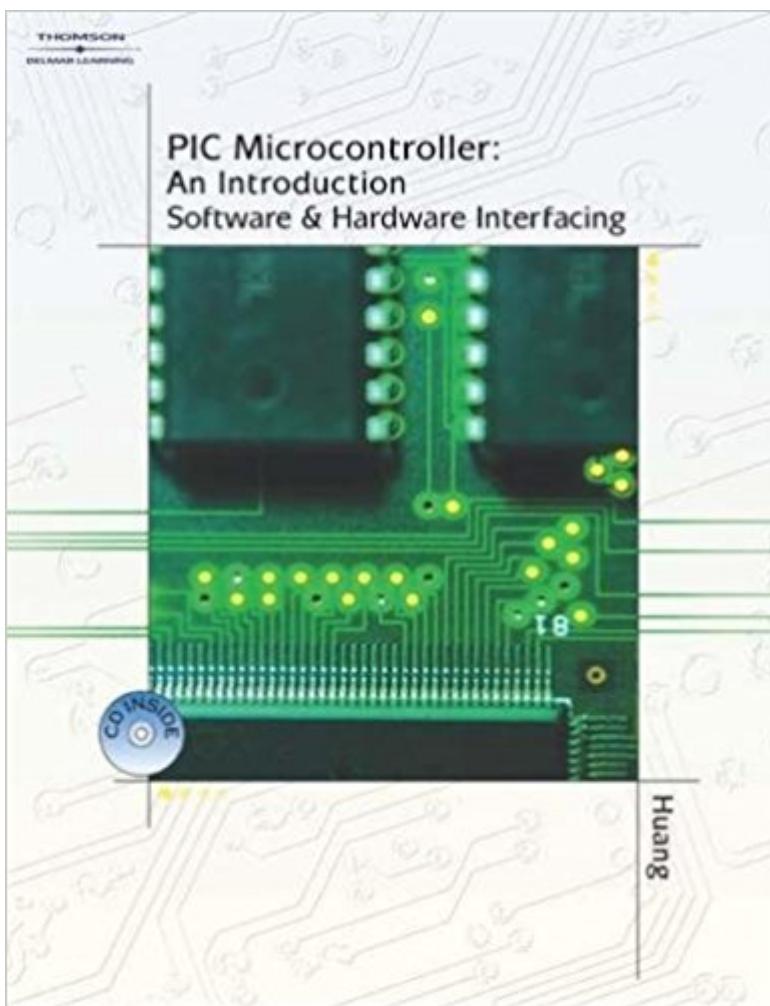


The book was found

# **PIC Microcontroller: An Introduction To Software & Hardware Interfacing**



## Synopsis

This book presents a thorough introduction to the Microchip PIC microcontroller family, including all of the PIC programming and interfacing for all the peripheral functions. A step-by-step approach to PIC assembly language programming is presented, with tutorials that demonstrate how to use such inherent development tools such as the Integrated Development Environment MPLAB, PIC18 C compiler, the ICD2 in-circuit debugger, and several demo boards. Comprehensive coverage spans the topics of interrupts, timer functions, parallel I/O ports, various serial communications such as USART, SPI, I2C, CAN, A/D converters, and external memory expansion.

## Book Information

Hardcover: 816 pages

Publisher: Delmar Cengage Learning; 1 edition (July 1, 2004)

Language: English

ISBN-10: 1401839673

ISBN-13: 978-1401839673

Product Dimensions: 1.5 x 8.2 x 9.5 inches

Shipping Weight: 3.4 pounds (View shipping rates and policies)

Average Customer Review: 4.0 out of 5 stars 14 customer reviews

Best Sellers Rank: #301,148 in Books (See Top 100 in Books) #1 in Books > Computers & Technology > Hardware & DIY > Microprocessors & System Design > PIC Microcontroller #46 in Books > Textbooks > Engineering > Electrical & Electronic Engineering #254 in Books > Engineering & Transportation > Engineering > Industrial, Manufacturing & Operational Systems > Robotics & Automation

## Customer Reviews

Introduction to the PIC18 Microcontroller. PIC18 Assembly Language Programming. PIC18 Development Tools. Advanced Assembly Programming. Using the C Compiler. Interrupts, Resets, and Configuration. Parallel Ports. Timers and CCP Modules. Addressable Universal Synchronous Asynchronous Receiver Transceiver. Serial Peripheral Interface (SPI). Inter-Integrated Circuit (I2C) Interface. Analog to Digital Converter. Controller Area Network. External memory Extension.

