1. Record Nr. UNINA9910830369603321

Autore	Davis W. Alan
Titolo	Radio frequency circuit design / / W. Alan Davis
Pubbl/distr/stampa	Hoboken, New Jersey : , : Wiley, , c2011 [Piscataqay, New Jersey] : , : IEEE Xplore, , [2010]
ISBN	1-282-82248-9 9786612822483 0-470-76802-9 0-470-76801-0
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (419 p.)
Collana	Wiley series in microwave and optical engineering ; ; 225
Disciplina	621.38412
Soggetti	Radio circuits - Design and construction Radio circuits -- Design and construction Electrical & Computer Engineering Electrical Engineering Engineering & Applied Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Information transfer technology -- Resistors, capacitors, and inductors -- Impedance matching -- Multiport circuit parameters and transmission lines -- Filter design and approximation -- Transmission line transformers -- Noise in RF amplifiers -- Class A amplifiers -- RF power amplifiers -- Oscillators and harmonic generators -- RF mixers -- Phase-lock loops.
Sommario/riassunto	Now Updated-The Most Comprehensive Guide to RF Circuit Component Design and AnalysisRadio Frequency (RF) design techniques and applications have greatly expanded over the past decade. This Second Edition of Radio Frequency Circuit Design has been thoroughly updated to cover the latest developments in RF communications, giving practicing engineers and students authoritative guidance in contemporary design and analysis of RF circuit components.This new edition features clear, step-by-step demonstrations of new design techniques for RF circuits, including phase locked loops, filters,

transformers, amplifiers, mixers, and oscillators. It offers a better understanding of RF power amplifiers and expands upon class D and E power amplifier treatment. Also increased coverage is given to oscillator phase noise and impedance matching. The book includes real-life examples illustrating the role of the described techniques in the overall design of various RF communication systems; additional features include solenoid design and double-tuned matching circuit examples, transistor and amplifier formulas, transformed frequency domain measurements, and analytical spiral inductor model references. To aid in the learning process, problems are included at the end of each chapter. In addition, source code for the programs illustrated throughout the book is available online, making the programs even more valuable to the working engineer in need of a quick solution and to the student looking to understand some of the details in a computation. Also included are summary tables, graphs, equations, and SPICE examples.Covering both the timeless principles of receiver and transmitter circuit design and the latest technological applications in RF communications, Radio Frequency Circuit Design, Second Edition is designed as a primary text for graduate students in a RF circuits course, as well as a field reference for professional engineers.