Integrating IOS Bluetooth LE With PIC18 Microcontrollers

Integrating iOS Bluetooth LE
with
PIC18 Microcontrollers

PAD to PIC

Owen Lacy Brown

Synopsis

This book provides detailed instructions and code on how to integrate iOS 7 with a Microchip PIC using Bluetooth Low Energy. The focus of the chapters deal with 3 platforms: iOS, PIC, & Bluegiga's BLE112 module. A complete project from start to finish is covered to build the Pad To PIC app which integrates with the iO Xtreme pcb. The app has a control panel that monitors the iO Xtreme's analog & digital inputs and provides user controls for operating the outputs. The book project provides complete code for the iOS's Core Bluetooth framework, the PIC microcontroller and the BGScript for the Bluegiga module. The Pad To PIC app is also available on the Apple App Store, if you want a sneak peak of its capabilities. The iO Xtreme board was designed specifically for this book and the Pad To PIC app. It provides an excellent learning platform for integrating the PIC18 with iOS. It comes fully assembled and preprogrammed. The board also includes an on-board Bluegiga BLE112 Bluetooth module. There are two main programming ports that are compatible with Microchip's ICD3 and TI's CC Debugger's standard programming cables. Both the on-board PIC18F26K22 and the BLE112 module come preprogrammed to work with the Pad To PIC app, but they can be easily reprogrammed to fit your custom code and to follow along with the book. The iO Xtreme board can be purchased from the www.back-40.com website.Making the connection between different platforms can have a steep learning curve. The contents of this book can be an essential tool for gaining the knowledge needed to complete your own projects.

Book Information

File Size: 6043 KB

Print Length: 228 pages

Publication Date: April 13, 2014

Sold by:Â Digital Services LLC

Language: English

ASIN: B00JOS5ASG

Text-to-Speech: Enabled

X-Ray: Not Enabled

Word Wise: Not Enabled

Lending: Not Enabled

Enhanced Typesetting: Not Enabled

Best Sellers Rank: #1,897,154 Paid in Kindle Store (See Top 100 Paid in Kindle Store)   #96 inÂ Books > Computers & Technology > Hardware & DIY > Microprocessors & System Design >

PIC Microcontroller   #2565 in Kindle Store > Kindle eBooks > Computers & Technology > Programming > Software Design > Software Development   #9159 in Books > Computers & Technology > Programming > Software Design, Testing & Engineering > Software Development

Integrating iOS Bluetooth LE with PIC18 Microcontrollers Make: Bluetooth: Bluetooth LE Projects with Arduino, Raspberry Pi, and Smartphones Applying PIC18 Microcontrollers: Architecture, Programming, and Interfacing using C and Assembly Fundamentals of Microcontrollers and Applications in Embedded Systems with PIC Microcontrollers PIC Microcontroller and Embedded Systems: Using Assembly and C for PIC18 Getting Started with Bluetooth Low Energy: Tools and Techniques for Low-Power Networking Building Applications with iBeacon: Proximity and Location Services with Bluetooth Low Energy Getting Started with Intel Edison: Sensors, Actuators, Bluetooth, and Wi-Fi on the Tiny Atom-Powered Linux Module (Make : Technology on Your Time) Wireless Networking: Introduction to Bluetooth and WiFi Building iPhone and iPad Electronic Projects: Real-World Arduino, Sensor, and Bluetooth Low Energy Apps in techBASIC Bluetooth Low Energy: The Developer's Handbook IOS: Crash Course - The Ultimate Beginner's Course to Learning IOS Programming in Under 12 Hours IOS Programming For Beginners: The Simple Guide to Learning IOS Programming Fast! The iOS 5 Developer's Cookbook: Core Concepts and Essential Recipes for iOS Programmers (Developer's Library) iOS 9 Swift Programming Cookbook: Solutions and Examples for iOS Apps Diving Into iOS 9 (iOS App Development for Non-Programmers Book 1) Learn to Code in Swift: The new language of iOS Apps (iOS App Development for Non-Programmers Book 2) Beginning iOS 7 Development: Exploring the iOS SDK iOS 8 Swift Programming Cookbook: Solutions & Examples for iOS Apps SWIFT: PROGRAMMING ESSENTIALS (Bonus Content Included): Learn iOS development! Code and design apps with Apple's New programming language TODAY (iOS development, swift programming)