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	Nota di contenuto	Introduction -- Modeling of Real-Time and Reconfigurable Systems -- Dynamic Cache Reconfiguration in Real-Time Systems -- Energy Optimization of Cache Hierarchy in Multicore Real-Time Systems -- Energy-Aware Scheduling with Dynamic Voltage Scaling -- System-wide Energy Optimization with DVS and DCR -- Temperature- and Energy-Constrained Scheduling -- Conclusions.
	Sommario/riassunto	Given the widespread use of real-time multitasking systems, there are tremendous optimization opportunities if reconfigurable computing can be effectively incorporated while maintaining performance and other design constraints of typical applications. The focus of this book is to describe the dynamic reconfiguration techniques that can be safely used in real-time systems. This book provides comprehensive approaches by considering synergistic effects of computation, communication as well as storage together to significantly improve overall performance, power, energy and temperature. Provides a comprehensive introduction to optimization and dynamic

reconfiguration techniques in real-time embedded systems; Covers state-of-the-art techniques and ongoing research in reconfigurable architectures; Focuses on algorithms tuned for dynamic reconfiguration techniques in real-time systems; Provides reference for anyone designing low-power systems, energy-/temperature-constrained devices, and power-performance efficient systems which execute tasks with timing constraints. .