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Nota di contenuto	Part I. Next-Generation ADCs -- Chapter 1. Emerging ADCs -- Chapter 2. Noise-Shaping SAR ADCs -- Chapter 3. Efficient High-Resolution Nyquist ADCs -- Chapter 4. Continuous-Time ADCs for Automotive Applications -- Chapter 5. Continuous-Time Delta-Sigma Converters With Finite-Impulse-Response (FIR) Feedback -- Chapter 6. High-speed ADCs for Wireless Base-Stations -- Part II. High-Performance Power Management -- Chapter 7. Advanced Multiphasing: Pushing the Limits of Fully Integrated Switched-Capacitor Converters -- Chapter 8. Highly-Efficient Power Management in Wearables and IoT Devices -- Chapter 9. Current Sensing Techniques: Principles and Readouts -- Chapter 10. Wide Bandgap Integrated Circuits for High Power Management in Extreme Environments -- Chapter 11. On the Limits of Driving Wide-Bandgap Transistors -- Chapter 12. Challenges in Driving New Generations of Power Switches for Motor Drive: A dV/dt Self-

Adjusting Architecture for Superjunction Power Devices -- Part III. Technology Considerations for Advanced IC -- Chapter 13. Silicon Technologies for the Next Age of Wireless Connectivity -- Chapter 14. IC Technologies for mm-Wave Applications -- Chapter 15. Accuracy: The Next Opportunity for MEMS -- Chapter 16. Robustness, Reliability and Diagnostic Aspects in Sensors for Automotive Applications: The Magnetic Sensors Case -- Chapter 17. Rad-Hard Mixed-Signal IC Design, Theory and Implementation -- Chapter 18.1-GRad-TID Effects in 28-nm Device Study for Rad-Hard Analog Design.

Sommario/riassunto

This book is based on the 18 tutorials presented during the 28th workshop on Advances in Analog Circuit Design. Expert designers present readers with information about a variety of topics at the frontier of analog circuit design, including next-generation analog-to-digital converters , high-performance power management systems and technology considerations for advanced IC design. For anyone involved in analog circuit research and development, this book will be a valuable summary of the state-of-the-art in these areas. Provides a summary of the state-of-the-art in analog circuit design, written by experts from industry and academia; Presents material in a tutorial-based format; Includes coverage of next-generation analog-to-digital converters, high-performance power management systems, and technology considerations for advanced IC design.
