

1. Record Nr.	UNINA9910454413303321
Autore	Sweet Allen A. <1943->
Titolo	Designing bipolar transistor radio frequency integrated circuits / / Allen A. Sweet
Pubbl/distr/stampa	Boston, Massachusetts : , : Artech House, , ©2008 [Piscataqay, New Jersey] : , : IEEE Xplore, , [2007]
ISBN	1-59693-129-9
Descrizione fisica	1 online resource (330 p.)
Collana	Artech House microwave library
Disciplina	621.38412
Soggetti	Radio 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 and index.
Nota di contenuto	Designing Bipolar Transistor Radio Frequency Integrated Circuits; Contents; Acknowledgments; CHAPTER 1 Introduction; CHAPTER 2 Applications; CHAPTER 3 RFIC Architectures; CHAPTER 4 InGaP/GaAs HBT Fabrication Technology; CHAPTER 5 SiGe HBT Fabrication Technology; CHAPTER 6 Passive Circuit Design; CHAPTER 7 Amplifier Design Basics; CHAPTER 8 Low-Noise Amplifier Design; CHAPTER 9 Power Amplifier Design; CHAPTER 10 Designing Multistage Amplifiers; CHAPTER 11 Mixer/Modulator Design; CHAPTER 12 Frequency Multiplier Design; CHAPTER 13 Voltage-Controlled Oscillator Design CHAPTER 14 Layout Design StrategiesCHAPTER 15 RFIC Economics; Acronyms; About the Author; Index
Sommario/riassunto	If you're looking for an in-depth and up-to-date understanding bipolar transistor RFIC design, this practical resource is a smart choice. Unlike most books on the market that focus on GaAs MESFET or silicon CMOS process technology, this unique volume is dedicated exclusively to RFIC designs based on bipolar technology. Until now, critical GaAs HBT and SiGe HBT process technologies have been largely neglected in reference books. This book fills this gap, offering you a detailed treatment of this increasingly important topic. You discover a wide range of circuit topologies that are optimized for maximum performance with bipolar

devices. From discussions of key applications (Bluetooth, UWB, GPS, WiMax) and architectures ... to in-depth coverage of fabrication technologies and amplifier design ... to a look at performance tradeoffs and production costs, this book arms you with complete design know-how for your challenging work in the field.
