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Altri autori (Persone)	PlettCalvin Marslandlan
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Nota di contenuto	Radio Frequency System Architecture and Design; Contents; Preface; Chapter 1 Introduction to RF Systems Design; 1.1 Introduction; 1.2 What is a Radio and Why Do We Need One?; 1.3 The Radio Spectrum; 1.4 A Communication Device; 1.5 Baseband Signal Processing Versus RFIC Design; 1.6 Overview; References; Chapter 2 An Introduction to Communication Systems; 2.1 A Simple Digital Communication System; 2.2 Basic Modulation Schemes; 2.2.1 Amplitude Shift Keying (ASK); 2.2.2 Phase Shift Keying (PSK); 2.2.3 Frequency Shift Keying (FSK); 2.2.4 Quadrature Amplitude Modulation (QAM); 2.3 Signal Models. 2.3.1 Complex Lowpass Equivalent Signal Representation 2.3.2 Signal Space Diagrams; 2.4 System Model; 2.4.1 Symbol Map; 2.4.2 Pulse-Shaping Filter; 2.4.3 Modulator; 2.4.4 Additive White Gaussian Noise (AWGN) Channel Model; 2.4.5 Demodulator; 2.4.6 Receive Filter; 2.4.7 Signal Sampling; 2.4.8 Decision Device; 2.5 Probability of Error Analy.
Sommario/riassunto	Communication devices such as smart phones, GPS systems, and Bluetooth, are now part of our daily lives more than ever before. As our communication equipment becomes more sophisticated, so do the radios and other hardware required to enable that technology. Common radio architectures are required to make this technology work seamlessly. This resource describes practical aspects of radio frequency

communications systems design, bridging the gap between system-level design considerations and circuit-level design specifications. Industry experts not only provide detailed calculations and theory to determine block level specifications, but also discuss basic theory and operational concepts. This resource also includes extensive, up-to-date application examples.
