Design With PIC Microcontrollers

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Focusing on Microchip Technology’s "PIC" microcontroller chips capacity to integrate features of a
digital design, this book introduces program writing with a series of code templates that helps
readers learn by doing rather than start code writing from scratch. Using detailed block diagrams to
illustrate registers, control bits, and status bits associated with assorted functions, the book also
provides examples to illustrate points and to demonstrate how assorted issues can be handled. It
provides a systematic path into the PIC microcontrollers by showing its organization and ways to
deal with idiosyncrasies. Provides alternative methods for addressing interrupt timing constraints to
meet the needs of all interrupt sources. Presents a systematic treatment of slowly changing events,
including keyswitches that have been debounced and scanned with a state machine
implementation. Discusses a number of important topics, including the PIC’s flexible
analog-to-digital conversion facility; the master-slave interconnection of PICs; low-power operation
alternatives; and comparisons of PIC family members for design requirement analysis. An
essential reference book on the PIC microcontroller for every professional engineer or designer.

Book Information

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Customer Reviews

As with Peatman’s other books, this one SEEMS to cover the material at first glance in the
bookstore. But then, after the reader purchases the book and gets it home, s/he will find the
coverage incomplete and diluted. What do I mean? Specifically, there are no detailed or in-depth
examples. The material is abstract and general in nature. For a topic like microcontrollers, the reader needs examples that are "step-by-step" and "how-to". These are totally lacking. Buy any other book instead. Then you might actually learn something.

Don’t believe for a minute the rave reviews preceding this one! You may be a seasoned embedded system programmer, and you want to get up to speed quickly rather than relying on pouring through Microchip’s reference manuals, this book is not it. It’s too bad that the author is not as good at writing as he is at marketing the book. A good writer will make even a difficult subject easy to understand. It is not so in this case. Sadly, the converse is true. (Randal Schwartz of Learning Perl fame, are you listening?!) I am going to learn to design and program the PIC, but not with this book. Bottom line: save the money and stay with the Microchip references available online.

I took Dr. Peatman’s class in college with this book, and I think this book would have done better if he had bundled the Class Lab book. The class lab book and actually having the hardware in front of you made the book make a whole lot more sense. I can see how some of the other readers may have been disappointed because with out the hardware in front of you its a bit difficult to really understand what’s going on. I think this book is great as a reference if you have a PIC controller to play around with, but I would not recommend this book to someone who is looking for a “PIC microprocessors for Dummies” type book.

This might be a suitable reference for someone who is already intimately familiar with PIC microcontrollers but it way too advanced for beginners. From the first page the author assumes you already know a lot about microprocessors including the lingo. The writing style is just dreadful, with sentences that run on and on in a prose that would leave Yoda confused. This is not a fun read about what should be a fun subject. Beginners will find the book too obtuse and advanced users need nothing more than the device datasheets so the book is pointless.

Peatman’s book would serve very well as a second or third year Electronics/Computer Science text without being too highbrow about it. Very useful in all respects. Focus is on the PIC16c6x and PIC 16c7x chips, but can be used with most others as well.

This book is basically an over-priced college text. ... On the other hand, there are a few good practical applications illustrated. The author choose to place a special emphasis on timing issues.
I recommend this book without qualification! After a disappointing encounter with the popular Predko book, I bought John Peatman's book sight unseen. I was not disappointed. This book has strong content, writing, and organization. It supplies all the information I needed to get started and it moves smoothly to advanced programming and applications. The only surprise, after Predko's book, was that Peatman focuses on the larger packages, with no mention of the 18- and 8-pin devices; however, since the features of the larger devices are a superset of the smaller devices, it is easy to understand (and use) the smaller devices using this text. Peatman covers all the advances peripheral interface features of the high-end PICs. Although I am not using such features today, I am happy to have a well-written and thorough reference in my possession. An excellent book!