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| Nota di contenuto | -- Preface xiii -- List of Contributors xvii -- 1 Introduction to 60GHz 1 / Su-Khiong (SK) Yong -- 1.1 What is 60 GHz? 1 -- 1.2 Comparison with other Unlicensed Systems 2 -- 1.3 Potential Applications 6 -- 1.4 Worldwide Regulation and Frequency Allocation 7 -- 1.4.1 North America 7 -- 1.4.2 Japan 8 -- 1.4.3 Australia 9 -- 1.4.4 Korea 9 -- 1.4.5 Europe 9 -- 1.5 Industry Standardization Effort 10 -- 1.5.1 IEEE 802.15.3c 11 -- 1.5.2 ECMA 387 12 -- 1.5.3 WirelessHD 13 -- 1.5.4 IEEE 802.11.ad 14 -- 1.5.5 Wireless Gigabit Alliance 14 -- 1.6 Summary 14 -- References 15 -- 2 60GHz Channel Characterizations and Modeling 17 / Su-Khiong (SK) Yong -- 2.1 Introduction to Wireless Channel Modeling 17 -- 2.2 Modeling Approach and Classification of Channel Model 18 -- 2.2.1 Deterministic Modeling 18 -- 2.2.2 Stochastic Modeling 20 -- 2.3 Channel Characterization 21 -- 2.3.1 |

Large-Scale Channel Characterization 21 -- 2.3.2 Small-Scale Channel Characterization 29 -- 2.3.3 Polarization 40 -- 2.4 Industry Standard Channel Models 43 -- 2.4.1 IEEE 802.15.3c 43 -- 2.4.2 IEEE 802.11ad 47 -- 2.5 Summary 57 -- References 57 -- 3 Non-Ideal Radio Frequency Front-End Models in 60GHz Systems 63 / Chang-Soon Choi, Maxim Piz and Eckhard Grass -- 3.1 RF Front-End Architecture 64 -- 3.1.1 Super-Heterodyne Architecture 64 -- 3.1.2 Direct-Conversion Architecture 66 -- 3.1.3 Low-IF Architecture 66 -- 3.2 Nonlinear Power Amplifier 67 -- 3.2.1 Tradeoff Between Linearity and Efficiency 67 -- 3.2.2 Nonlinearity Modeling 69 -- 3.2.3 Behavioral Models 71 -- 3.2.4 Output Backoff Versus Peak-to-Average Power Ratio 75 -- 3.2.5 Impact of Nonlinear Power Amplifier 76 -- 3.3 Phase Noise from Oscillators 78 -- 3.3.1 Modeling of Phase Noise in Phase-Locked Loops 78 -- 3.3.2 Behavioral Modeling for Phase Noise in Phase-Locked Loops 82 -- 3.4 Other RF Non-Idealities 82 -- 3.4.1 Quantization Noise in Data Converters 82 -- 3.4.2 I/Q Mismatch 86 -- References 87 -- 4 Antenna Array Beamforming in 60GHz 89 / Pengfei Xia. 4.1 Introduction 89 -- 4.2 60 GHz Channel Characteristics 90 -- 4.2.1 Path Loss and Oxygen Absorption 90 -- 4.2.2 Multipath Fading 91 -- 4.3 Antenna Array Beamforming 93 -- 4.3.1 Training for Adaptive Antenna Arrays 95 -- 4.3.2 Training for Switched Antenna Arrays 107 -- 4.3.3 Channel Access in 60 GHz Wireless Networks 110 -- 4.4 Summary 115 -- References 115 -- 5 Baseband Modulation 117 / Pengfei Xia and Andre Bourdoux -- 5.1 Introduction 117 -- 5.2 OFDM Baseband Modulation 120 -- 5.2.1 Principles of OFDM 120 -- 5.2.2 OFDM Design Considerations 123 -- 5.3 Case Study: IEEE 802.15.3c Audio Video OFDM 126 -- 5.3.1 Uncompressed Video Communications 126 -- 5.3.2 Equal and Unequal Error Protection 127 -- 5.3.3 Bit Interleaving and Multiplexing 130 -- 5.3.4 AV OFDM Modulation 132 -- 5.4 SC with Frequency-Domain Equalization 135 -- 5.4.1 Introduction 135 -- 5.4.2 Case Study: IEEE 802.15.3c SC PHY 137 -- 5.5 SC Transceiver Design and System Aspects 142 -- 5.5.1 Transmit and Receive Architecture 142 -- 5.5.2 SC with Frequency-Domain Equalization 146 -- 5.6 Digital Baseband Processing 149 -- 5.6.1 Burst Detection and Rough Timing/CFO Acquisition 149 -- 5.6.2 Joint Fine CFO and Channel Estimation Without I/Q Imbalance 155 -- 5.6.3 Joint Estimation of Fine CFO, Channel and I/Q Imbalance 156 -- 5.6.4 Time-Domain Equalization, Despreading and Tracking 161 -- References 166 -- 6 60GHz Radio Implementation in Silicon 169 / Alberto Valdes-Garcia -- 6.1 Introduction 169 -- 6.2 Overview of Semiconductor Technologies for 60 GHz Radios 170 -- 6.3 60 GHz Front-End Components 173 -- 6.3.1 60 GHz LNAs in SiGe and CMOS 174 -- 6.3.2 60 GHz PAs in SiGe and CMOS 176 -- 6.3.3 Process Variability in Silicon Millimeter-Wave Designs 179 -- 6.4 Frequency Synthesis and Radio Architectures 180 -- 6.5 Radio / Baseband Interface 182 -- 6.5.1 ADCs and DACs for Wide Bandwidth Signals 182 -- 6.5.2 Modulators, Demodulators and Analog Signal Processors for Gbps Applications 187 -- References 189 -- 7 Hardware Implementation for Single Carrier Systems 193 / Yasunao Katayama. 7.1 Introduction 193 -- 7.2 Advantages and Challenges of SC Systems 194 -- 7.3 System Design with Non-Coherent Detection 196 -- 7.4 System Design with Differentially Coherent Detection 201 -- 7.5 Test and Evaluation 203 -- 7.6 Advanced SC System with Per-Packet Coherent Detection 205 -- 7.7 Conclusion 209 -- References 209 -- 8 Gbps OFDM Baseband Design and Implementation for 60GHz Wireless LAN Applications 211 / Chang-Soon Choi, Maxim Piz, Marcus Ehrig and Eckhard Grass -- 8.1 OFDM Physical Layer Implemented on FPGA 212 -- 8.1.1 Designed OFDM Physical Layer 212 -- 8.1.2 Performance

