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	Altri autori (Persone)	Higuera-ToledanoM. Teresa BrinkschulteUwe RettbergAchim
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	Soggetti	Embedded computer systems - Programming Real-time data processing
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	Nota di bibliografia	Includes bibliographical references.
	Nota di contenuto	A Control Theory Approach to Improve Microprocessors for Real-Time Applications by Self-Adapting Thread Performance -- Providing safety-critical and real-time services for mobile devices in uncertain environment -- Self-Organizing Real-Time Services in Mobile Ad Hoc Networks -- Swarm Robotic Time Synchronization for Object Tracking -- Improving Performance of Controller Area Network (CAN) by Adaptive Message Scheduling -- Self-configurable Automotive Embedded Systems -- Composing Adaptive Distributed Embedded and Real-Time Java Systems Based on RTSJ -- The ASSL Formalism for Real-Time Autonomic Systems -- Organic Real-Time Middleware.
	Sommario/riassunto	This book describes the emerging field of self-organizing, multicore, distributed and real-time embedded systems. Self-organization of both hardware and software can be a key technique to handle the growing complexity of modern computing systems. Distributed systems running hundreds of tasks on dozens of processors, each equipped with multiple cores, requires self-organization principles to ensure efficient and reliable operation. This book addresses various, so-called Self-X features such as self-configuration, self-optimization, self-adaptation, self-healing and self-protection. Presents open

components for embedded real-time adaptive and self-organizing applications; Describes innovative techniques in: scheduling, memory management, quality of service, communications supporting organic real-time applications; Covers multi-/many-core embedded systems supporting real-time adaptive systems and power-aware, adaptive hardware and software systems; Includes case studies of open embedded real-time self-organizing system developments supporting real-time applications.