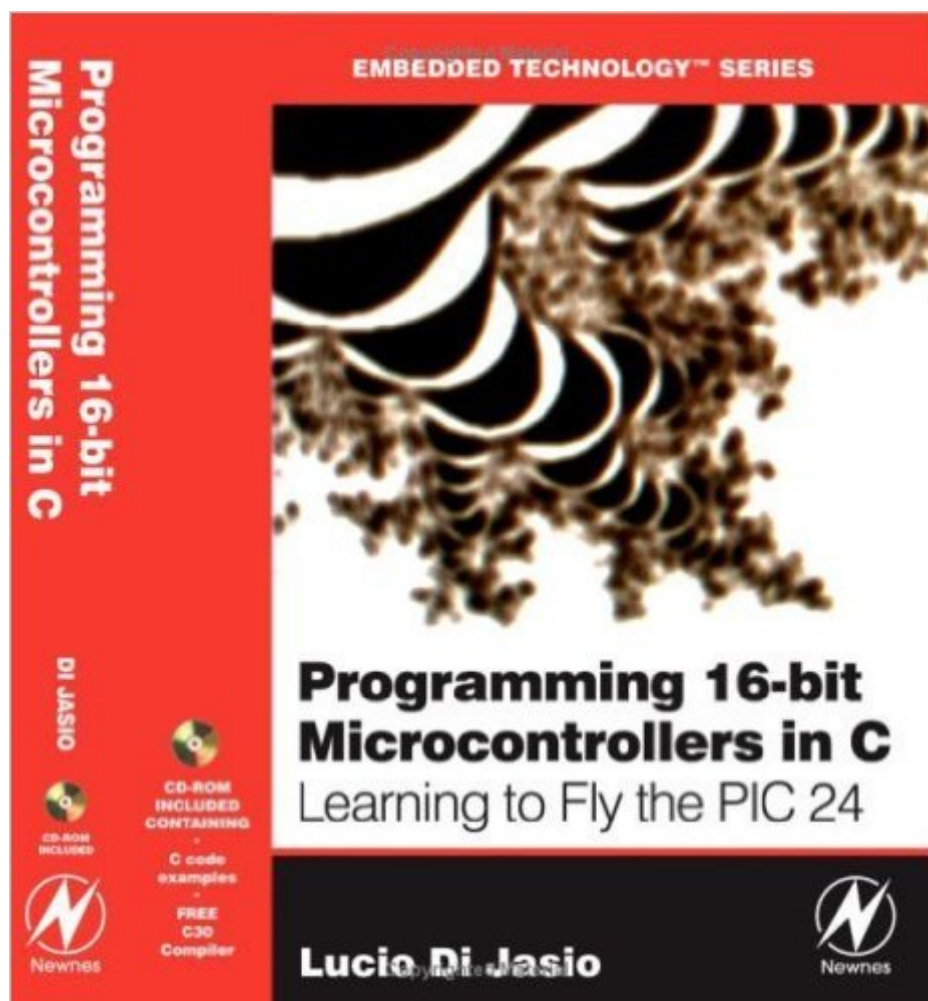# Programming 16-Bit PIC Microcontrollers In C: Learning To Fly The PIC 24 (Embedded Technology)

Synopsis

â ¢ A Microchip insider tells all on the newest, most powerful PICs ever! â ¢ FREE CD-ROM includes source code in C, the Microchip C30 compiler, and MPLAB SIM softwareâ ¢ Includes handy checklists to help readers perform the most common programming and debugging tasksThe new 16-bit PIC24 chip provides embedded programmers with more speed, more memory, and more peripherals than ever before, creating the potential for more powerful cutting-edge PIC designs. This book teaches readers everything they need to know about these chips: how to program them, how to test them, and how to debug them, in order to take full advantage of the capabilities of the new PIC24 microcontroller architecture.Author Lucio Di Jasio, a PIC expert at Microchip, offers unique insight into this revolutionary technology, guiding the reader step-by-step from 16-bit architecture basics, through even the most sophisticated programming scenarios. This bookâ ™s common-sense, practical, hands-on approach begins simply and builds up to more challenging exercises, using proven C programming techniques. Experienced PIC users and newcomers to the field alike will benefit from the textâ ™s many thorough examples, which demonstrate how to nimbly side-step common obstacles, solve real-world design problems efficiently, and optimize code for all the new PIC24 features. You will learn about:â ¢ basic timing and I/O operations, â ¢ multitasking using the PIC24 interrupts, â ¢ all the new hardware peripherals â ¢ how to control LCD displays, â ¢ generating audio and video signals, â ¢ accessing mass-storage media, â ¢ how to share files on a mass-storage device with a PC, â ¢ experimenting with the Explorer 16 demo board, debugging methods with MPLAB-SIM and ICD2 tools, and more!Â A Microchip insider tells all on the newest, most powerful PICs ever! Â Condenses typical introductory "fluff" focusing instead on examples and exercises that show how to solve common, real-world design problems quicklyÂ Includes handy checklists to help readers perform the most common programming and debugging tasksÂ FREE CD-ROM includes source code in C, the Microchip C30 compiler, and MPLAB SIM software, so that readers gain practical, hands-on programming experienceÂ Check out the author's Web site at http://www.flyingpic24.com for FREE downloads, FAQs, and updates

