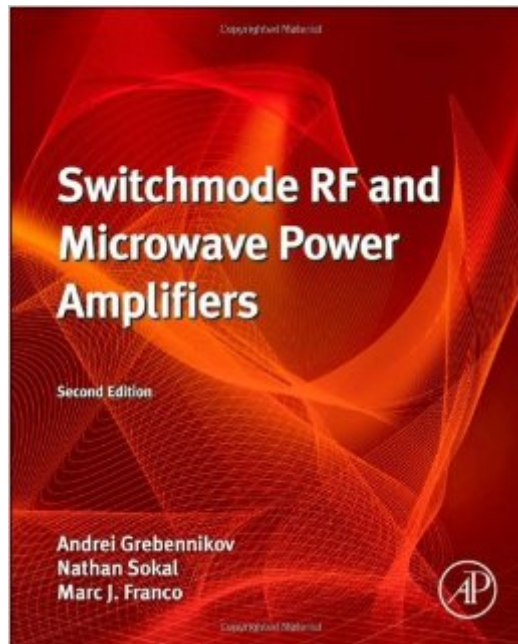


The book was found

Switchmode RF And Microwave Power Amplifiers, Second Edition



Synopsis

Combining solid theoretical discussions with practical design examples, this book is an essential reference on developing RF and microwave switchmode power amplifiers. With this book you will be able to:

- Design high-efficiency RF and microwave power amplifiers on different types of bipolar and field-effect transistors using well-known and novel theoretical approaches, nonlinear simulation tools, and practical design techniques
- Design any type of high-efficiency switchmode power amplifiers operating in Class D or E at lower frequencies and in Class E or F and their subclasses at microwave frequencies, with specified output power
- Understand the theory and practical implementation of load-network design techniques based on lumped and transmission-line elements
- Combine multi-stage Doherty architecture and switchmode power amplifiers to significantly increase efficiency of the entire radio transmitter
- Learn the different types of predistortion linearization techniques required to improve the quality of signal transmission in a nonlinear amplifying system

New to this edition:

- Comprehensive overview of different Doherty architectures which are, and will be used in modern communication systems to save power consumption and reduce costs
- A new chapter on analog and digital predistortion techniques
- Coverage of broadband Class-F power amplifiers, high-power inverse Class-F power amplifiers for WCDMA systems, broadband Class-E techniques
- Unique focus on switchmode RF and microwave power amplifiers that are widely used in cellular/wireless, satellite and radar communication systems and which offer major power consumption savings
- Complete coverage of the new Doherty architecture which offers major efficiencies and savings on power consumption
- Balances theory with practical implementation, avoiding a cookbook approach, enabling engineers to develop better designs
- Trusted content from leading figures in the field with a Foreword of endorsement by Zoya Popovic

Book Information

Hardcover: 704 pages

Publisher: Academic Press; 2 edition (July 3, 2012)

Language: English

ISBN-10: 0124159079

ISBN-13: 978-0124159075

Product Dimensions: 7.7 x 1.5 x 9.3 inches

Shipping Weight: 2.8 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars Â Â See all reviews Â (1 customer review)

Best Sellers Rank: #1,121,610 in Books (See Top 100 in Books) #133 in Books > Engineering & Transportation > Engineering > Telecommunications & Sensors > Microwaves #310 in Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Microelectronics #396 in Books > Crafts, Hobbies & Home > Crafts & Hobbies > Radio Operation

Customer Reviews

"The main objective of this book is to present all relevant information required to design high-efficiency RF and microwave power amplifiers, including well-known and novel theoretical approaches and practical design techniques." - Microwave Journal, November 2007"

Combining solid theoretical discussions with practical design examples, this book is an essential reference on developing RF and microwave switchmode power amplifiers. Unique focus on switchmode RF and microwave power amplifiers that are widely used in cellular/wireless, satellite and radar communication systems and which offer major power consumption savings. Complete coverage of the new Doherty architecture which offers major efficiencies and savings on power consumption Balances theory with practical implementation, avoiding a cookbook approach, enabling engineers to develop better designs. Trusted content from leading figures in the field with a Foreword of endorsement by Zoya Popovic With this book you will be able to: Design high-efficiency RF and microwave power amplifiers on different types of bipolar and field-effect transistors using well-known and novel theoretical approaches, nonlinear simulation tools, and practical design techniques Design any type of high-efficiency switchmode power amplifiers operating in Class D or E at lower frequencies and in Class E or F and their subclasses at microwave frequencies, with specified output power Understand the theory and practical implementation of load-network design techniques based on lumped and transmission-line elements Combine multi-stage Doherty architecture and switchmode power amplifiers to significantly increase efficiency of the entire radio transmitter Learn the different types of predistortion linearization techniques required to improve the quality of signal transmission in a nonlinear amplifying system New to this edition: • Comprehensive overview of different Doherty architectures which are, and will be used in modern communication systems to save power consumption and reduce costs • A new chapter on analog and digital predistortion techniques • Coverage of broadband Class-F power amplifiers, high-power inverse Class-F power amplifiers for WCDMA systems, broadband Class-E techniques

[Download to continue reading...](#)

Switchmode RF and Microwave Power Amplifiers, Second Edition RF Power Amplifiers for Wireless Communications, Second Edition (Artech House Microwave Library) Microwave MESFETs and HEMTs (Microwave Library) (Artech House Microwave Library (Hardcover)) High Efficiency RF and Microwave Solid State Power Amplifiers Microwave Transistor Amplifiers: Analysis and Design (2nd Edition) The Microwave Gourmet Cookbook!: Quick and Easy Microwave Cooking Recipes that will Blow your Mind! (Fast, Quick, and Easy Cooking Recipes and Cooking Tips! Book 1) Microwave Meals (5 in 1): No-Mess Quick and Easy Microwave Recipes, Mug Meals and Mug Desserts to Cook in No Time Low Carb Microwave Cookbook: 40 No-Mess Quick and Easy Recipes Under 300 Cal to Make in 30 Minutes or Less for Busy People. (Low Carb & Microwave Meals) Freeze, Heat and Eat Box Set (5 in 1): Budget-Friendly, Low Carb, Microwave, Dump Freezer Meals for Busy People (Microwave Meals & Recipes) Fundamentals of Microwave Photonics (Wiley Series in Microwave and Optical Engineering) Microwave Mixer Technology and Applications (Artech House Microwave Library (Hardcover)) Microwave Dishes In Minutes: Microwave Is Not Only A Tool To Re-heat Food Handbook of Microwave Integrated Circuits (Artech House Microwave Library) Microwave Tubes (Artech House Microwave Library) Power Training: For Combat, MMA, Boxing, Wrestling, Martial Arts, and Self-Defense: How to Develop Knockout Punching Power, Kicking Power, Grappling Power, and Ground Fighting Power Principles of Transistor Circuits, Eighth Edition: Introduction and guide to the design of amplifiers, function generators, receivers and digital circuits Operational Amplifiers and Linear Integrated Circuits (6th Edition) Design With Operational Amplifiers And Analog Integrated Circuits (McGraw-Hill Series in Electrical and Computer Engineering) Dynamic Offset Compensated CMOS Amplifiers (Analog Circuits and Signal Processing) Make: More Electronics: Journey Deep Into the World of Logic Chips, Amplifiers, Sensors, and Randomicity

[Dmca](#)