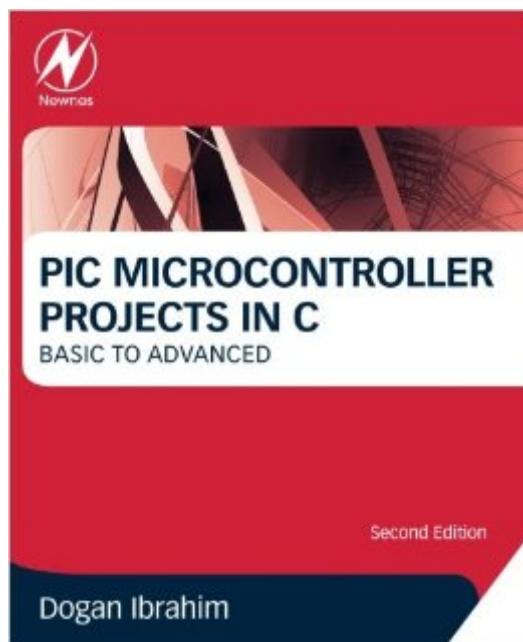# PIC Microcontroller Projects In C, Second Edition: Basic To Advanced

Synopsis

Extensively revised and updated to encompass the latest developments in the PIC 18FXXX series, this book demonstrates how to develop a range of microcontroller applications through a project-based approach. After giving an introduction to programming in C using the popular mikroC Pro for PIC and MPLAB XC8 languages, this book describes the project development cycle in full. The book walks you through fully tried and tested hands-on projects, including many new, advanced topics such as Ethernet programming, digital signal processing, and RFid technology. This book is ideal for engineers, technicians, hobbyists and students who have knowledge of the basic principles of PIC microcontrollers and want to develop more advanced applications using the PIC18F series. This book Includes over fifty projects which are divided into three categories: Basic, Intermediate, and Advanced. New projects in this edition: Logic probe Custom LCD font design Hi/Lo game Generating various waveforms in real-time Ultrasonic height measurement Frequency counter Reaction timer GPS projects Closed-loop ON/OFF temperature control Bluetooth projects (master and slave) RFid projects Clock using Real-time-clock (RTC) chip RTC alarm project Graphics LCD (GLCD) projects Barometer+thermometer+altimeter project Plotting temperature on GLCD Ethernet web browser based control Ethernet UDP based control Digital signal processing (Low Pass Filter design) Automotive LIN bus project Automotive CAN bus project Multitasking projects (using both cooperative and Round-robin scheduling) Unipolar stepper motor projects Bipolar stepper motor projects Closed-loop ON/OFF DC motor controlA clear introduction to the PIC 18FXXX microcontroller's architecture Covers developing wireless and sensor network applications, SD card projects, and multi-tasking; all demonstrated with the block and circuit diagram, program description in PDL, program listing, and program descriptionIncludes more than 50 basic, intermediate, and advanced projects

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Customer Reviews

I am not new to embedded designs an C, but the PIC's awesome number of processors and function register names etc. had me baffeled, but this book was a disapointment to me. Right at the beginning it presents the PIC18 Explorer board. So to be able to follow this book, I ordered this board, before going to deep into it. Unfortunately, it never used this board, instead it used a more expensive one. I cannot understand why the explorer board was pictured and explained in detail right at the beginning and then an other book is used. Well, I am upset, spending an other $100 for the explorer board, but not being able to get any help from this $60 book. I will still be reading this book in the hope that there will be some useful info for me. One thing I like is that the program listings include the MPLAB XC8 compiler listings.Including shipping, this book cost me $70 and I did get about $5 worth of info out of it.This might be a great book for some, it answers a lot of questions well, if you are looking for answers to the PIC18F45K2 using the EasyPIC V7 development board.

Do not use with Kindle. The examples are small pictures and their text cannot be made larger by changing the Kindle font.

Great book, but it depends heavily on MikroC for the advanced projects.

Well this is the one and only book that "embraces" the mighty XC8. Deserves five stars.Even though some examples are not clear and Mr. Ibrahim uses some very expensive equipments from time to time, this is a great book.

Calling this book an introduction is way far more fitting than calling it a projects book since it is the best PIC book out there.. It is very intriguing and stimulating and substantial reading. Don't let the Projects title scare you off like it did me.

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