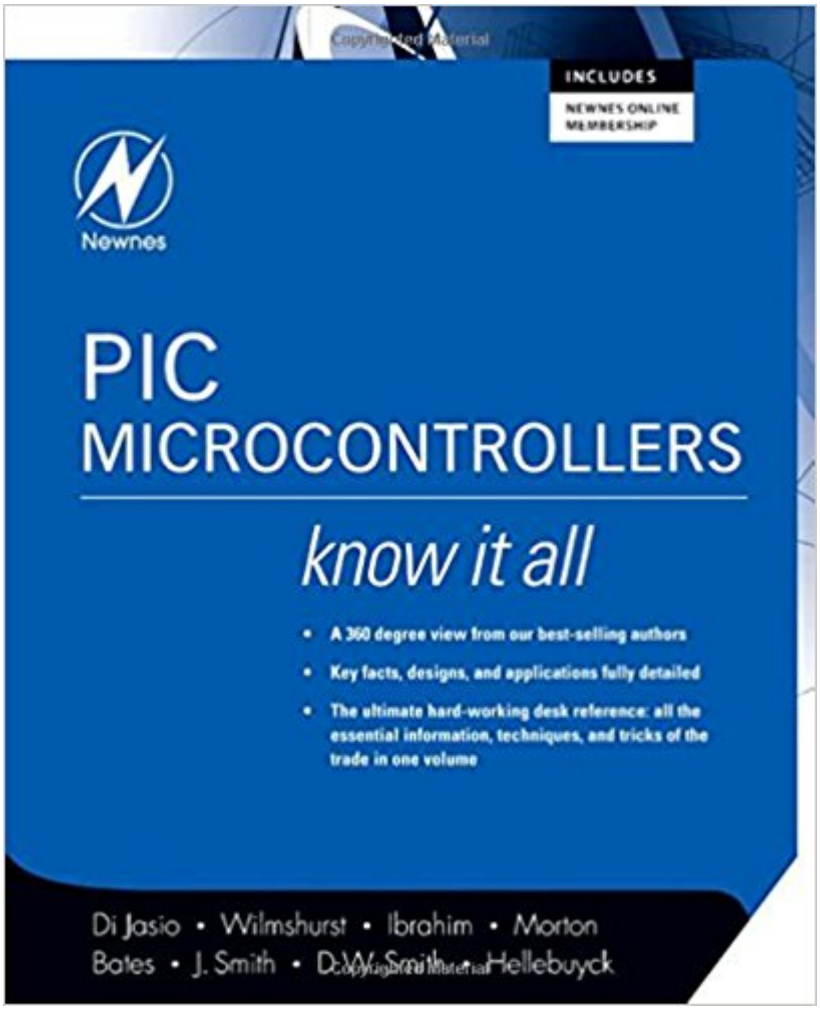
PIC Microcontrollers: Know It All (Newnes Know It All)



Synopsis

The Newnes Know It All Series takes the best of what our authors have written over the past few years and creates a one-stop reference for engineers involved in markets from communications to embedded systems and everywhere in between. PIC design and development a natural fit for this reference series as it is one of the most popular microcontrollers in the world and we have several superbly authored books on the subject. This material ranges from the basics to more advanced topics. There is also a very strong project basis to this learning. The average embedded engineer working with this microcontroller will be able to have any question answered by this compilation. He/she will also be able to work through real-life problems via the projects contained in the book. The Newnes Know It All Series presentation of theory, hard fact, and project-based direction will be a continual aid in helping the engineer to innovate in the workplace.Section I. An Introduction to PIC MicrocontrollersChapter 1. The PIC Microcontroller FamilyChapter 2. Introducing the PIC 16 Series and the 16F84AChapter 3. Parallel Ports, Power Supply and the Clock OscillatorSection II. Programming PIC Microcontrollers using Assembly LanguageChapter 4. Starting to ProgramÃ¢â ¬â ¢An Introduction to AssemblerChapter 5. Building Assembler ProgramsChapter 6. Further Programming TechniquesChapter 7. Prototype HardwareChapter 8. More PIC Applications and DevicesChapter 9. The PIC 1250x Series (8-pin PIC microcontrollers)Chapter 10. Intermediate Operations using the PIC 12F675Chapter 11. Using InputsChapter 12. Keypad ScanningChapter 13. Program ExamplesSection III. Programming PIC Microcontrollers using PicBasicChapter 14. PicBasic and PicBasic Pro Programming Chapter 15. Simple PIC ProjectsChapter 16. Moving On with the 16F876Chapter 17. CommunicationSection IV. Programming PIC Microcontrollers using MBasicChapter 18. MBasic Compiler and Development BoardsChapter 19. The BasicsÃ¢â ¬â ¢OutputChapter 20. The BasicsÃ¢â ¬â ¢Digital InputChapter 21. Introductory Stepper MotorsChapter 22. Digital Temperature Sensors and Real-Time ClocksChapter 23. Infrared Remote ControlsSection V. Programming PIC Microcontrollers using CChapter 24. Getting StartedChapter 25. Programming LoopsChapter 26. More LoopsChapter 27. NUMB3RSChapter 28. InterruptsChapter 29. Taking a Look under the HoodOver 900 pages of practical, hands-on content in one book!Huge market - as of November 2006 Microchip Technology Inc., a leading provider of microcontroller and analog semiconductors, produced its 5 BILLIONth PIC microcontrollerSeveral points of view, giving the reader a complete 360 of this microcontroller