Book Information

File Size: 10419 KB

Print Length: 400 pages

Publisher: Newnes (March 16, 2007)

Publication Date: March 16, 2007

Sold by:Â Digital Services LLC

Language: English

ASIN: B001UN2W98

Text-to-Speech: Enabled

X-Ray: Not Enabled

Word Wise: Not Enabled

Lending: Not Enabled

Enhanced Typesetting: Not Enabled

Best Sellers Rank: #1,132,930 Paid in Kindle Store (See Top 100 Paid in Kindle Store)   #53 inÂ Books > Computers & Technology > Hardware & DIY > Microprocessors & System Design > PIC Microcontroller   #140 inÂ Kindle Store > Kindle eBooks > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Microelectronics   #140 inÂ Kindle Store > Kindle eBooks > Engineering & Transportation > Engineering > Electrical & Electronics > Digital Design

Customer Reviews

There are many books published on how to program or use Microchip's PIC product in various application categories. For networking, Fred Eady's, "Networking and Internetworking With Microcontrollers", ISBN 0-7506-7698, Keith Curtis, "Embedded Multitasking", ISBN 0-7506-7918-2, and Creed Huddleston's, "Intelligent Sensor Design", ISBN 0-7506-7755-4, are but 3 of my favorites (there are more). This book is a deserving the serious PIC programmer's attention; that is, if you want to really use the PIC24 or dsPIC. This book does not is not written for the dsPIC, but the architecture is similar enough that, aside from the DSP engine, you can learn almost all of the non-DSP features of the dsPIC (save for a select few dsPIC features).Lucio has managed to put together a real interesting collection of material to help you learn the PIC24 and in a fun way. Lucio's theme is "Learning to Fly the PIC24". The book addresses primarily C developers, with plenty of example code. Assembly programmers are not left out, however as the format of each chapter is: a flight plan, the flight, post flight briefing, and notes for PIC experts, and assembly language experts. Lucio is a PIC expert at Microchip so you will learn from the best. The book includes a CD-ROM with source code in C and the student version of the C30 compiler. The book is not written for "absolute" beginners. Some familiarity with assembly language and basic understanding of the C language. Prior exposure to the PIC architecture would be helpfull as well.Part I is about the basics of the PIC24. Chapter 1 takes you through the basics of programming the PIC24; Compiling, linking, building a project, port initialization, and other tips and tricks.

Programming 16-Bit PIC Microcontrollers in C: Learning to Fly the PIC 24 (Embedded Technology) Programming 16-Bit PIC Microcontrollers in C: Learning to Fly the PIC 24 (Embedded Technology) Pap/Cdr Edition by Di Jasio, Lucio published by Newnes (an imprint of Butterworth-Heinemann Ltd) (2007) Programming 16-Bit PIC Microcontrollers in C, Second Edition: Learning to Fly the PIC 24 Programming 16-Bit PIC Microcontrollers in C: Learning to Fly the PIC 24 Programming 32-bit Microcontrollers in C: Exploring the PIC32 (Embedded Technology) Designing Embedded Systems with 32-Bit PIC Microcontrollers and MikroC Fundamentals of Microcontrollers and Applications in Embedded Systems with PIC Microcontrollers Programming 8-bit PIC Microcontrollers in C: with Interactive Hardware Simulation Programming PIC Microcontrollers with PICBASIC (Embedded Technology) Learning: 25 Learning Techniques for Accelerated Learning - Learn Faster by 300%! (Learning, Memory Techniques, Accelerated Learning, Memory, E Learning, ... Learning Techniques, Exam Preparation) Modern X86 Assembly Language Programming: 32-bit, 64-bit, SSE, and AVX Programming #8:C Programming Success in a Day & Android Programming In a Day! (C Programming, C++programming, C++ programming language, Android , Android Programming, Android Games) Programming #57: C++ Programming Professional Made Easy & Android Programming in a Day (C++ Programming, C++ Language, C++for beginners, C++, Programming ... Programming, Android, C, C Programming) DOS: Programming Success in a Day: Beginners guide to fast, easy and efficient learning of DOS programming (DOS, ADA, Programming, DOS Programming, ADA ... LINUX, RPG, ADA Programming, Android, JAVA) ASP.NET: Programming success in a day: Beginners guide to fast, easy and efficient learning of ASP.NET programming (ASP.NET, ASP.NET Programming, ASP.NET ... ADA, Web Programming, Programming) C#: Programming Success in a Day: Beginners guide to fast, easy and efficient learning of C# programming (C#, C# Programming, C++ Programming, C++, C, C Programming, C# Language, C# Guide, C# Coding) FORTRAN Programming success in a day:Beginners guide to fast, easy and efficient learning of FORTRAN programming (Fortran, Css, C++, C, C programming, ... Programming, MYSQL, SQL Programming) Prolog Programming; Success in a Day: Beginners Guide to Fast, Easy and Efficient Learning of Prolog Programming (Prolog, Prolog Programming, Prolog Logic, ... Programming, Programming Code, Java) R Programming: Learn R Programming In A DAY! - The Ultimate Crash Course to Learning the Basics of R Programming Language In No Time (R, R Programming, ... Course, R Programming Development Book 1) Parallel Programming: Success in a Day: Beginners' Guide to Fast, Easy, and Efficient Learning of Parallel Programming (Parallel Programming, Programming, ... C++ Programming, Multiprocessor, MPI)