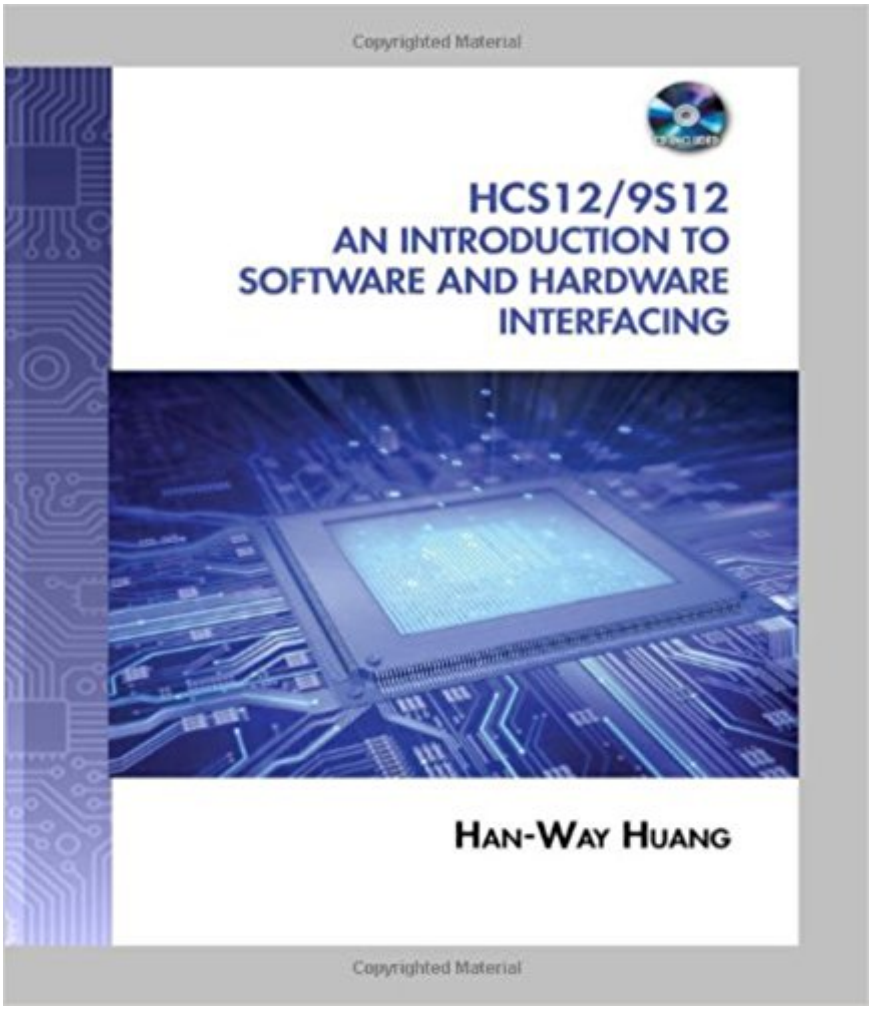
The HCS12 / 9S12: An Introduction To Software And Hardware Interfacing



Synopsis

This new book provides a total solution for learning and teaching embedded system design based on the Freescale HCS12/9S12 microcontroller. Readers will learn step-by-step how to program the HCS12 using both assembly and C languages, as well as how to use such development tools as CodeWarrior, ImageCraft ICC12, MiniIDE, GNU C, and EGNU IDE. Supportive examples clearly illustrate all applications of the HCS12 peripheral functions, including parallel port, timer functions, PWM, UART port, SPI, I2C, CAN, on-chip flash and EEPROM programming, external memory expansion, and more. New sections on C programming style, software development methodology, and software reuse have been added in theis revision. A back-of-book CD contains the source code for all examples in the book, several groups of reusable utility functions, and complimentary freeware development tools for improved learning.

