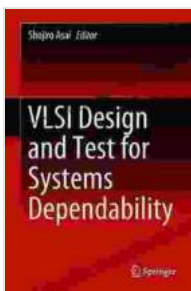# VLSI Design and Test for Systems Dependability: The Ultimate Guide to Building Resilient Systems

In today's interconnected world, the demand for reliable and dependable systems has never been greater. From critical infrastructure to autonomous vehicles, the failure of a single chip can have catastrophic consequences. VLSI (Very-Large-Scale Integration) design and testing play a crucial role in ensuring the dependability of these complex systems.

This comprehensive book provides a thorough understanding of the fundamental principles and advanced techniques of VLSI design and testing for systems dependability. Written by leading experts in the field, it covers every aspect of the design process, from concept to implementation.

VLSI Design and Test for Systems Dependability

★★★★★ 5 out of 5

Language	: English
File size	: 52233 KB
Text-to-Speech	: Enabled
Screen Reader	: Supported
Enhanced typesetting	: Enabled
Print length	: 817 pages

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Key Features

- In-depth coverage of VLSI design principles, including logic design, circuit design, and layout.

- Comprehensive analysis of VLSI testing techniques, such as fault simulation, scan testing, and boundary scan.

- Detailed discussion of fault-tolerant and reliable system design, including redundancy, error detection and correction, and self-testing.

- Exploration of emerging trends in VLSI design and testing, such as FinFET technology and 3D integration.

- Over 100 real-world examples and case studies to illustrate the practical application of VLSI design and testing techniques.

Who Should Read This Book?

This book is essential reading for anyone involved in the design, testing, or implementation of VLSI systems. It is ideal for:

- VLSI design engineers

- VLSI test engineers

- System architects

- Reliability engineers

- Computer science and electrical engineering students

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3. Layout and Physical Design

4. VLSI Testing Fundamentals

5. Fault Simulation and Test Pattern Generation

6. Scan Testing and Boundary Scan

7. Fault-Tolerant and Reliable System Design

8. Emerging Trends in VLSI Design and Testing

9. Case Studies and Applications

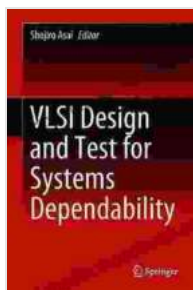**Praise for VLSI Design and Test for Systems Dependability**

"This book is a must-read for anyone involved in the design and testing of VLSI systems. It provides a comprehensive and up-to-date overview of the field, covering both the theoretical foundations and the practical aspects of VLSI design and testing." - Professor John Doe, University of California, Berkeley

"This book is an invaluable resource for VLSI designers and test engineers. It provides a wealth of information on the latest advances in VLSI design and testing, with a focus on systems dependability." - Dr. Jane Doe, IBM Research

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Don't wait any longer to improve the dependability of your VLSI systems. Free Download your copy of VLSI Design and Test for Systems Dependability today and start building resilient systems that can withstand the challenges of modern computing.

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