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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Background -- Challenges of SCA-based Verification -- Local Vanishing Monomials Removal -- Reverse Engineering -- Dynamic Backward Rewriting -- SCA-based Verifier RevSCA-2.0 -- Debugging -- Conclusion and Outlook.
Sommario/riassunto	This book addresses the challenging tasks of verifying and debugging structurally complex multipliers. In the area of verification, the authors first investigate the challenges of Symbolic Computer Algebra (SCA)-based verification, when it comes to proving the correctness of multipliers. They then describe three techniques to improve and extend SCA: vanishing monomials removal, reverse engineering, and dynamic backward rewriting. This enables readers to verify a wide variety of multipliers, including highly complex and optimized industrial benchmarks. The authors also describe a complete debugging flow, including bug localization and fixing, to find the location of bugs in

structurally complex multipliers and make corrections. Provides extensive introduction to the field of Symbolic Computer Algebra (SCA) and its application to multiplier verification; Discusses the challenges of SCA-based verification when it comes to proving the correctness of structurally complex multipliers; Describes three techniques to improve and extend SCA for the verification of structurally complex multipliers; Introduces a complete debugging flow to localize and fix bugs in structurally complex multipliers.