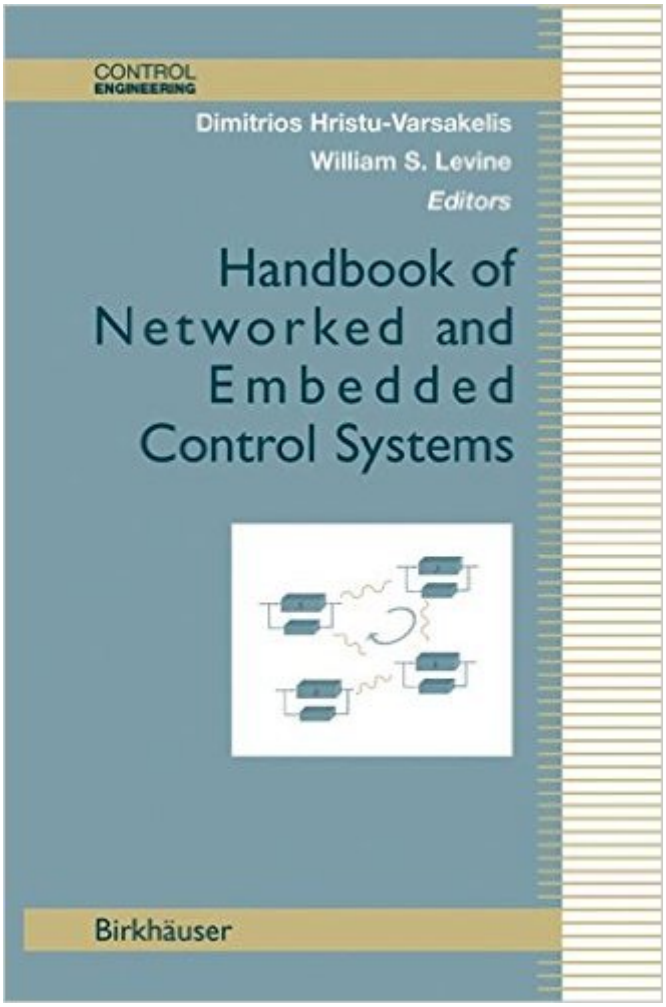
Handbook Of Networked And Embedded Control Systems (Control Engineering)



Synopsis

The vast majority of control systems built today are embedded; that is, they rely on built-in, special-purpose digital computers to close their feedback loops. Embedded systems are common in aircraft, factories, chemical processing plants, and even in carsâ “a single high-end automobile may contain over eighty different computers. The design of embedded controllers and of the intricate, automated communication networks that support them raises many new questionsâ •practical, as well as theoreticalâ •about network protocols, compatibility of operating systems, and ways to maximize the effectiveness of the embedded hardware. This handbook, the first of its kind, provides engineers, computer scientists, mathematicians, and students a broad, comprehensive source of information and technology to address many questions and aspects of embedded and networked control. Separated into six main sectionsâ •Fundamentals, Hardware, Software, Theory, Networking, and Applicationsâ •this work unifies into a single reference many scattered articles, websites, and specification sheets. Also included are case studies, experiments, and examples that give a multifaceted view of the subject, encompassing computation and communication considerations.

Book Information

Series: Control Engineering

Hardcover: 822 pages

Publisher: BirkhÃƒÂ¤user; 1st ed. 2005. Corr. 2nd printing 2008 edition (June 10, 2008)

Language: English

ISBN-10: 0817632395

ISBN-13: 978-0817632397

Product Dimensions: 6.1 x 1.8 x 9.2 inches

Shipping Weight: 2.8 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 starsÂ Â See all reviewsÂ (1 customer review)

Best Sellers Rank: #1,715,737 in Books (See Top 100 in Books) #111 inÂ Books > Computers & Technology > Hardware & DIY > Microprocessors & System Design > Control Systems #190 inÂ Books > Computers & Technology > Hardware & DIY > Microprocessors & System Design > Embedded Systems #834 inÂ Books > Computers & Technology > Computer Science > Robotics

Customer Reviews

This is a very goog book that covers essential topics from fundamentals to applications of networked and embedded systems with theories and up-to-date techniques. In particular, I like the chapters of "Bluetooth in Control" and "Embedded sensor networks". Plus the chapters giving

fundamentals and theories, it is worthy!

Handbook of Networked and Embedded Control Systems (Control Engineering) Design Patterns for Embedded Systems in C: An Embedded Software Engineering Toolkit Applied Control Theory for Embedded Systems (Embedded Technology) DSP Software Development Techniques for Embedded and Real-Time Systems (Embedded Technology) Embedded Systems Architecture: A Comprehensive Guide for Engineers and Programmers (Embedded Technology) Analog Interfacing to Embedded Microprocessor Systems, Second Edition (Embedded Technology Series) Real-Time UML Workshop for Embedded Systems, Second Edition (Embedded Technology) Real-time Operating Systems (The engineering of real-time embedded systems Book 1) Spreadable Media: Creating Value and Meaning in a Networked Culture (Postmillennial Pop) by Jenkins, Henry, Ford, Sam, Green, Joshua (2013) Party On!: Political Parties from Hamilton and Jefferson to Today's Networked Age Multiplayer Game Programming: Architecting Networked Games (Game Design) Beyond E-Business: Towards networked structures Networked Life Linux for Embedded and Real-time Applications, Third Edition (Embedded Technology) Linux for Embedded and Real-time Applications (Embedded Technology) Linux for Embedded and Real-time Applications, Second Edition (Embedded Technology) Real-Time Embedded Components and Systems with Linux and RTOS (Engineering) TCP/IP Embedded Internet Applications (Embedded Technology) Embedded Systems Security: Practical Methods for Safe and Secure Software and Systems Development Introduction to Embedded Systems: Using ANSI C and the Arduino Development Environment (Synthesis Lectures on Digital Circuits and Systems)