Book Information

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Customer Reviews

Lucio Di Jasio is now Sales Manager in Europe for Microchip Inc. He was previously Application Segments Manager at Microchip in Chandler AZ. He has been intimately involved in the development of Microchip PIC products for over 10 years and is a well known writer and expert on the use of PIC products both via his Newnes books and his work at events such as the Microchip Masters.Tim Wilmshurst is the author of Designing Embedded Systems with PIC Microcontrollers. He has been designing embedded systems since the early days of microcontrollers. For many years this was for Cambridge University, where he led a development team building original systems for research applications - for example in measurement of bullet speed, wind tunnel control, simulated earthquakes, or seeking a cure to snoring. Now he is Head of Electronic Systems at the University of Derby, where he aims to share his love of engineering design with his students.Prof Dogan Ibrahim graduated from the University of Salford with First Class Honours in Electronic Engineering. He then completed an MSc course in Automatic Control Engineering at the University of Manchester, and PhD in Digital Signal Processing at the City University in London. Prof Ibrahim worked at several companies before returning to the academic life. He is currently a lecturer at the Department of Computer Information Systems at the Near East University. Prof Ibrahim is a Fellow of the IET, and a Chartered Electrical Engineer. His interests are in the fields of microcontroller based automatic control, digital signal processing, and computer aided design.Dogan Ibrahim has been Associate Professor and Head of Department at the Near East University, Cyprus, lecturer at

South Bank University, London, Principal Research Engineer at GEC Hirst Research Centre, and is now a hardware and software systems consultant to London's Traffic Control Systems Unit.Martin Bates is one of the leading authors specializing in introductory level texts on PIC microcontrollers for the academic, professional and hobby markets, with 20 yearsÃ¢â ¬â„¢ experience of teaching microprocessor systems.David Smith has had 30 years experience in the Electronics Industry. Before arriving at MMU he worked as an Electronics Design Engineer for ICL and Marconi. His teaching interests are focused on enabling Design and Technology students to implement microcontroller designs into their projects.Founder and president of elproducts, Inc., a firm specializing in devices and project kits based on the PIC microcontroller. He writes a monthly column on the PIC microcontroller for Ã¢â ¬Å“Nuts and Volts” magazine.

I have mixed feelings about the book. I thought that the author did well in showing how to use MPLAB and various tools like Watch windows, Variable windows, Stimulus etc. However its written for MPLAB not the latest MPLABX. In the newer MPLABX the layout is very different. Some of the tools have new names and new locations. So if you plan on working in MPLABX then you will spend a decent amount of time translating to the newer MPLABX. Some of the programs are old also there are some annoying things like he programs in absolute. I found this out because I spent several days trying to figure out why my user variables were not showing up in the Variables window. That may not mean much to you right now, but when you're a novice and trying to follow the book exercises and it doesn't work, its extremely frustrating. I found errors in some of the code also. All in all I think he explained the PIC very well I just wish the programs were a little tighter and up to date.

So often when purchasing technical books I am disappointed by their contents. This book does not fall into that category. It provides a solid overview of using PIC micro-controllers. Examples are given with the usual assortment of stepper motors and temperature sensors. It provides an introduction to programming with a variety of tools, including my personal favorites for the PIC, assembler and MELabs' PIC BASIC. I do wish the coverage of assembler were more in depth, but that is my personal bias.Another reviewer felt that this book was not for beginners. Perhaps thirty years of doing this stuff has skewed my perspective, but I do not think that this book is a bad place for a serious beginner to start. Yes, it is a handy reference for the pro's, but if you have a talent for this sort of stuff, I think this book can get you started (with some effort) and continue to serve as a useful reference going forward. No one book is likely to solve all of your questions, but this will one give you an overview of what your options are with the PIC.If you are a beginner, and not a pro, I

will offer you a suggestion that virtually no one else will agree with. Learn an assembler language first. Once you overcome the initial learning curve of all the mnemonics, registers, and the odd ways we do math, you will understand what is going on under the hood as few do. And, like me, you may find that it is actually fun to program in assembler. I'd rather write in assembler than C any day. If, on the other hand, you need a little instant gratification (and we all do from time to time) try PIC BASIC, or even a BASIC STAMP.But I digress. This is an excellent book in spite of lacking depth in some areas. I am glad I spent the money for it, and most of you will be as well.

