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Descrizione fisica	1 online resource (839 pages)
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Soggetti	Electronic circuits Computer engineering Internet of things Embedded computer systems Microprocessors Circuits and Systems Cyber-physical systems, IoT Processor Architectures
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
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Nota di contenuto	Introduction -- Information weapon: concepts, means, methods and examples of application -- Computer Viruses, Malicious Logic and Spyware -- Hardware Trojans in Electronic Devices -- Hardware Trojans in Microcircuits -- Methods of Identification of Hardware Trojans in Integrated Circuits -- Reverse Engineering of Integrated Circuits -- Methods of counteracting hardware IC Trojans -- Is the Trojan phenomenon a new stage in the evolution of modern weapons?.
Sommario/riassunto	This book provides readers with a valuable reference on cyber weapons and, in particular, viruses, software and hardware Trojans. The authors discuss in detail the most dangerous computer viruses, software Trojans and spyware, models of computer Trojans affecting computers, methods of implementation and mechanisms of their interaction with an attacker — a hacker, an intruder or an intelligence agent. Coverage includes Trojans in electronic equipment such as telecommunication

systems, computers, mobile communication systems, cars and even consumer electronics. The evolutionary path of development of hardware Trojans from "cabinets", "crates" and "boxes" to the microcircuits (IC) is also discussed. Readers will benefit from the detailed review of the major known types of hardware Trojans in chips, principles of their design, mechanisms of their functioning, methods of their introduction, means of camouflaging and detecting, as well as methods of protection and counteraction. Describes the evolution of hardware Trojans from "cabinets", "boxes" and "cases" to advanced circuits; Discusses both software and hardware Trojans, the principles of their design, the mechanisms of functioning, the methods of detection, the methods of masking them, the methods of prevention and protection; Presents complex topics using simple language, minimizing mathematics.

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