Record Nr. UNINA9910437760703321 Chen Mingsong Autore Titolo System-level validation: high-level modeling and directed test generation techniques / / Mingsong Chen ... [et al.] New York, : Springer, 2012 Pubbl/distr/stampa **ISBN** 1-283-64017-1 1-4614-1359-1 Descrizione fisica 1 online resource (258 p.) Altri autori (Persone) BlaschErik Disciplina 003.3 Soggetti Information resources management Information technology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references and index. Nota di bibliografia Introduction -- Modeling and Specification of SoC Designs --Nota di contenuto Automated Generation of Directed Tests -- Functional Test Compaction. - Property Clustering and Learning Techniques -- Decision Ordering Based Learning Techniques -- Synchronized Generation of Directed Tests -- Learning-Oriented Property Decomposition Approaches -- Directed Test Generation for Multicore Architectures --Test Generation for Cache Coherence Validation.- Reuse of System-Level Tests for Implementation Validation -- Conclusion. This book covers state-of-the art techniques for high-level modeling Sommario/riassunto and validation of complex hardware/software systems, including those with multicore architectures. Readers will learn to avoid timeconsuming and error-prone validation from the comprehensive coverage of system-level validation, including high-level modeling of designs and faults, automated generation of directed tests, and efficient validation methodology using directed tests and assertions. The methodologies described in this book will help designers to improve the quality of their validation, performing as

much validation as possible in the early stages of the design, while

reducing the overall validation effort and cost.