Record Nr. UNINA9910456237403321 Autore Gilmore Rowan Titolo Practical RF circuit design for modern wireless systems . Vol. II Active circuits and systems / / Rowan Gilmore, Les Besser Pubbl/distr/stampa Boston:,: Artech House,, ©2003 [Piscatagay, New Jersey]:,: IEEE Xplore,, [2003] **ISBN** 1-58053-674-3 Descrizione fisica 1 online resource (587 p.) Collana Artech House microwave library Altri autori (Persone) BesserLes Disciplina 621.384/12 Soggetti Microwave circuits - Design and construction Radio circuits - Design and construction Wireless communication systems - Equipment and supplies Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Contents; Preface; Acknowledgements; 1. Linear RF amplifier designgeneral considerations; 2. Linear and low-noise RF amplifiers; 3. Active RF devices and their modeling; 4. Nonlinear circuit simulation techniques; 5. High-power RF transistor amplifier design; 6. Oscillators; 7. Mixers and frequency multipliers; 8. Circuits in systems-radio system applications; Appendix; Authors; Index Sommario/riassunto The second of two authoritative, highly practical volumes, this handson resource covers active and nonlinear circuits, and introduces advanced topics in RF circuit and system design. The book opens with an overview of active RF devices and their modeling. It explores nonlinear circuit simulation techniques such as harmonic balance, and extensively illustrates the use of CAD tools in active circuit design throughout. This is a tested and insightful book that contains answers to most of the questions practical engineers are asking. In this thoroughly practical second volume, you learn the theory behind linear and low-noise RF amplifiers, high power RF transistor amplifiers, oscillators, mixers, and frequency multipliers, so you gain an intuitive

understanding of their operation. The final chapter presents the design of a radio chip set and pulls together the component aspects that are

covered earlier in the book. This essential reference is lavishly illustrated with explanation of practical issues and supported with clear examples. This text is guaranteed to provide even the most experienced RF designer with fresh, intuitive insight into circuit operation, and will be as useful at universities as a course text on practical RF circuit design, as it will in industry as a training refresher.