Evaluation in the Presence of Clock Deviation and Phase Noise 214 -- 8.2 OFDM Baseband Receiver Architecture 214 -- 8.2.1 Receiver Front-End 217 -- 8.2.2 Receiver Back-End 222 -- 8.3 OFDM Baseband Transmitter Architecture 225 -- 8.4 60 GHz Link Demonstration 226 -- 8.4.1 60 GHz OFDM Demonstrator Architecture 226 -- 8.4.2 Wireless Link Demonstration with 60 GHz Radio 227 -- 8.5 Next-Generation OFDM Demonstrators for 60 GHz Wireless LAN Applications 229 -- 8.5.1 Channel Plan and RF Transceiver 230 -- 8.5.2 Next-Generation Multi-Gbps OFDM Physical Layers 231 -- 8.5.3 Performance Evaluation with 60 GHz NLOS Channel and 60 GHz Phase Noise Models 232 -- References 236 -- 9 Medium Access Control Design 239 / Harkirat Singh -- 9.1 Design Issues in the Use of Directional Antennas 240 -- 9.2 IEEE 802.15.3c MAC for 60 GHz 244 -- 9.2.1 Neighbor Discovery 244 -- 9.2.2 Aggregation and Block-ACK 245 -- 9.3 Design Considerations for Supporting Uncompressed Video 252 -- 9.3.1 Pixel Partitioning 254 -- 9.3.2 Uncompressed Video ARQ 255 -- 9.3.3 Unequal Error Protection 256 -- 9.3.4 Error Concealment 257 -- 9.4 Performance Study 258 -- 9.4.1 Effect of UEP and EEP 260 -- 9.4.2 Stability of UEP 261 -- 9.4.3 VQM Scores 262 -- 9.5 Conclusions and Future Directions 263 -- References 264 -- 10 Remaining Challenges and Future Directions 267 / Alberto Valdes-Garcia, Pengfei Xia, Su-Khiong Yong and Harkirat Singh. References 270 -- Index 273.

Sommario/riassunto

This book addresses 60 GHz technology for Gbps WLAN and WPAN from theory to practice, covering key aspects for successful deployment. In this book, the authors focus specifically on 60 GHz wireless technology which has emerged as the most promising candidate for multi-gigabit wireless indoor communication systems. 60 GHz technology offers various advantages over current or existing communications systems (e.g. huge unlicensed bandwidth worldwide, high transmit power, high frequency reuse and small form factor), which enables many disruptive applications that are otherwise difficult if not impossible to be realized at lower frequencies. The book addresses all aspects of the state-of-the-art in 60 GHz technology for high data rate wireless applications. Key Features: . Comprehensive coverage from theory to practice: provides readers with a thorough technical guide of 60 GHz technology development. Brings together the entire area of 60GHz technology for Gigabits per second (Gbps) WLAN and WPAN applications.. Discusses practical system designs covering wide aspects such as antenna propagation, beamforming, circuit design, digital communication, signal processing, system architectures, etc.. Provides up-to-date standardization activities, regulatory issues, technology development as well as future trends. Includes examples and case studies for practical scenarios. Contains theoretical, simulation and experimental results to demonstrate and compare the performance of various schemes (or systems) This book serves as an excellent reference for system engineers, system architects, IC designers, standard engineers, researchers, and vendor and manufacturer consumers. Technical consultants, software and application developers will also find this book of interest.
