Designer's Guide To The Cypress PSoC (Embedded Technology)
Synopsis

This it the first technical reference book available on the PSoC, and it offers the most comprehensive combination of technical data, example code, and descriptive prose you’ll find anywhere. Embedded design expert Robert Ashby will guide you through the entire PSoC world, providing thorough coverage of device feature, design, programming and development of the software-reconfigurable PSoC. He shares his best tips, tricks, and techniques that will help you to utilize the flexible and inexpensive PSoC to its greatest potential, with a minimum of heartaches and late nights. With its emphasis on designing for adaptability - a feature of the utmost importance in today’s fast-paced and cost-pressured design cycles - this book will bring you up to speed quickly on everything PSoC, from memory management to interconnects. You will add brains and capable signal conditioning to a design with one chip, giving you extreme flexibility for a relatively low price. Specific application examples highlighting the PSoC’s unique capabilities are included throughout the text, with the supporting sample source code. This valuable code is also provided on the companion website so you can easily adapt it to your own designs. * The first independent technical reference available on the PSoC, a product line experiencing explosive growth in the embedded design world* Application examples, sample code, and design tips and techniques will get readers get up-to-speed quickly * Companion website includes all example code from book, so that engineers can easily adapt it to their own designs

Book Information

Series: Embedded Technology
Paperback: 272 pages
Publisher: Newnes (August 11, 2005)
Language: English
ISBN-10: 0750677805
Product Dimensions: 7.5 x 0.6 x 9.2 inches
Shipping Weight: 1.1 pounds (View shipping rates and policies)
Average Customer Review: 3.1 out of 5 stars Â See all reviews Â (7 customer reviews)
Best Sellers Rank: #1,533,444 in Books (See Top 100 in Books)  #174 in Â Books > Computers & Technology > Hardware & DIY > Microprocessors & System Design > Microprocessor Design #415 in Â Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Microelectronics  #440 in Â Books > Engineering & Transportation > Engineering >
Customer Reviews

The "Designer’s Guide to the Cypress PSoC" by Robert Ashby is a good introductory text to the PSoC. It is written clearly and in the same easy going style that Mr. Ashby used so successfully in his articles on chipcenter.com. To his credit, Mr. Ashby does not reproduce data sheets nor does he toe the Cypress line. He takes a practical approach that proves a great deal of experience in the embedded field. As a result you get general microcomputer knowledge along with PSoC specifics.

This book is not a reference of all things PSoC, nor does it pretend to be. It is the ideal text to get you up to speed on the PSoC even if you have previous microcomputer experience. The book directly addresses the idiosyncrasies of the PSoC and has a great summary of the PSoC modules that allows for a quick review and comparison to facilitate the choice of which module to use. For instance why would you use the ADCINCVR as opposed to the ADINC12 module? There is also a great example on the use of multiple configurations. There is an excellent description of the potential problems and solutions when using the AND/ OR/ XOR instructions on the I/O ports. Mr. Ashby also addresses simple level shifting of analog input signals.

The book is further enhanced by details on the optimization settings of the PSoC Designer and has a chapter dedicated memory management that covers RAM and Flash settings, both from the project perspective (including personal utilities) and how to implement them through directives to the assembler. The appendix that covers global resources contains good reference material on meaning of the different settings within the Global Resources window in PSOC Designer and there is also a wealth of information that is covered in the appendix on a "Project Walkthrough".

Download to continue reading...