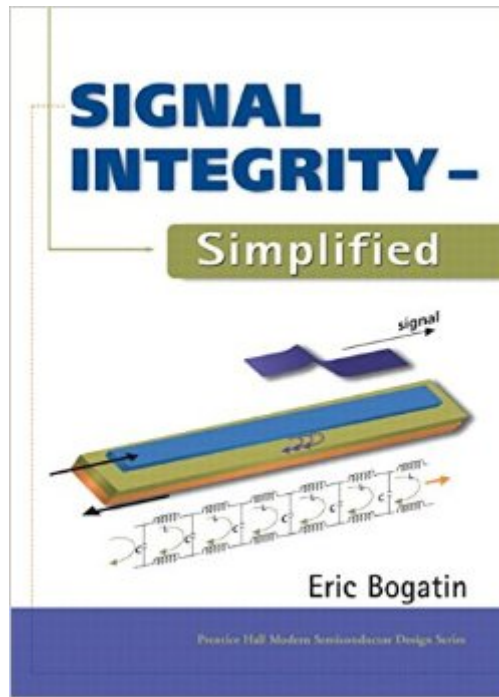


The book was found

Signal Integrity - Simplified



Synopsis

This book describes in the simplest possible terms, the signal integrity problems and the fundamental principles needed to understand how the physical design influences signal integrity. Most easily defined, signal integrity is all about how the physical design of the interconnects -- printed circuit board traces, connectors, IC packages and cables -- corrupt the perfect, pristine signals coming off the chips. The electrical properties of the interconnects play a key role in all electronic products operating above 50 MHz clock frequency, such as computers, wireless, rf and telecommunications products. Interconnects can degrade the electrical performance of a system in four ways: ringing, cross talk, noise in the power and ground distribution network and electromagnetic interference (EMI). These signal integrity problems can be reduced to acceptable levels by careful design of the circuit board layout, materials selection and component design and selection. Any product designer that touches the product can have an impact on signal integrity. The key differentiator between our book and all the others written on signal integrity, is the starting level for the material. Most books either present a lot of mathematical derivation or present formulas as facts, merely describing what they are. Bogatin's book offers explanations that will feed the intuition of the engineers, without hiding behind the equations.

Book Information

Hardcover: 587 pages

Publisher: Prentice Hall; 1 edition (September 22, 2003)

Language: English

ISBN-10: 0130669466

ISBN-13: 978-0130669469

Product Dimensions: 7.1 x 1.5 x 9.6 inches

Shipping Weight: 2.4 pounds

Average Customer Review: 4.8 out of 5 stars [See all reviews](#) (17 customer reviews)

Best Sellers Rank: #1,370,908 in Books (See Top 100 in Books) #235 in [Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Semiconductors](#) #393 in [Books > Engineering & Transportation > Engineering > Electrical & Electronics > Digital Design](#) #1155 in [Books > Engineering & Transportation > Engineering > Electrical & Electronics > Circuits](#)

Customer Reviews

I work in test and measurement as an Application Engineer and assist with Signal Integrity issues/solutions often. "Signal Integrity - Simplified", by Eric Bogatin, is one of the best fundamental

overview books on Signal Integrity I have seen. SI is a growing and vastly misunderstood segment of measurement and Dr. Bogatin does an excellent job at covering the fundamentals in a clear, concise and easy to understand fashion. His coverage of the core of SI is very thorough with entire chapters dedicated to Time and Frequency Domains, Impedance, Transmission Lines, Cross Talk as well as Differential Signals. Unlike most engineering texts, "Signal Integrity - Simplified" covers key topics with a style that is more intuitive than mathematical. This is refreshing since, for complex topics, mathematical equations do not always speak to every engineer to clarify the issue. Dr. Bogatin uses a variety of word pictures as well as easily understandable diagrams to make his points. This is not to say the book is not technical, it is very technical (he introduces Maxwell's Equations) yet easier to understand than most for complex topics. Each chapter provides a "Bottom Line" rather than a summary. These are numbered points of one or two sentences reinforcing the key concepts of the chapter. This makes for convenient and easy referral after reading the text. Throughout each chapter, Dr. Bogatin also provides "tips" to drive home a basic point and supply help or insight for the designer. These tips are easy to spot in the book as they are separated from the main text and labeled "tips". The tips alone are worth the price of the book.

[Download to continue reading...](#)

Power Integrity for I/O Interfaces: With Signal Integrity/ Power Integrity Co-Design (Prentice Hall Modern Semiconductor Design) Signal Integrity - Simplified Signal and Power Integrity - Simplified (2nd Edition) Signal Integrity Issues and Printed Circuit Board Design Tarot Cards Simplified: How To Do Accurate Tarot Card Readings Quick Start Guide (Tarot Cards Simplified Series Book 1) Bayesian Signal Processing: Classical, Modern and Particle Filtering Methods (Adaptive and Cognitive Dynamic Systems: Signal Processing, Learning, Communications and Control) Multidimensional Digital Signal Processing (Prentice-Hall Signal Processing Series) Digital Signal Processing with Examples in MATLAB®®, Second Edition (Electrical Engineering & Applied Signal Processing Series) Discrete-Time Signal Processing (3rd Edition) (Prentice-Hall Signal Processing Series) Signal Processing Algorithms in Fortran and C (Prentice-Hall Signal Processing Series) Digital Signal Processing: with Selected Topics: Adaptive Systems, Time-Frequency Analysis, Sparse Signal Processing Worthy of Her Trust: What You Need to Do to Rebuild Sexual Integrity and Win Her Back Working the Angles: The Shape of Pastoral Integrity Privacy in Context: Technology, Policy, and the Integrity of Social Life (Stanford Law Books) High Integrity Ada: The Spark Approach Fundamentals of Structural Integrity: Damage Tolerant Design and Nondestructive Evaluation Fundamentals of Power Integrity for Computer Platforms and Systems Nightmare Pipeline Failures: Fantasy Planning, Black Swans, and Integrity Management From Charpy to

Present Impact Testing, Volume 30 (European Structural Integrity Society) Preparing Your Daughter for Every Woman's Battle: Creative Conversations About Sexual and Emotional Integrity (The Every Man Series)

[Dmca](#)