



The book was found

Phaselock Techniques



Synopsis

A greatly revised and expanded account of phaselock technology The Third Edition of this landmark book presents new developments in the field of phaselock loops, some of which have never been published until now. Established concepts are reviewed critically and recommendations are offered for improved formulations. The work reflects the author's own research and many years of hands-on experience with phaselock loops. Reflecting the myriad of phaselock loops that are now found in electronic devices such as televisions, computers, radios, and cell phones, the book offers readers much new material, including:

- * Revised and expanded coverage of transfer functions
- * Two chapters on phase noise
- * Two chapters examining digital phaselock loops
- * A chapter on charge-pump phaselock loops
- * Expanded discussion of phase detectors and of oscillators
- * A chapter on anomalous phaselocking
- * A chapter on graphical aids, including Bode plots, root locus plots, and Nichols charts

As in the previous editions, the focus of the book is on underlying principles, which remain valid despite technological advances. Extensive references guide readers to additional information to help them explore particular topics in greater depth. Phaselock Techniques, Third Edition is intended for practicing engineers, researchers, and graduate students. This critically acclaimed book has been thoroughly updated with new information and expanded for greater depth.

Book Information

Hardcover: 450 pages

Publisher: Wiley-Interscience; 3 edition (July 29, 2005)

Language: English

ISBN-10: 0471430633

ISBN-13: 978-0471430636

Product Dimensions: 6.5 x 1.1 x 9.3 inches

Shipping Weight: 1.7 pounds (View shipping rates and policies)

Average Customer Review: 4.2 out of 5 stars 16 customer reviews

Best Sellers Rank: #702,447 in Books (See Top 100 in Books) #145 in Books > Science & Math > Physics > Waves & Wave Mechanics #612 in Books > Engineering & Transportation > Engineering > Electrical & Electronics > Circuits #2147 in Books > Engineering & Transportation > Engineering > Telecommunications & Sensors

Customer Reviews

"I believe it is a must on the bookshelf of everybody working with PLLs." (IEEE Communications

Magazine, October 2007)

Great expanded and largely rewritten, presenting much new and novel material--some published for the first time. Reviews fundamentals and discusses underlying problems faced by designers; presents information that deals with practical aspects of component circuits and rational procedures for deciding upon phaselock loop parameters; provides engineering descriptions and analyses of phaselock applications. Includes unique discussions of phaselocked modulations, and demodulators, treatment of synthesizers, receivers, transponders, oscillator stabilizers, and data synchronizers. --This text refers to an out of print or unavailable edition of this title.

I would say that this book is geared for those with at least some experience with designing PLL systems. I originally picked up this book to learn a few things about PLLs. While this book did provide me with quite a bit of knowledge that I did not know before, I have yet to actually design a PLL on my own. On the other hand, I know a lot more of the pros, cons, and limitations of PLLs which are helpful for my job. I think the sections that stand out the most to me are its two chapters concerning phase noise. First, it gives a basic overview of what phase noise is and its sources. It then goes on to do some comparisons of various types oscillators and their general phase noise characteristics. And of course, since we are talking about PLLs, how designing the close loop system will affect total system phase noise. He even describes (at a high level at least) how phase noise is changed in various RF type elements (mixers, freq multipliers, limiters). If I have questions about phase noise, this is the book that I grab. I haven't read the sections concerning the digital PLLs, but the coverage on analog PLLs seems in depth. This leads to another nice thing about this book, and that is each chapter is rather self contained, so you can pick and choose to read what portions you think are applicable to your needs. I will be reading the PLL digital sections shortly! All in all, this is a good book to learn about PLLs, but it may be useful to brush up on your control systems theory first to get the most out of this book.

How do you review a classic? This book is the first and last word on frequency synthesis, everything else is commentary. Still the basis for modern synthesizers.

Well known book from a well known author. Derivations are easy to follow and the writing style is clear. Lots of math, but this is PLL...May be a longer chapter devote to charge pump devices would be OK.

Very good book with plenty of mathematical details concerning the frequency response and the tracking error.

Still the classic text on the subject.

This book is dense and largely mathematical, and provides scant little practical insight. Good as a reference, but not to learn from IMO. Roland Best's "Phase Locked Loops" has a much better balance of readability to mathematical derivation, and he also tries to give the reader an intuition as to what is happening, which illuminates the equations so much better!

great new book.

Superb book. Essential reading and reference for any serious PLL designer. This updated edition does for DPLLs what the original did for analog. I haven't seen any author come close to Gardner for comprehensive, accurate treatment of these topics.

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

Phaselock Techniques The Phaselock Code: Through Time, Death and Reality: The Metaphysical Adventures of Man His Forge Burns Hot for Mosaic Damascus: Knife Patterns & Techniques: Damascus pattern making & techniques. Learn how to make mosaic Damascus patterns ... techniques for making Damascus patterns. Painting: Techniques for Beginners to Watercolor Painting, Painting Techniques and How to Paint (Painting, Oil Painting, Acrylic Painting, Water Color Painting, Painting Techniques Book 3) Basic Figure Drawing Techniques (Basic Techniques) All About Techniques in Pastel (All About Techniques Art Series) The Encyclopedia of Pastel Techniques: A Comprehensive A-Z Directory of Pastel Techniques and a Step-by-Step Guide to Their Use All About Techniques in Airbrush (All About Techniques Series) 222 Love Techniques to Make Any Man Fall in Love With You & Get Your Ex Back. Learn The Rules and Secret Laws of Enchantment: 222 Love Techniques to Get Your Ex Back and Make Him Miss You GUITAR: Guitar Lessons For Beginners, Simple Guide Through Easy Techniques, How To (Guitar, Beginners, Easy Techniques, Fretboard) Principles & Techniques of Patient Care, 4e (Principles and Techniques of Patient Care) Operative Techniques in Foot and Ankle Surgery (Operative Techniques in Orthopaedic Surgery) Rock Lead Techniques: Techniques, Scales and Fundamentals for Guitar (Musicians Institute Press) PENIS ENLARGEMENT: The porn industry's secret penis

enlargement techniques. Natural, proven methods, exercises & tips on how to add several inches and ... impotence, techniques, natural) Positional Release Techniques with DVD-ROM, 3e (Advanced Soft Tissue Techniques) Compendium of Acrylic Painting Techniques: 300 Tips, Techniques and Trade Secrets Basic People Painting: Techniques in Watercolor (Basic Techniques) Acrylic Painting: Masterful Techniques for How to Paint, Portrait Painting and Landscape Painting (Painting, Oil Painting, Acrylic Painting, Water Color Painting, Painting Techniques Book 1) Encyclopedia Of Mosaic Techniques: A Step-by-step Visual Directory, With An Inspirational Gallery Of Finished Works (Encyclopedia of Art Techniques) Flash Techniques for Location Portraiture: Single and Multiple-Flash Lighting Techniques

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)