PIC Microcontrollers, Know it All is exactly what the cover describes it as; the ultimate hard-working desk reference. I bought this book with the hopes that it would help me learn the language necessary to write successful programs for the MicrochipÃƒâ Ã Â® PIC Microcontroller; and it did just that, help. It is not an all-inclusive study guide or teaching aide.The text provides knowledge necessary to build a base knowledge of the inner workings of microcontrollers, and explores some various languages available to help you begin writing programs. It will help you understand how information moves within the microcontrollers, explores memory and architecture types, introduces you to the microcontroller instruction set, and more. With this text, and supplemental information from the internet, I was successful in learning assembly language programming, having had no previous knowledge or experience in about a month's time.I would like to point out, that I felt this book's layout was a bit unorganized. There were sections and chapters that felt out of place, and sometimes left me confused. As an example, the book begins explaining how to accomplish tasks using certain lines of instructions prior to introducing you to any instructions at all, let alone the instructions the text references. I found myself constantly flipping around the book, sometimes hundreds of pages at a time, to find information I needed to read a chapter in the beginning of the book.Despite the book's minor flaws, it still proved to be an invaluable resource, and it will find a permanent home on my book shelf at the side of my desk. Again, as the book's cover says, it is undoubtedly the ultimate hard-working desk reference, and a worth-while investment.

This rating is based on the fact that this book is merely a compilation of snippets from other Newnes books- many of which I already have. This should be made clear in the description.

While the material in the book is fair, I think the authors and publisher were just trying to make a big book with a lot of pages. A free Newnes Online Membership is advertised on the cover which is supposed to give you "four free downloadable selections from leading experts on the cutting edge",

but there is no information on how to take advantage of this offer and emails to [...] support have been ignored. Save your money - most of the information is available online.PIC Microcontrollers: Know It All (Newnes Know It All)

Very good basic information.... very thorough on the subject. Get’s into hows and whys and details of implementation. All information viable for newer series of chips although this particular edition does tend to focus on older chips.... Overall very satisfied. Hoping for an updated version covering newer peripherals and chips....

Very happy with my purchase!! Deliver was faster than expected. Water mark they described was barely noticeable and didn’t go past page five. Better quality than expected!!

The book was clear and gave detail of individual PIC chips, however apart from the price the book did feel like it did tend to skip slight details that might not be picked up by new comers.

PIC Microcontrollers: Know It All (Newnes Know It All) Fundamentals of Microcontrollers and Applications in Embedded Systems with PIC Microcontrollers PIC Microcontrollers, Third Edition: An Introduction to Microelectronics Naked Women : Explicit And Lustful Naked Women Pic Bound To Get You Aroused. (Adult Picture Books) Tanker Operations: A Handbook for the Person-In-Charge (PIC) My Polaroid PIC-300 Instant Film Camera Fun Guide!: 101 Ideas, Games, Tips and Tricks For Weddings, Parties, Travel, Fun and Adventure! (Polaroid Instant Print Camera Books) PIC Microcontroller: An Introduction to Software & Hardware Interfacing Travel and Adventure vol 1: related: bunny,Botswana,locomote,Henri Cartier-Bresson,traveling,capital of italy,Henri Cartier-Bresson,gorgeous,gamble,pic High-Tech DIY Projects with Microcontrollers (Maker Kids) Programming with MicroPython: Embedded Programming with Microcontrollers and Python Introduction to Embedded Systems: Using Microcontrollers and the MSP430 Designing with Microcontrollers -- The 68HCS12 Programmable Microcontrollers with Applications: MSP430 LaunchPad with CCS and Grace (Electronics) PROJECTS WITH MICROCONTROLLERS AND PICC Basic Arduino Projects: 26 Experiments with Microcontrollers and Electronics All Things Joyful All Things Lovely Catholic Journal Color Doodle: First Communion Gifts for Girls in All Departments Confirmation Gifts for Girl in ... All Dep Catholic Devotional 2017 in all Dep All Things Lovely All Things Lovely Catholic Journal Color Doodle: Catholic Devotional for Teen Girls in all Departments Catholic Devotional for Women ... Books for Teens Girls Teen Girls in all Dep You Don’t Know What

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