1. Record Nr. UNINA9910454560703321

Autore	Hella Mona Mostafa
Titolo	RF CMOS power amplifiers [[electronic resource]] : theory, design, and implementation / / Mona Mostafa Hella, Mohammed Ismail
Pubbl/distr/stampa	Boston, : Kluwer Academic Publishers, c2002
ISBN	1-280-20802-3 9786610208029 0-306-47320-8
Edizione	[1st ed. 2002.]
Descrizione fisica	1 online resource (111 p.)
Collana	The Kluwer international series in engineering and computer science ; ; SECS 659
Altri autori (Persone)	IsmailMohammed
Disciplina	621.384/12
Soggetti	Amplifiers, Radio frequency Power amplifiers Metal oxide semiconductors, Complementary Very high speed integrated circuits Radio frequency integrated circuits Electronic books.
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 (p. [89]-92) and index.
Nota di contenuto	Power Amplifier; Concepts and Challenges -- A 900MHz Class E CMOS PA -- A CMOS PA for Bluetooth -- A Complete Bluetooth PA Solution -- Conclusion.
Sommario/riassunto	RF CMOS Power Amplifiers: Theory Design and Implementation focuses on the design procedure and the testing issues of CMOS RF power amplifiers. This is the first monograph addressing RF CMOS power amplifier design for emerging wireless standards. The focus on power amplifiers for short is distance wireless personal and local area networks (PAN and LAN), however the design techniques are also applicable to emerging wide area networks (WAN) infrastructure using micro or pico cell networks. The book discusses CMOS power amplifier design principles and theory and describes the architectures and tardeoffs in designing linear and nonlinear power amplifiers. It then details design examples of RF CMOS power amplifiers for short distance wireless applications (e, g., Bluetooth, WLAN) including

designs for multi-standard platforms. Design aspects of RF circuits in deep submicron CMOS are also discussed. RF CMOS Power Amplifiers: Theory Design and Implementation serves as a reference for RF IC design engineers and RD and R&D managers in industry, and for graduate students conducting research in wireless semiconductor IC design in general and with CMOS technology in particular.