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Nota di contenuto	Chapter 1. Introduction -- Chapter 2. From Switched-capacitor Converter to Hybrid Converter -- Chapter 3. Basic Hybrid Converters with 2:1 SC -- Chapter 4. Design Philosophy of Recent Hybrid Converters -- Chapter 5. Advanced High-order Hybrid Converters Examples -- Chapter 6. Design Flow and Examples of Inventing New Hybrid Converters -- Chapter 7. Conclusion.
Sommario/riassunto	This book provides an in-depth introduction to hybrid DC-DC converters, which integrate both inductors and capacitors for high efficiency and high power density. These converters address the demands of applications like high-performance computing and automotive electronics. While numerous hybrid converter combinations have been explored in recent research, this book guides readers in selecting the optimal topology for a specific application. This book provides an incisive understanding of hybrid converters, revealing their underlying design philosophy. The authors present multiple examples of popular hybrid converters, tracing their evolution from simple, fundamental transformer models while highlighting their benefits and limitations. Furthermore, the book includes design guidelines for inventing new hybrid converters. Enables readers to design and invent

hybrid DC-DC converters tailored to specific applications Provide detailed analysis of the advantages and limitations of various hybrid converters currently available Demonstrates how to apply a simple DC transformer model to analyse the complex circuits of hybrid DC-DC converters.