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Sommario/riassunto	This book covers the fundamental principles behind the design of ultra-low power radios and how they can form networks to facilitate a variety of applications within healthcare and environmental monitoring, since they may operate for years off a small battery or even harvest energy from the environment. These radios are distinct from conventional radios in that they must operate with very constrained resources and low overhead. This book provides a thorough discussion of the challenges associated with designing radios with such constrained resources, as well as fundamental design concepts and practical approaches to implementing working designs. Coverage includes integrated circuit design, timing and control considerations, fundamental theory behind low power and time domain operation, and network/communication protocol considerations. • Enables detailed understanding of the design space for ultra-low power radio; • Provides detailed discussion and examples of the design of a practical low power radio network; • Compares a variety of low power transmission and radio styles, including traditional continuous wave radio, wake up radios, and impulse radios; • Includes detailed design

techniques and examples of integrated circuits for low power impulse radio transceivers, with discussion of timing control and synchronization. .