

1. Record Nr.	UNINA9910810468603321
Autore	Bahl I. J.
Titolo	Lumped elements for RF and microwave circuits // Inder Bahl
Pubbl/distr/stampa	Boston : , : Artech House, , ©2003 [Piscataqay, New Jersey] : , : IEEE Xplore, , [2003]
ISBN	1-58053-661-1
Descrizione fisica	1 online resource (508 p.)
Collana	Artech House microwave library
Disciplina	621.381/32
Soggetti	Lumped elements (Electronics) Microwave integrated circuits Radio frequency integrated circuits Passive components
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	V -- Preface xi -- Acknowledgments xv -- Part I: Cellular Networks xvii -- 1 Introduction 1 -- 1.1 Mobile Wireless Networks 5 -- 1.2 Cellular Networks 6 -- 1.3 Ad Hoc Wireless Networks 10 -- 1.4 Location Management 11 -- 1.5 Wireless Routing Techniques 13 -- 2 Mobility Issues 17 -- 2.1 Introduction 17 -- 2.2 Mobility Models 18 -- 2.3 Mobility in 3G Systems 26 -- 3 Radio Resource Management 31 -- 3.1 Radio Propagation 32 -- 3.2 Radio Resource (Spectrum Allocation) 37 -- 3.3 RRM 43 -- 3.4 Handoff Process 52 -- 3.5 Managing Resource Allocation 55 -- 3.6 Emerging RRM Techniques 60. 3.7 Integrated RRM 63 -- 3.8 Summary 65 -- 4 Location Management 69 -- 4.1 Location Update 71 -- 4.2 Paging 75 -- 4.3 Intelligent Paging Scheme 78 -- 4.4 More Paging Schemes 84 -- 4.5 Intersystem Paging 87 -- 4.6 IP Micromobility and Paging 88 -- 4.7 Location Management 89 -- 4.8 LA Planning 97 -- 4.9 Conclusion 109 -- Part II: Ad Hoc Wireless Networks 115 -- 5 Overview 117 -- 5.1 Characteristics of Ad Hoc Networks 117 -- 5.2 Three Fundamental Design Choices 118 -- 6 MAC Techniques in Ad Hoc Networks 125 -- 6.1 MAC Protocols with Omnidirectional Antennas 125. 6.2 MAC Protocols with Directional Antennas 128 -- 6.3 Discussions 132 -- 7 Routing Protocols in Ad Hoc Wireless Networks 135 -- 7.1

Introduction 135 -- 7.2 Unicast Routing Protocols in Ad Hoc Networks 138 -- 7.3 Multicast Routing Protocols in Ad Hoc Networks 165 -- 7.4 Performance Comparisons of Unicast and Multicast Routing Protocols 168 -- 7.5 Discussion 170 -- Part III: Future Issues 177 -- 8 Routing in Next-Generation Wireless Networks 179 -- 8.1 UMTS All-IP Networks 179 -- 8.2 Routing in Distributed Wireless Sensor Networks 182 -- 8.3 Pervasive Routing 186 -- 9 Conclusion 191.
List of Acronyms 195 -- About the Authors 203 -- Index 205.

Sommario/riassunto

Due to the unprecedented growth in wireless applications over the past decade, development of low-cost solutions for RF and microwave communication systems has become of great importance. This practical new book is the first comprehensive treatment of lumped elements, which are playing a critical role in the development of the circuits that make these cost-effective systems possible. The book offers you an in-depth understanding of the different types of RF and microwave circuit elements, including inductors, capacitors, resistors, transformers, via holes, airbridges, and crossovers.
