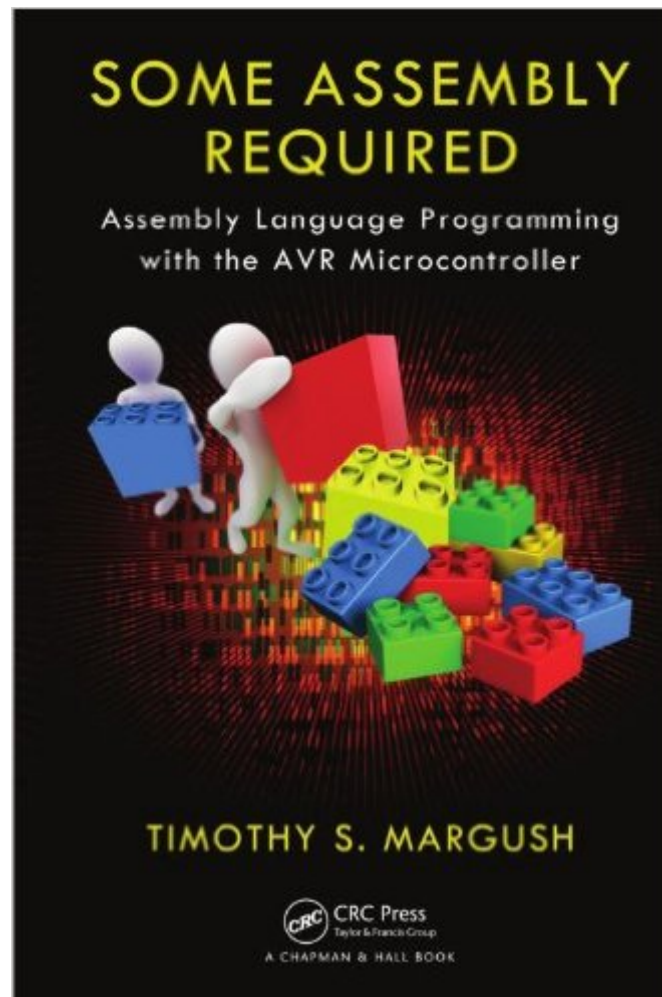


The book was found

Some Assembly Required: Assembly Language Programming With The AVR Microcontroller



Synopsis

A family of internationally popular microcontrollers, the Atmel AVR microcontroller series is a low-cost hardware development platform suitable for an educational environment. Until now, no text focused on the assembly language programming of these microcontrollers. Through detailed coverage of assembly language programming principles and techniques, *Some Assembly Required: Assembly Language Programming with the AVR Microcontroller* teaches the basic system capabilities of 8-bit AVR microcontrollers. The text illustrates fundamental computer architecture and programming structures using AVR assembly language. It employs the core AVR 8-bit RISC microcontroller architecture and a limited collection of external devices, such as push buttons, LEDs, and serial communications, to describe control structures, memory use and allocation, stacks, and I/O. Each chapter contains numerous examples and exercises, including programming problems. By studying assembly languages, computer scientists gain an understanding of the functionality of basic processors and how their capabilities support high level languages and applications. Exploring this connection between hardware and software, this book provides a foundation for understanding compilers, linkers, loaders, and operating systems in addition to the processors themselves.

Book Information

File Size: 42422 KB

Print Length: 643 pages

Simultaneous Device Usage: Up to 4 simultaneous devices, per publisher limits

Publisher: CRC Press; 1 edition (April 19, 2016)

Publication Date: April 19, 2016

Sold by: Digital Services LLC

Language: English

ASIN: B007IVDXVM

Text-to-Speech: Not enabled

X-Ray: Not Enabled

Word Wise: Not Enabled

Lending: Not Enabled

Enhanced Typesetting: Not Enabled

Best Sellers Rank: #735,807 Paid in Kindle Store (See Top 100 Paid in Kindle Store) #568

in Books > Computers & Technology > Hardware & DIY > Design & Architecture #945 in Kindle

Store > Kindle eBooks > Computers & Technology > Hardware #3792 in Kindle Store > Kindle eBooks > Computers & Technology > Programming

Customer Reviews

This book is an excellent source of very useful details on assembly language programming of the AVR family of microcontrollers. It is also a very good "how to" book on how to use ATMELs starter kit boards and xplained boards for the AVR. For those without a formal education and training in assembly programming of microcontrollers, this is a must read. I am 90 pages into it and it has already cleared up a dozen misconceptions and problems that I was having programming the chips and using the starter kit boards. It really lets you get the most out of these devices. It goes far beyond the help files that one finds in ATMEL's Visual Studio 5 software and offers very practical instructions and information. It's the best book purchase that I have ever made on .com and is well worth the price.

So far this book is treating me well. I already had a great deal of information on Atmel AVR assembler printed out from Atmel website and organized into a giant ring binder, but this book somehow manages to incorporate all that information into a smaller and nicely presented format. I use an ATMEGA2560 board (from an Arduino reference) and an Atmel AVR XMEGA-A1 XPlained boards for my projects. I use Atmel AVRISP mkII programmer to load code into the chips via Atmel Studio 6 (free development environment from Atmel). That is pretty much all you will need to get started. If you love doing manual soldering and tinkering then you will be okay with a 2560 board, because you will need to make your own LED output boards, switch boards, etc. The XMEGA-A1 board has majority of that stuff already built-in.

I LOVE this book. I've read through the entire XMEGA AU Manual, and had just started diving into assembly. This book explained in detail all the things I have been confused about, and has been invaluable in clearing up many things I was confused about. I'm about a third of the way through it, and it really is leaving no stone un-turned. That being said, I think this is a book targeted towards those who have some experience programming and dealing with digital devices, and who aren't afraid of diving in and getting their hands dirty. It complements the AVR device manuals and datasheets very well, going over the details Atmel assumes their readers already know.

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

Some Assembly Required: Assembly Language Programming with the AVR Microcontroller AVR

Microcontroller and Embedded Systems: Using Assembly and C (Pearson Custom Electronics Technology) The Atmel AVR Microcontroller: MEGA and XMEGA in Assembly and C (Explore Our New Electronic Tech 1st Editions) The Atmel AVR Microcontroller: MEGA and XMEGA in Assembly and C (with Student CD-ROM) (Explore Our New Electronic Tech 1st Editions) 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) Men: Some Assembly Required (Renewing the Heart) Some Assembly Required: A Journal of My Son's First Son Programming #45: Python Programming Professional Made Easy & Android Programming In a Day! (Python Programming, Python Language, Python for beginners, ... Programming Languages, Android Programming) The Motorola MC68332 Microcontroller: Product Design, Assembly Language Programming and Interfacing 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) 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) Body Language: Body Language Training - Attract Women & Command Respect, by Mastering Your High Status Body Language (Body Language Attraction, Body Language ... Language Secrets, Nonverbal Communication) PC Assembly Language: learn how computer work easy ways to learn assembly language Programming: Computer Programming for Beginners: Learn the Basics of Java, SQL & C++ - 3. Edition (Coding, C Programming, Java Programming, SQL Programming, JavaScript, Python, PHP) Raspberry Pi 2: Raspberry Pi 2 Programming Made Easy (Raspberry Pi, Android Programming, Programming, Linux, Unix, C Programming, C+ Programming) Android: Programming in a Day! The Power Guide for Beginners In Android App Programming (Android, Android Programming, App Development, Android App Development, ... App Programming, Rails, Ruby 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) 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)

[Dmca](#)