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Nota di contenuto	OFDM Baseband Receiver Design for Wireless Communications; Contents; Preface; About the Authors; Acknowledgements; 1 Introduction; 1.1 Wireless Communication Systems; 1.1.1 Digital Broadcasting Systems; 1.1.2 Mobile Cellular Systems; 1.1.3 Wireless Network Systems; Bibliography; 2 Digital Modulation; 2.1 Single-Carrier Modulation; 2.1.1 Power Spectral Densities of Modulation Signals; 2.1.2 PSK, QAM and ASK; 2.1.3 CPFSK and MSK; 2.1.4 Pulse Shaping and Windowing; 2.2 Multi-Carrier Modulation; 2.2.1 Orthogonal Frequency-Division Multiplexing; 2.2.2 OFDM-Related Issues 2.2.3 OFDM Transceiver Architecture2.2.4 OFDM System Examples; Bibliography; 3 Multiple Access and Error-Correcting Codes; 3.1 Multiple Access; 3.1.1 Frequency-Division Multiple Access (FDMA); 3.1.2 Time-Division Multiple Access (TDMA); 3.1.3 Code-Division Multiple Access (CDMA); 3.1.4 Carrier Sense Multiple Access (CSMA); 3.2 Spread Spectrum and CDMA; 3.2.1 PN Codes; 3.2.2 Direct-Sequence Spread Spectrum; 3.2.3 Frequency-Hopping Spread Spectrum; 3.3 Error-Correcting Codes; 3.3.1 Block Codes; 3.3.2 Reed-

Solomon Codes; 3.3.3 Convolutional Codes; 3.3.4 Low-Density Parity-Check Codes
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Sommario/riassunto

Orthogonal frequency-division multiplexing (OFDM) access schemes are becoming more prevalent among cellular and wireless broadband systems, accelerating the need for smaller, more energy efficient receiver solutions. Up to now the majority of OFDM texts have dealt with signal processing aspects. To address the current gap in OFDM integrated circuit (IC) instruction, Chiueh and Tsai have produced this timely text on baseband design. OFDM Baseband Receiver Design for Wireless Communications covers the gamut of OFDM technology, from theories and algorithms to architectures and circuits.