Record Nr. UNINA9910792281003321 Autore Pu Di Titolo Digital communication systems engineering with software-defined radio / / Di Pu, Alexander M. Wyglinski Pubbl/distr/stampa Boston:,: Artech House,, 2013 [Piscatagay, New Jersey]:,: IEEE Xplore,, [2013] **ISBN** 1-60807-526-5 Descrizione fisica 1 online resource (306 p.) Collana Mobile communications series Altri autori (Persone) WyglinskiAlexander M Disciplina 621.384 Soggetti Software radio Systems engineering Digital communications 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 What is an SDR? -- Signals and systems overview -- Probability review -- Digital transmission fundamentals -- Basic SDR implementation of a transmitter and a receiver -- Receiver structure and waveform synthesis of a transmitter and a receiver -- Multicarrier modulation and duplex communications -- Spectrum sensing techniques --Applications of software-defined radio. This unique resource provides you with a practical approach to quickly Sommario/riassunto learning the software-defined radio concepts you need to know for your work in the field. By prototyping and evaluating actual digital communication systems capable of performing over-the-air wireless data transmission and reception, this volume helps you attain a firsthand understanding of critical design trade-offs and issues. Moreover you gain a sense of the actual real-world operational behavior of these systems. With the purchase of the book, you gain access to several ready-made Simulink experiments at the publisher s website. This collection of laboratory experiments, along with several examples, enables you to successfully implement the designs discussed the book

in a short period of time. These files can be executed using MATLAB

version R2011b or later versions.