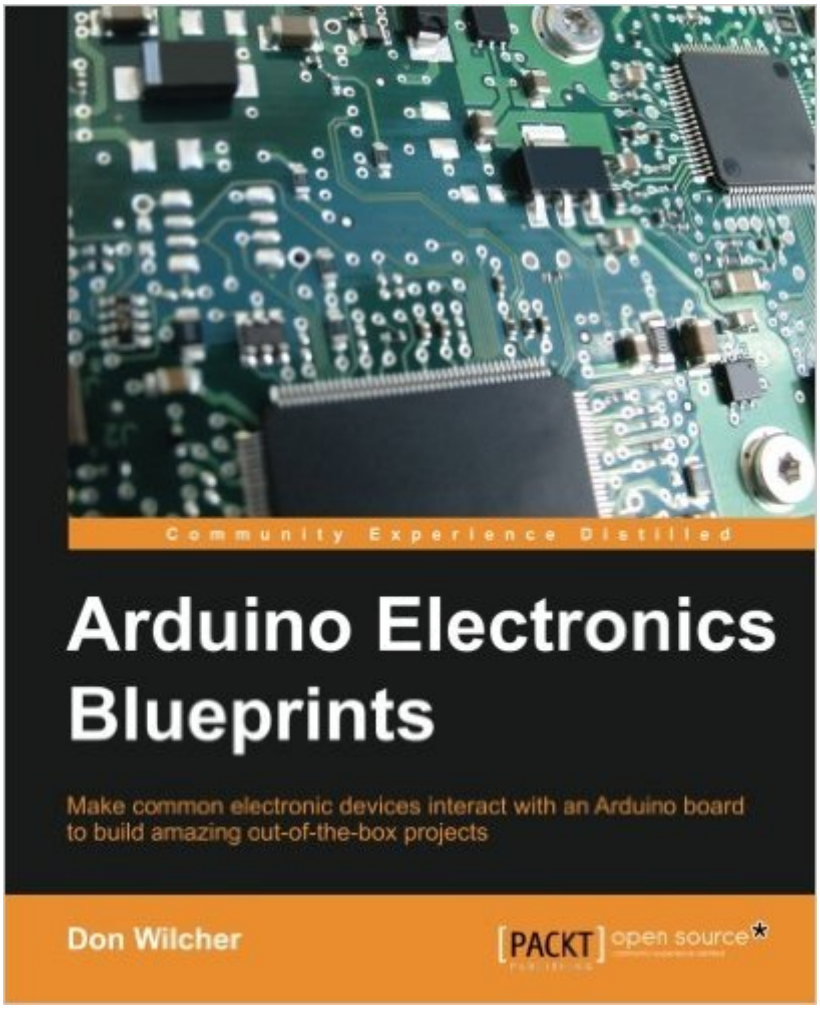
Arduino Electronics Blueprints



Synopsis

Make common electronic devices interact with an Arduino board to build amazing out-of-the-box projects About This BookBuild interactive electronic devices using the ArduinoLearn about web page, touch sensor, Bluetooth, and infrared controlsA project-based guide to create smartly interactive electronic devices with the ArduinoWho This Book Is ForThis book is intended for those who want to learn about electronics and coding by building amazing devices and gadgets with Arduino. If you are an experienced developer who understands the basics of electronics, then you can quickly learn how to build smart devices using Arduino. The only experience needed is a desire to learn about electronics, circuit breadboarding, and coding.What You Will LearnAdd SD and wave-file libraries to your Arduino codeGet to grips with SD card SPI communicationsInterface an IR detection circuit to ArduinoWire an OLED LCD to ArduinoInstall the Nordic nRF8001 Bluetooth Low Energy code to ArduinoBuild an HMI (Human Machine Interface) from a web page using JavaScriptConnect Arduino to a virtual server (Breakout.js)Wire a small DC motor driver to Arduino with a transistor and diode circuitIn DetailArduino is an open source electronics prototyping platform for building a multitude of smart devices and gadgets. Developers can benefit from using Arduino in their projects because of the ease of coding, allowing you to build cool and amazing devices supported by numerous hardware resources such as shields in no time at all.Whether you’re a seasoned developer or brand new to Arduino, this book will provide you with the knowledge and skill to build amazing smart electronic devices and gadgets. First, you will learn how to build a sound effects generator using recorded audio-wave files you’ve made or obtained from the Internet. Next, you will build DC motor controllers operated by a web page, a slide switch, or a touch sensor. Finally, the book will explain how to build an electronic operating status display for an FM radio circuit using Arduino.

Book Information

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Customer Reviews

There are stacks of books on the Arduino these days and as time goes by they become more and more advanced with host of sophisticated projects. Gone are the days of "lets flash an LED" style project books, these days the availability of quality interface boards and better quality code with them has driven the hobby and commercial embedded controller market to new highs and this has led to a new interest in real world device control.This book aims to provide a small subset of real world interfacing solutions. Its suitable for use as a reference on a small range of devices which puts it in the more advanced interfacing books category and an ideal book for those looking to build projects that connect to the real world."Arduino Electronics Blueprints" provides 10 chapters of simple projects that build on earlier chapters, although not highly sophisticated projects, there is room to utilize the concepts in real-world applications. Each project incorporates electronic modules that are themselves usable in a range of other projects. The book’s authors have made reuse of "off the shelf components" a high priority and anything that needs to be crafted by hand is laid out in a simple fashion so that basic skills are needed to assemble most projects.When I started reading each chapter I was impressed at the extent of theory provided on the various components that the project would incorporate but there should have been more emphasis on controlling power devices rather than small DC motors.

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