your answer is yes, you need this book.You will get more than I can say with few words. It is not cheap, but it’s price really reflects it’s value . Book gives you deep insight into wide spectrum of microwave world and reveals it as simple as possible. I have this book three years and it is always on table reacheable with hands.

Microwave Solid State Circuit Design Integrated circuit devices and components (Integrated-circuit technology, analog and logic circuit design, memory and display devices) The Floridas: The Sunshine State * The Alligator State * The Everglade State * The Orange State * The Flower State * The Peninsula State * The Gulf State Mug Cakes Cookbook: My Top Mug Cake Recipes for

Microwave Cakes (microwave mug recipes, microwave cake, mug cakes, simple cake recipes) Easy Livin' Microwave Cooking: A microwave instructor shares tips, secrets, & 200 easiest recipes for fast and delicious microwave meals Winter Circuit (Show Circuit Series -- Book 2) (The Show Circuit) Microwave Dessert Cookbook: 34 Easy Microwave Recipes for Desserts Learn How to Cook Some Delightful Dishes in Your Microwave: Microwave Recipes You Can Enjoy As a Bachelor, As a Couple or As a Family 30 Delicious Microwave Desserts: Get Quick & Easy Recipes to Satisfy Your Sweet Tooth from Simple Microwave Desserts Cookbook Microwave Mug Recipes: 65 Top Microwave Recipes That Are Tasty And Easy To Make Microwave Cooking: Rice Paper Rolls with Chikuwa, Cucumber and Carrot (Microwave Cooking - Fishes & Shellfishes Book 6) Mug Recipes: Quick & Easy, Microwave Meals to Cook for One (Mug Cookbook, Cooking For One, Microwave) Microwave Meals Like a Chef: 50 Quick and Tasty Recipes That you DidnÃ¢â ¬â„¢t Know You Could Make In Your Microwave Mug Meals Cookbook: 95 Delicious Quick And Easy Microwave Meals In A Mug, Microwave Recipes Integrated Microwave Front-Ends with Avionics Applications (Artech House Microwave Library (Hardcover)) Summer Circuit (Show Circuit Series -- Book 1) The A Circuit (An A Circuit Novel Book 1) Off Course: An A Circuit Novel (The A Circuit) My Favorite Mistake: An A Circuit Novel (The A Circuit) Rein It In: An A Circuit Novel (The A Circuit)