Book Information

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Customer Reviews

Han-Way Huang is a Professor in the Department of Electrical and Computer Engineering and Technology at Minnesota State University, Mankato. A member of both IEEE and ASEE, he has 25 years of teaching experience in microprocessors and microcontrollers. A well-respected author, he has also written THE HCS12/9S12: AN INTRODUCTION TO HARDWARE AND SOFTWARE (Delmar Learning), EMBEDDED SYSTEM DESIGN WITH M8051 (Cengage Engineering), THE PIC MICROCONTROLLER: AN INTRODUCTION TO SOFTWARE AND INTERFACING (Delmar Learning), THE HC12 MICROCONTROLLER: AN INTRODUCTION (Delmar Learning), and THE

HC11 MICROCONTROLLER: AN INTRODUCTION (Delmar Learning). Dr. Huang earned an MS and Ph.D. in Computer Engineering from Iowa State University and the BSEE degree from National Taiwan University.

The only reason I did not give this book five stars is due to the price. It is an expensive book, and it is one which I was required to buy for one of my classes. If you expect to open the book and be able to copy code from it into an IDE, compile, and use it, then this is not the book to get. However, if you want to learn about the underlying hardware of a CPU, and how everything from interrupts to analog to digital conversion is accomplished on the HCS12, I do not think there is a better book. There are examples available within the book, catered to a variety of HCS12 based microcontrollers, however, some of them use definitions which are defined on the author's included CD, which I did not make much use of. The content of this book is spectacular, and I can honestly say I have learned a lot about how processors actually function through reading it.

For you who are starting in embedded systems, a good choice.

No CD

Very good book but the price is Expensive. if you want to work with HCS12 Microcontroler by this book or the HSC12 by Mazidi,and if you want good kit to work on by the Dragon12 board is so good.the shipping interval was 18 Days.

Great explanations and examples.

good thanks

...so it's not going to be very exciting. But if you need a solid explanation of how the HCS12 works and how to make it do what you need it to, this is as good a resource as any.

I would recommend this book to anybody new to microcontrollers or the HCS12 family. The book does a great job of covering programming of the HCS12 in assembly and C. There are plenty of examples in the book and included on the CD-ROM to guide you along. Additionally, the book provides a basic guide to the C language and the use of several different compilers. Out of all of the

microcontroller books and textbooks I've used, I can say with confidence this one is the best.

The HCS12 / 9S12: An Introduction to Software and Hardware Interfacing PIC Microcontroller: An Introduction to Software & Hardware Interfacing The Hardware Hacker: Adventures in Making and Breaking Hardware Software Engineering: The Current Practice (Chapman & Hall/CRC Innovations in Software Engineering and Software Development Series) Computer Organization and Design MIPS Edition, Fifth Edition: The Hardware/Software Interface (The Morgan Kaufmann Series in Computer Architecture and Design) Make: Arduino Bots and Gadgets: Six Embedded Projects with Open Source Hardware and Software (Learning by Discovery) Computer Organization and Design, Fourth Edition: The Hardware/Software Interface (The Morgan Kaufmann Series in Computer Architecture and Design) Specifying Systems: The TLA+ Language and Tools for Hardware and Software Engineers Getting Started with 3D Printing: A Hands-on Guide to the Hardware, Software, and Services Behind the New Manufacturing Revolution The Architecture of Computer Hardware, Systems Software, and Networking: An Information Technology Approach Make: FPGAs: Turning Software into Hardware with Eight Fun and Easy DIY Projects IEC 61511-1 Ed. 1.0 b:2003, Functional safety - Safety instrumented systems for the process industry sector - Part 1: Framework, definitions, system, hardware and software requirements AVR Programming: Learning to Write Software for Hardware The Architecture of Computer Hardware, Systems Software, & Networking: An Information Technology Approach Interfacing LabVIEW and Arduino using LINX: Learn in a day The Software Requirements Memory Jogger: A Pocket Guide to Help Software And Business Teams Develop And Manage Requirements (Memory Jogger) Software Agreements Line by Line, 2nd ed.: A Detailed Look at Software Agreements and How to Draft Them to Meet Your Needs Head First Software Development: A Learner's Companion to Software Development Agile Project Management: Agile Revolution, Beyond Software Limits: A Practical Guide to Implementing Agile Outside Software Development (Agile Business Leadership, Book 4) Don't Buy Software For Your Small Business Until You Read This Book: A guide to choosing the right software for your SME & achieving a rapid return on your investment