1. Record Nr. UNINA9910815972603321 Autore Bensky Alan <1939-> Titolo Short-range wireless communication: fundamentals of RF system design and application / / by Alan Bensky Amsterdam ; ; Boston, ; Elsevier Pubbl/distr/stampa Burlington,: Newnes, c2004 **ISBN** 1-280-96439-1 9786610964390 0-08-047005-X Edizione [2nd ed.] Descrizione fisica 1 online resource (385 p.) Collana Communications engineering series Disciplina 621.384 Soggetti Wireless communication systems 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. 347-352) and index. Nota di contenuto copyright; table of contents; front matter; Dedication; Preface to the First Edition; Preface to the Second Edition; What's on the CD-ROM; body; 1. Introduction; 1.1 Historical Perspective; 1.2 Reasons for the Spread of Wireless Applications; 1.3 Characteristics of Short-range Radio; 1.4 Elements of Wireless Communication Systems; 1.5 Summary; 2. Radio Propagation; 2.1 Mechanisms of Radio Wave Propagation; 2.2 Open Field Propagation; 2.3 Diffraction; 2.4 Scattering; 2.5 Path Loss; 2.6 Multipath Phenomena; 2.7 Flat Fading; 2.8 Diversity Techniques; 2.9 Noise; 2.10 Summary; Appendix 2-A 3. Antennas and Transmission Lines 3.1 Introduction; 3.2 Antenna Characteristics; 3.3 Types of Antennas; 3.4 Impedance Matching; 3.5 Measuring Techniques: 3.6 Summary: 4. Communication Protocols and Modulation: 4.1 Baseband Data Format and Protocol: 4.2 Baseband Coding; 4.3 RF Frequency and Bandwidth; 4.4 Modulation; 4.5 RFID; 4.6 Summary; 5. Transmitters; 5.1 RF Source; 5.2 Modulation; 5.3 Amplifiers; 5.4 Filtering; 5.5 Antenna; 5.6 Summary; 6. Receivers; 6.1 Tuned Radio Frequency (TRF); 6.2 Superregenerative Receiver; 6.3 Superheterodyne Receiver: 6.4 Direct Conversion Receiver

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Sommario/riassunto

The Complete "Tool Kit? for the Hottest Area in RF/Wireless Design! Short-range wireless-communications over distances of less than 100 meters-is the most rapidly growing segment of RF/wireless engineering. Alan Bensky is an internationally recognized expert in short-range wireless, and this new edition of his bestselling book is completely revised to cover the latest developments in this fast moving field. You'll find coverage of such cutting-edge topics as: architectural trends in RF/wireless integrated circuits compatibility and conflict issues between differ