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. Mr. Chartrand holds a Bachelor of Science degree in electrical engineering from Queen's University in Kingston Ontario. He has been teaching digital courses for 20 years at Niagara College in Welland, Ontario. Mr. Chartrand has made industry contributions with various designs including interfacing an infrared camera to a PC, creating a digital circuit board used as a PC training system, and designing a control pendant for an air-filled medical bed. He also worked as a plant engineer for General Motors.

Having a background in software development (C/C++), having written a lot of assembly language in the distant past, and being familiar with processor architecture, I found the book to be straightforward and useful to me. I was able to make rapid progress through the text, sometimes skipping ahead to sections to find just what I needed. Plenty of useful source code in both asm and C as well. The professor who wrote this put together what seems like a very clean, easy to understand text (where "easy" may depend on your background - I found it easy). It is true that you can probably find much of the information in the processor specification PDF file available from Microchip or in other online sources, yet I found it very convenient to have it all available in one organized textbook. I do recommend the book for others wishing to learn more about the PIC18.

Writing style is clear and easy to follow. Detailed and straightforward explanations. I bought this book in 2016 because I had to instruct students in a lab-based course, and they had learnt PIC18F MCU in a previous course, from this book. I had no exposure to PIC MCUs before but I have a background on CPU architecture and assembly programming based on the 86x processors. The book fulfilled its purpose for me and I had no difficulties following along.

required book

I have virtually all of the major PIC books available and this one is, by far, the best PIC18 book on the market. That may be because it is written as a textbook by an obviously experienced academic

as well a microprocessor engineer. Each chapter follows a natural progression from the basics of instruction set, tool use such as MPLAB, assembly, C programming, and on to the details of the PIC18 architecture. Its clear organization makes it equally useful as a reference and may be dipped into for solutions to many PIC issues such as I2C, timer and A/D use and interfacing details for many applications. For the earlier PIC16, the best reference is "The Quintessential PIC Microcontroller" by Sid Katzen for many of the same reasons. Buy these two books and you have both the PIC16 and PIC18 covered.

WORST BOOK EVER. seriously- hardest book to reference; even the teacher had trouble with it- unfortunately, its the only book out there for this microcontroller :/

Good Book, not very interesting subject. Just a book that we have to buy for our class. Edition changed quickly, but content are almost identical.

PIC!!!

It's perfect and helped me many times!

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

PIC Microcontroller: An Introduction to Software & Hardware Interfacing The HCS12 / 9S12: An Introduction to Software and 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) Getting Started with 3D Printing: A Hands-on Guide to the Hardware, Software, and Services Behind the New Manufacturing Revolution Computer Organization and Design MIPS Edition, Fifth Edition: The Hardware/Software Interface (The Morgan Kaufmann Series in Computer Architecture and Design) The Architecture of Computer Hardware, Systems Software, and Networking: An Information Technology Approach AVR Programming: Learning to Write Software for Hardware Make: Arduino Bots and Gadgets: Six Embedded Projects with Open Source Hardware and Software (Learning by Discovery) Make: FPGAs: Turning Software into Hardware with Eight Fun and Easy DIY Projects Computer Organization and Design, Fourth Edition: The Hardware/Software Interface (The Morgan Kaufmann Series in Computer Architecture and Design) The Architecture of Computer Hardware, Systems Software, & Networking: An Information Technology Approach 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 Specifying Systems: The  
TLA+ Language and Tools for Hardware and Software Engineers Interfacing LabVIEW and Arduino  
using LINX: Learn in a day PIC Microcontrollers, Third Edition: An Introduction to Microelectronics  
Programming and Customizing the Multicore Propeller Microcontroller: The Official Guide  
Technician's Guide to the 68HC11 Microcontroller MSP430 Microcontroller Basics AVR  
Microcontroller and Embedded Systems: Using Assembly and C (Pearson Custom Electronics  
Technology)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)