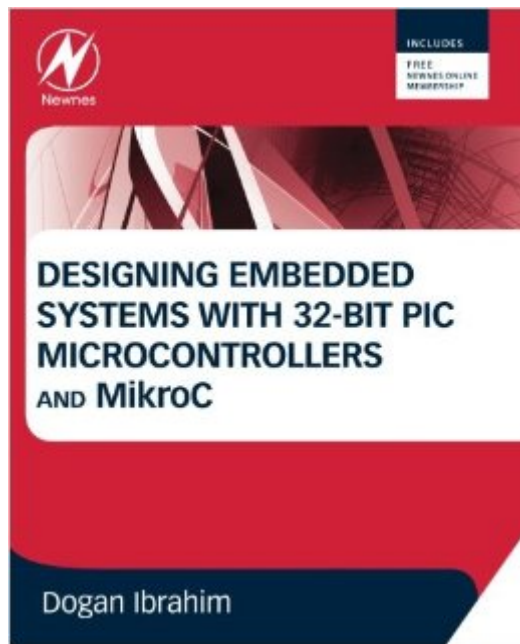# Designing Embedded Systems With 32-Bit PIC Microcontrollers And MikroC

Synopsis

The new generation of 32-bit PIC microcontrollers can be used to solve the increasingly complex embedded system design challenges faced by engineers today. This book teaches the basics of 32-bit C programming, including an introduction to the PIC 32-bit C compiler. It includes a full description of the architecture of 32-bit PICs and their applications, along with coverage of the relevant development and debugging tools. Through a series of fully realized example projects, Dogan Ibrahim demonstrates how engineers can harness the power of this new technology to optimize their embedded designs. With this book you will learn: The advantages of 32-bit PICsThe basics of 32-bit PIC programmingThe detail of the architecture of 32-bit PICsHow to interpret the Microchip data sheets and draw out their key pointsHow to use the built-in peripheral interface devices, including SD cards, CAN and USB interfacingHow to use 32-bit debugging tools such as the ICD3 in-circuit debugger, mikroCD in-circuit debugger, and Real Ice emulatorHelps engineers to get up and running quickly with full coverage of architecture, programming and development tools Logical, application-oriented structure, progressing through a project development cycle from basic operation to real-world applications Includes practical working examples with block diagrams, circuit diagrams, flowcharts, full software listings an in-depth description of each operation

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Customer Reviews

Much to much of the book was spent on number systems rather than the PIC32 specifically. While it

had some good content, I think the page count could have been better spent concentrating on the PIC32 features rather than binary arithmetic and the MikroC environment. The book title is a little misleading in this respect. However, having said that, if the content contained in it is what you're after, then he does a very good job explaining it.

I was in the middle of a project on the EasyPIC Fusion development board, with a rusty knowledge of C. I found what I needed here. Well written, reasonably comprehensive with some good examples.

This is one of the best books I came across on PIC32 family of microcontrollers. The author gives the basic architecture of the 32-bit microcontrollers. Then, the C programming language is given. The best par of the book is the lots of projects given using the 32-bit microcontrollers. Highly recommended.

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