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Titolo	Reliable and Energy Efficient Streaming Multiprocessor Systems // by Anup Kumar Das, Akash Kumar, Bharadwaj Veeravalli, Francky Catthoor
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Descrizione fisica	1 online resource (XIV, 147 p. 50 illus., 29 illus. in color.)
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Soggetti	Electronic circuits Microprocessors Computer architecture Logic design Electronic Circuits and Systems Processor Architectures Logic Design
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Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Chapter 1. Introduction -- chapter 2.Operational Semantics of Application and Reliability Model -- Chapter 3.Literature Survey on System-level Optimizations Techniques -- Chapter 4.Reliability and Energy-Aware Platform-Based Multiprocessor Design -- Chapter 5. Reliability and Energy-Aware Co-design of Multiprocessor Systems -- Chapter 6.Design-time Analysis for Fault-Tolerance -- Chapter 7.Run-time Adaptations for Lifetime Improvement -- chapter 8.Conclusions and Future Directions.
Sommario/riassunto	This book discusses analysis, design and optimization techniques for streaming multiprocessor systems, while satisfying a given area, performance, and energy budget. The authors describe design flows for both application-specific and general purpose streaming systems. Coverage also includes the use of machine learning for thermal optimization at run-time, when an application is being executed. The design flow described in this book extends to thermal and energy optimization with multiple applications running sequentially

and concurrently.
