1. Record Nr. UNINA9911019196903321

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Titolo	Digital radio system design / / Grigorios Kalivas
Pubbl/distr/stampa	Chichester, West Sussex, U.K. ; ; Hoboken, N.J., : J. Wiley, 2009
ISBN	9786612362217 9781282362215 1282362216 9780470748381 0470748389 9780470748374 0470748370
Descrizione fisica	1 online resource (474 p.)
Disciplina	621.384/131
Soggetti	Radio - Transmitter-receivers - Design and construction Digital communications - Equipment and supplies - Design and construction Radio circuits - Design and construction Signal processing - Digital techniques Wireless communication systems - Equipment and supplies - Design and construction
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	Radio communications: system concepts, propagation and noise -- Digital communication principles -- RF transceiver design -- Radio frequency circuits and subsystems -- Synchronization, diversity and advanced transmission techniques -- System design examples.
Sommario/riassunto	A systematic explanation of the principles of radio systems, Digital Radio System Design offers a balanced treatment of both digital transceiver modems and RF front-end subsystems and circuits. It provides an in-depth examination of the complete transceiver chain which helps to connect the two topics in a unified system concept. Although the book tackles such diverse fields it treats them in sufficient depth to give the designer a solid foundation and an

implementation perspective. Covering the key concepts and factors that characterise and impact radio transmission and reception, the book presents topics such as receiver design, noise and distortion. Information is provided about more advanced aspects of system design such as implementation losses due to non-idealities. Providing vivid examples, illustrations and detailed case-studies, this book is an ideal introduction to digital radio systems design. . Offers a balanced treatment of digital modem and RF front-end design concepts for complete transceivers. Presents a diverse range of topics related to digital radio design including advanced transmission and synchronization techniques with emphasis on implementation. Provides guidance on imperfections and non-idealities in radio system design. Includes detailed design case-studies incorporating measurement and simulation results to illustrate the theory in practice.