Record Nr. UNISA996465485203316 Formal Hardware Verification [[electronic resource]]: Methods and Titolo Systems in Comparison / / edited by Thomas Kropf Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, . 1997 **ISBN** 3-540-69577-X Edizione [1st ed. 1997.] 1 online resource (XII, 376 p.) Descrizione fisica Collana Lecture Notes in Computer Science, , 0302-9743 ; ; 1287 Disciplina 621.39/5 Soggetti Computer engineering Computer hardware Computer logic Mathematical logic Computer Engineering Computer Hardware Logics and Meanings of Programs Mathematical Logic and Formal Languages Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Symbolic trajectory evaluation -- Automated verification with abstract Nota di contenuto state machines using multiway decision graphs -- Design verification using Synchronized Transitions -- Hardware verification using PVS --Verifying VHDL designs with COSPAN -- The C@S system: Combining proof strategies for system verification -- Appendix: The common book examples. This state-of-the-art monograph presents a coherent survey of a Sommario/riassunto variety of methods and systems for formal hardware verification. It emphasizes the presentation of approaches that have matured into tools and systems usable for the actual verification of nontrivial circuits. All in all, the book is a representative and well-structured survey on the success and future potential of formal methods in proving the correctness of circuits. The various chapters describe the respective approaches supplying theoretical foundations as well as

taking into account the application viewpoint. By applying all methods

and systems presented to the same set of IFIP WG10.5 hardware verification examples, a valuable and fair analysis of the strenghts and weaknesses of the various approaches is given.