

1. Record Nr.	UNINA9910299744903321
Autore	Mathew Jimson
Titolo	Energy-efficient fault-tolerant systems // Jimson Mathew, Rishad A. Shafik, Dhiraj K. Pradhan, editors
Pubbl/distr/stampa	New York : , : Springer, , 2014
ISBN	1-4614-4193-5
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (xiv, 335 pages) : illustrations (some color)
Collana	Embedded Systems
Disciplina	006.22 621.39/5/0287
Soggetti	Integrated circuits - Fault tolerance
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Evolution of Fault Tolerant Design -- Fault and Reliability Models -- Energy Efficient Design Techniques -- Error Correction Coding -- System-level Reliable Design -- Fault Tolerant -- Finite Field Arithmetic Circuit Design and Testing Techniques -- Reliable Network-on-Chip Architectures -- Energy Efficient Reconfigurable Systems -- Bio-Inspired Online Fault Detection in NoC Interconnect -- Fault-tolerant dynamically reconfigurable NoC-based SoC.
Sommario/riassunto	This book describes the state-of-the-art in energy efficient, fault-tolerant embedded systems. It covers the entire product lifecycle of electronic systems design, analysis and testing and includes discussion of both circuit and system-level approaches. Readers will be enabled to meet the conflicting design objectives of energy efficiency and fault-tolerance for reliability, given the up-to-date techniques presented. <ul style="list-style-type: none"> · Provides embedded systems designers with state-of-the-art solutions to the conflicting problems of energy efficiency and fault-tolerance for reliability; · Covers the entire product lifecycle of electronic systems design, analysis and testing and includes discussion of both circuit and system-level approaches; · Includes discussion of emerging issues related to technology scaling, next generation memory and logic design.