

1. Record Nr.	UNINA9910457499403321
Titolo	Fundamentals of multicore software development // edited by Victor Pankratius, Ali-Reza Adl-Tabatabai, and Walter Tichy
Pubbl/distr/stampa	Boca Raton, Fla. : , : CRC Press, , 2012
ISBN	0-429-14904-2 1-280-12164-5 9786613525505 1-4398-1274-8
Edizione	[1st edition]
Descrizione fisica	1 online resource (322 p.)
Collana	Chapman & Hall/CRC computational science series
Altri autori (Persone)	PankratiusVictor Adl-TabatabaiAli-Reza TichyWalter F
Disciplina	005.2/75
Soggetti	Parallel programming (Computer science) Computer software - Development Multiprocessors Systems on a chips Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"A Chapman & Hall book."
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	pt. 1. Basics of parallel programming -- pt. 2. Programming languages for multicore -- pt. 3. Programming heterogeneous processors -- pt. 4. Emerging technologies.
Sommario/riassunto	With multicore processors now in every computer, server, and embedded device, the need for cost-effective, reliable parallel software has never been greater. By explaining key aspects of multicore programming, Fundamentals of Multicore Software Development helps software engineers understand parallel programming and master the multicore challenge. Accessible to newcomers to the field, the book captures the state of the art of multicore programming in computer science. It covers the fundamentals of multicore hardware, parallel design patterns, and parallel programming in C++, .NET, and Java. It

2. Record Nr.	UNINA9910788566203321
Titolo	Ultrawideband antennas [[electronic resource]] : design and applications // Daniel Valderas ... [et al.]
Pubbl/distr/stampa	London, : Imperial College Press, 2011
ISBN	1-283-14337-2 9786613143372 1-61344-081-2 1-84816-492-0
Descrizione fisica	1 online resource (210 p.)
Altri autori (Persone)	ValderasDaniel
Disciplina	621.382/4 621.3824 621.384135
Soggetti	Ultra-wideband antennas Ultra-wideband antennas - Design
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. 183-190) and index.
Nota di contenuto	Foreword; Acknowledgements; Authors; Contents; 1. Introduction to Ultrawideband Systems Cong Ling; 1.1 Overview; 1.2 UWB Schemes; 1.2.1 Impulse radio/time hopping; 1.2.2 Direct sequence; 1.2.3 Frequency hopping; 1.2.4 OFDM; 1.3 Industry Standards; 1.3.1 Single band versus multiband; 1.3.2 Standards; 1.4 Applications; 1.5 Challenges; 2. Figures of Merit for UWB Antennas David Puente and Daniel Valderas; 2.1 Requirements for a UWB Antenna; 2.1.1 Efficiency and matching; 2.1.2 Signal distortion and dispersion (ringing) 2.1.3 Stability over frequency of the transmission-reception transfer function2.1.3.1. Constant transfer function: Pulses selected directly by the source; 2.1.3.2. Variable transfer function: Concept of the antenna as a filter; 2.2 UWB Antenna Parameters; 2.2.1 Variability in the frequency domain; 2.2.1.1. Magnitude of the transfer function; 2.2.1.1.1. Stability of the reflection coefficient; 2.2.1.1.2. Polarisation stability; 2.2.1.1.3. Gain stability and channel losses; 2.2.1.2. Transfer function phase: Group delay; 2.2.2 Variability in the time domain: Pulse distortion parameters

2.2.2.1. Fidelity factor; 2.2.2.2. Time spread; 2.2.3 Variability in the space domain; 2.2.3.1. Statistical values; 2.2.3.1.1. Uniformity; 2.2.3.1.2. Spatially averaged transfer function (SATF); 2.2.3.1.3. Spatially averaged group delay (SAGD); 2.2.3.2. Correlation-based averages: Angular range; 2.3 Simulation in the Time Domain; 3. Classification of UWB Antennas David Puente and Daniel Valderas; 3.1 Helical Antennas; 3.2 Frequency-independent Antennas; 3.2.1 Spiral antennas; 3.2.2 Biconical antennas; 3.2.2.1. 3D biconical antennas; 3.2.2.2. 2D biconical antennas; 3.3 Log-periodic Antennas; 3.4 Horn Antennas; 3.4.1 3D horn antennas; 3.4.2 2D horn antennas; 3.5 UWB Antennas Derived from Resonant Antennas; 3.5.1 3D monopoles; 3.5.1.1. Modifications to the geometry; 3.5.1.1.1. Euclidean shapes; 3.5.1.1.2. Computer optimisation; 3.5.1.1.3. Partial variation on a Euclidean shape; 3.5.1.2. Changes in current distribution; 3.5.1.2.1. Use of parasitic elements; 3.5.1.2.2. Use of a short-circuit pin; 3.5.1.2.3. Asymmetric feed; 3.5.1.2.4. Double feed; 3.5.2 2D resonant antennas; 3.5.2.1. Full 2D monopoles; 3.5.2.2. Slot antennas; 3.6 Conclusions

4. UWB Monopole Antenna Analysis Daniel Valderas and Juan I. Sancho; 4.1 Introduction; 4.2 Current-conductive Parts on Planar Monopole Antennas; 4.2.1 Currents parallel and perpendicular to the ground plane: A working hypothesis; 4.2.2 Non-radiating currents in a PMA; 4.3 Transmission Line Model for UWB Monopole Antennas; 4.3.1 General description; 4.3.2 Description of the model; 4.3.2.1. Transmission line; 4.3.2.2. Radiating structure; 4.3.3 Purpose of the analogy; 4.3.4 Graphical approach: The Smith Chart; 4.4 Design Based on TLM; 4.4.1 Design of an UWB-PMA antenna with a given bandwidth; 4.4.2 Design of an UWB-PMA antenna having a maximised bandwidth

Sommario/riassunto

Ultrawideband (UWB) technology, positioned as the cutting edge of research and development, paves the way to meet the emerging demands set by broadband wireless applications, such as high-speed data transmission, medical imaging, short-range radars, electromagnetic testing, etc. This breathtaking resource builds upon the basics of UWB technology to provide a complete compilation of figures of merit along with a vital state-of-the-art of the different antenna alternatives that are to be employed according to the specific application. Without excessive recourse to mathematics, this volume emphas
