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Titolo	Fault-Tolerant Design // by Elena Dubrova
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ISBN	1-4614-2113-6
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (XV, 185 p.)
Disciplina	620/.00452
Soggetti	Electronic circuits Computer software—Reusability Electronics Microelectronics Circuits and Systems Performance and Reliability Electronics and Microelectronics, Instrumentation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Fundamentals of Dependability -- Dependability Evaluation Techniques -- Hardware Redundancy -- Information Redundancy -- Time Redundancy -- Software Redundancy -- Conclusion.
Sommario/riassunto	This textbook serves as an introduction to fault-tolerance, intended for upper-division undergraduate students, graduate-level students and practicing engineers in need of an overview of the field. Readers will develop skills in modeling and evaluating fault-tolerant architectures in terms of reliability, availability and safety. They will gain a thorough understanding of fault tolerant computers, including both the theory of how to design and evaluate them and the practical knowledge of achieving fault-tolerance in electronic, communication and software systems. Coverage includes fault-tolerance techniques through hardware, software, information and time redundancy. The content is designed to be highly accessible, including numerous examples and exercises. Solutions and powerpoint slides are available for instructors. . Provide <ul style="list-style-type: none"> <li>Describes a variety of basic techniques for achieving fault-</li> </ul>

tolerance in electronic, communication and software systems;

- Guides readers to develop skills in modeling and evaluating fault-tolerant architectures in terms of reliability, availability and safety;
- Describes in detail sources of faults and means for their prevention and forecasting.

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