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Descrizione fisica	1 online resource (241 p.)
Collana	Lecture notes in computer science ; ; 5596
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Soggetti	Formal methods (Computer science)
Lingua di pubblicazione	Inglese
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Note generali	Includes index.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Invited Presentations -- Formal Methods for Critical Systems -- Model-Based Verification of Automotive Control Software -- Contract-Based Analysis of Automotive and Avionics Applications: The SPEEDS Approach -- Panel -- Panel Discussion on Formal Methods in Commercial Software Development Tools -- Research Papers -- LETO - A Lustre-Based Test Oracle for Airbus Critical Systems -- Extending Structural Test Coverage Criteria for Lustre Programs with Multi-clock Operators -- Fighting State Space Explosion: Review and Evaluation -- Local Quantitative LTL Model Checking -- Efficient Symbolic Model Checking for Process Algebras -- Reentrant Readers-Writers: A Case Study Combining Model Checking with Theorem Proving -- Using CSP B Components: Application to a Platoon of Vehicles -- Formal Verification of the Implementability of Timing Requirements -- Dynamic Event-Based Runtime Monitoring of Real-Time and Contextual Properties -- Can Flash Memory Help in Model Checking? -- From Informal Requirements to Property-Driven Formal Validation -- Automated Certification of Non-Interference in Rewriting Logic --

Formal Verification of Safety Functions by Reinterpretation of Functional Block Based Specifications -- Using Datalog and Boolean Equation Systems for Program Analysis.

Sommario/riassunto

This book constitutes the thoroughly refereed post-workshop proceedings of the 13th International Workshop on Formal Methods for Industrial Critical Systems, FMICS 2008, held in L'Aquila, Italy, in September 2008 - colocated with ASE 2008, the 23rd International Conference on Automated Software Engineering. The 14 revised full papers presented together with the abstracts of 3 invited presentations and 2 short presentations introducing the panel were carefully selected from 36 initial submissions. The papers strive to promote research and development for the improvement of formal methods and tools for industrial applications. They cover topics such as model checking, testing, software verification, real-time performance, and industrial case studies.
