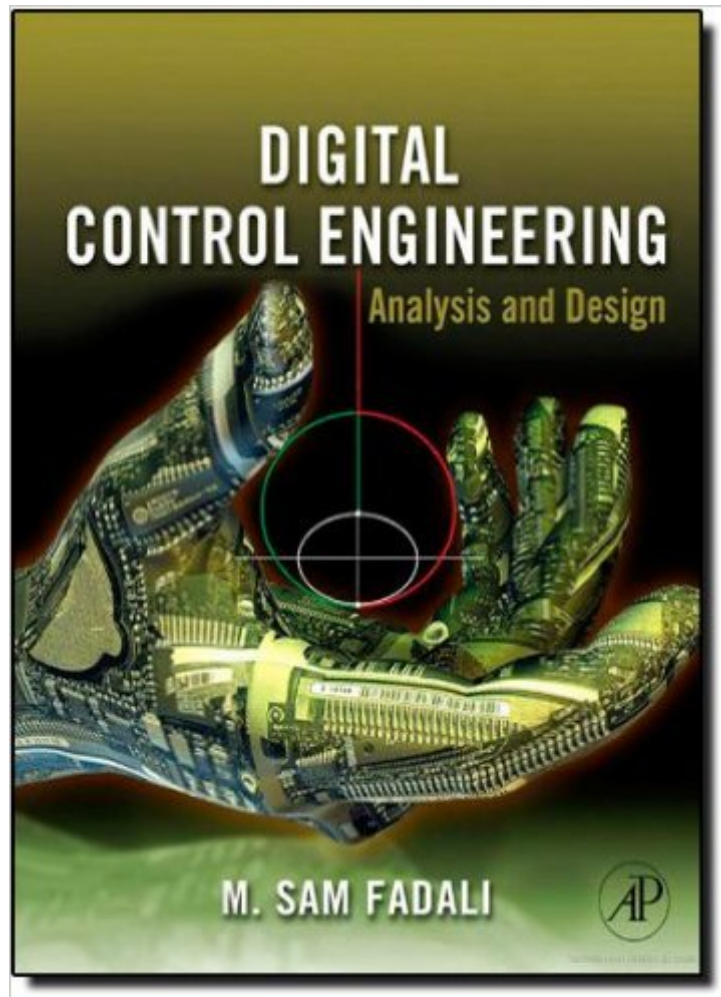


The book was found

# Digital Control Engineering: Analysis And Design



## Synopsis

Digital controllers are part of nearly all modern personal, industrial, and transportation systems. Every senior or graduate student of electrical, chemical or mechanical engineering should therefore be familiar with the basic theory of digital controllers. This new text covers the fundamental principles and applications of digital control engineering, with emphasis on engineering design. Extensive Use of computational tools: Matlab sections at end of each chapter show how to implement concepts from the chapter. Frees the student from the drudgery of mundane calculations and allows him to consider more subtle aspects of control system analysis and design. An engineering approach to digital controls: emphasis throughout the book is on design of control systems. Mathematics is used to help explain concepts, but throughout the text discussion is tied to design and implementation. For example coverage of analog controls in chapter 5 is not simply a review, but is used to show how analog control systems map to digital control systems. Review of Background Material: contains review material to aid understanding of digital control analysis and design. Examples include discussion of discrete-time systems in time domain and frequency domain (reviewed from linear systems course) and root locus design in s-domain and z-domain (reviewed from feedback control course). Inclusion of Advanced Topics In addition to the basic topics required for a one semester senior/graduate class, the text includes some advanced material to make it suitable for an introductory graduate level class or for two quarters at the senior/graduate level. Examples of optional topics are state-space methods, which may receive brief coverage in a one semester course, and nonlinear discrete-time systems. Minimal Mathematics Prerequisites The mathematics background required for understanding most of the book is based on what can be reasonably expected from the average electrical, chemical or mechanical engineering senior. This background includes three semesters of calculus, differential equations and basic linear algebra. Some texts on digital control require more mathematical maturity and are therefore beyond the reach of the typical senior.

## Book Information

Hardcover: 552 pages

Publisher: Academic Press; 1 edition (February 16, 2009)

Language: English

ISBN-10: 0123744989

ISBN-13: 978-0123744982

Product Dimensions: 9.2 x 7.5 x 1.3 inches

Shipping Weight: 2.4 pounds

Average Customer Review: 3.5 out of 5 stars Â Â See all reviewsÂ (2 customer reviews)

Best Sellers Rank: #592,846 in Books (See Top 100 in Books) #61 inÂ Books > Engineering & Transportation > Engineering > Design #194 inÂ Books > Engineering & Transportation > Engineering > Electrical & Electronics > Digital Design #473 inÂ Books > Engineering & Transportation > Engineering > Industrial, Manufacturing & Operational Systems > Robotics & Automation

## Customer Reviews

This is by far one of the best engineering text books I have used. Its full of examples and its very easy to follow it

I bought this book for a class and there is a ton of errors in example problems as well as other places in the book. My teacher had to provide us with a large pdf of book corrections.

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

Digital Control Engineering: Analysis and Design Digital Control System Analysis and Design (3rd Edition) Digital Control System Analysis & Design (4th Edition) Fotografia Submarina / Underwater Photography: Tecnicas Fotograficas / Digital and Traditional Techniques (Ocio Digital / Leisure Digital) (Spanish Edition) Measuring the Digital World: Using Digital Analytics to Drive Better Digital Experiences (FT Press Analytics) Chemical Engineering Design and Analysis: An Introduction (Cambridge Series in Chemical Engineering) G.Dieter's Li.Schmidt's Engineering 4th (Fourth) edition(Engineering Design (Engineering Series) [Hardcover])(2008) NLP: Neuro Linguistic Programming: Re-program your control over emotions and behavior, Mind Control - 3rd Edition (Hypnosis, Meditation, Zen, Self-Hypnosis, Mind Control, CBT) Digital Control Systems (The Oxford Series in Electrical and Computer Engineering) Algorithms: C++: Data Structures, Automation & Problem Solving, w/ Programming & Design (app design, app development, web development, web design, jquery, ... software engineering, r programming) Handbook of Networked and Embedded Control Systems (Control Engineering) Feng Shui: Wellness and Peace- Interior Design, Home Decorating and Home Design (peace, home design, feng shui, home, design, home decor, prosperity) Control Engineering, 2nd Edition (Tutorial Guides in Electronic Engineering) Wind Turbine Control Systems: Principles, Modelling and Gain Scheduling Design (Advances in Industrial Control) Model Predictive Control System Design and Implementation Using MATLAB® (Advances in Industrial Control) VLSI Design Techniques for Analog and Digital Circuits

(McGraw-Hill Series in Electrical Engineering) Analysis and Design of Digital Integrated Circuits  
CMOS Digital Integrated Circuits Analysis & Design Face Image Analysis by Unsupervised Learning  
(The Kluwer International Series in Engineering and Computer Science, Volume 612) (The Springer  
International Series in Engineering and Computer Science) Matrix Analysis of Structural Dynamics:  
Applications and Earthquake Engineering (Civil and Environmental Engineering)

[Dmca](#)