

1. Record Nr.	UNISA996466070203316
Titolo	Embedded Software [[electronic resource]] : Third International Conference, EMSOFT 2003, Philadelphia, PA, USA, October 13-15, 2003, Proceedings // edited by Rajeev Alur
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2003
ISBN	3-540-45212-5
Edizione	[1st ed. 2003.]
Descrizione fisica	1 online resource (X, 378 p.)
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 2855
Disciplina	005.1
Soggetti	Application software Special purpose computers Computer programming Software engineering Programming languages (Electronic computers) Operating systems (Computers) Computer Applications Special Purpose and Application-Based Systems Programming Techniques Software Engineering Programming Languages, Compilers, Interpreters Operating Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Invited Contributions -- A Probabilistic Framework for Schedulability Analysis -- Resource-Efficient Scheduling for Real Time Systems -- Emerging Trends in Adaptive Middleware and Its Application to Distributed Real-Time Embedded Systems -- Regular Papers -- Heterogeneous Reactive Systems Modeling and Correct-by-Construction Deployment -- HOKES/POKES: Light-Weight Resource Sharing -- Rate Monotonic vs. EDF: Judgment Day -- Translating Discrete-Time Simulink to Lustre -- Minimizing Variables' Lifetime in Loop-Intensive Applications -- Resource Interfaces -- Clocks as First

Class Abstract Types -- Energy-Conscious Memory Allocation and Deallocation for Pointer-Intensive Applications -- Space Reductions for Model Checking Quasi-Cyclic Systems -- Intelligent Editor for Writing Worst-Case-Execution-Time-Oriented Programs -- Clock-Driven Automatic Distribution of Lustre Programs -- Reasoning about Abstract Open Systems with Generalized Module Checking -- Schedule-Carrying Code -- Energy-Efficient Multi-processor Implementation of Embedded Software -- A Methodology and Tool Support for Generating Scheduled Native Code for Real-Time Java Applications -- Constraint-Based Design-Space Exploration and Model Synthesis -- Eliminating Stack Overflow by Abstract Interpretation -- Event Correlation: Language and Semantics -- Generating Heap-Bounded Programs in a Functional Setting -- Pre-Scheduling: Integrating Offline and Online Scheduling Techniques.

Sommario/riassunto

This book constitutes the refereed proceedings of the Third International Conference on Embedded Software, EMSOFT 2003, held in Philadelphia, PA, USA in October 2003. The 20 revised full papers presented together with three invited papers were carefully reviewed and selected from 60 submissions. All current topics in embedded software are addressed: formal methods and model-based development, middleware and fault tolerance, modelling and analysis, programming languages and compilers, real-time scheduling, resource-aware systems, and systems on a chip.
