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Altri autori (Persone)	GoswamiMrinal KumarManoj RajputNavin Singh
Disciplina	621.3815
Soggetti	Electronic circuits Embedded computer systems Electronic circuit design Electronic Circuits and Systems Embedded Systems Electronics Design and Verification
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Nota di contenuto	Introduction to Hardware Security -- Role of Artificial Intelligence in Hardware Security -- Towards Transistor-less Computation: Key Attributes & Challenges -- Hardware Security in IoT Paradigm -- Structure for implementation of Hardware Security in IoT Devices -- Hardware Security in Healthcare Industry -- Emerging Trends and Future Directions in Hardware Security -- Reverse Engineering Techniques for Cyber-Physical Systems Security -- Hardware Security in Automotive Systems -- Secure Boot and Secure Firmware using Trusted Platform Modules (TPMs) -- Side-Channel Attacks and Countermeasures -- Blockchain-Enabled Hardware Security -- Fault Attacks and Potential Countermeasures -- Hardware Security Verification and Validation -- Hardware Security Threats and Attacks in Smart City Scenarios.
Sommario/riassunto	This book provides a comprehensive overview of hardware security

challenges and solutions, making it an essential resource for engineers, researchers, and students in the field. The authors cover a wide range of topics, from hardware design and implementation to attack models and countermeasures. They delve into the latest research and industry practices in the field, including techniques for secure chip design, hardware Trojan detection, side-channel attack mitigation, the threats and vulnerabilities facing modern hardware, the design and implementation of secure hardware, and the latest techniques for testing and verifying the security of hardware systems. The book also covers emerging technologies such as quantum computing and the Internet of Things, and their impact on hardware security. With its practical approach and extensive coverage of the subject, this book is an ideal reference for anyone working in the hardware security industry. Covers hardware security topic including design, implementation, vulnerabilities, attack methods and countermeasures; Includes real case studies that illustrate the challenges and solutions in hardware security; Offers practical guidance on how to implement hardware security measures in realistic scenarios.
