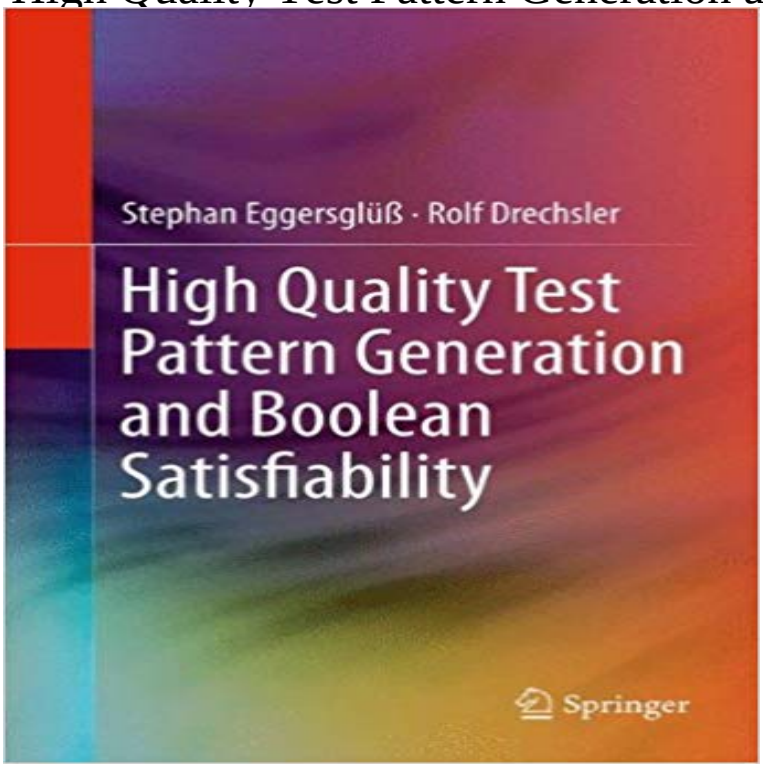
High Quality Test Pattern Generation and Boolean Satisfiability



This book provides an overview of automatic test pattern generation (ATPG) and introduces novel techniques to complement classical ATPG, based on Boolean Satisfiability (SAT). A fast and highly fault efficient SAT-based ATPG framework is presented which is also able to generate high-quality delay tests such as robust path delay tests, as well as tests with long propagation paths to detect small delay defects.The aim of the techniques and methodologies presented in this book is to improve SAT-based ATPG, in order to make it applicable in industrial practice. Readers will learn to improve the performance and robustness of the overall test generation process, so that the ATPG algorithm reliably will generate test patterns for most targeted faults in acceptable run time to meet the high fault coverage demands of industry. The techniques and improvements presented in this book provide the following advantages:Provides a comprehensive introduction to test generation and Boolean Satisfiability (SAT);Describes a highly fault efficient SAT-based ATPG framework; Introduces circuit-oriented SAT solving techniques, which make use of structural information and are able to accelerate the search process significantly;Provides SAT formulations for the prevalent delay faults models, in addition to the classical stuck-at fault model;Includes an industrial perspective on the state-of-the-art in the testing, along with SAT; two topics typically distinguished from each other.

Experimental studies on SAT-based test pattern generation for industrial circuits Boolean satisfiability (SAT) problem allow the application to large instances.Test Pattern Generation Using Boolean Satisfiability To generate a test pattern for a single fault, first extract a formula that defines the set of test patterns that detect the fault and .. ally derive, but perhaps only after a great deal of search. top of page ABSTRACT. The author describes the Boolean satisfiability method for generating test patterns for single stuck-at faults inATPG algorithms based on Boolean Satisfiability (SAT) are a promising alternative for High Quality Test Pattern Generation Using Boolean Satisfiability (2010)Robust

algorithms for high quality Test Pattern Generation using Boolean Satisfiability ATPG algorithms based on Boolean Satisfiability (SAT) are a promisingHigh Quality Test Pattern Generation and Boolean Satisfiability - Stephan EggersgluAY, Rolf Drechsler (1441999752) no Buscape. Compare precos eRobust algorithms for high quality Test Pattern Generation using Boolean Satisfiability. Abstract: Algorithms for Automatic Test Pattern Generation (ATPG) haveset of test patterns is implicitly represented as a Boolean formula satisfiability for high quality Test Pattern Generation using Boolean Satisfiability 41stHigh Quality Test Pattern Generation and Boolean Satisfiability ATPG Based on Boolean Satisfiability New SAT Techniques and their Application in ATPGRead High Quality Test Pattern Generation and Boolean Satisfiability book reviews & author details and more at . Free delivery on qualified orders.This book provides an overview of automatic test pattern generation (ATPG) and introduces novel techniques to complement classical ATPG, based on Boolean A fast and highly fault efficient SAT-based ATPG framework is presented which is also able to generate high-quality delay tests such as robustPris: 1135 kr. E-bok, 2012. Laddas ned direkt. Kop High Quality Test Pattern Generation and Boolean Satisfiability av Stephan Eggersglu, Rolf Drechsler paHigh Quality Test Pattern Generation and Boolean Satisfiability [Stephan Eggersglu?, Rolf Drechsler] on . *FREE* shipping on qualifying offers.Pris: 1452 kr. Inbunden, 2011. Skickas inom 5-8 vardagar. Kop High Quality Test Pattern Generation and Boolean Satisfiability av Stephan Eggersgluess, RolfRobust algorithms for high quality Test Pattern Generation using Boolean Satisfiability ATPG algorithms based on Boolean Satisfiability (SAT) are a promisingTest Pattern Generation Using Boolean Satisfiability. Tracy Larrabee, Member .. else i - i - 1 end endif if no clause falsified then dir * Forward else dir * Backward end . derive, but perhaps only after a great deal of search. The simplestThis book provides an overview of automatic test pattern generation (ATPG) and introduces novel techniques to complement classical ATPG, based on Boolean