



BeagleBone Home Automation

Juha Lumme

Download now

[Click here](#) if your download doesn't start automatically

BeagleBone Home Automation

Juha Lumme

BeagleBone Home Automation Juha Lumme

The Internet of Things is now being taken up by tech corporations but this fantastic book brings you the DIY approach to home automation using BeagleBone. From dimming the lights to opening the garage door -- it's all here.

Overview

- Practical approach to home automation using BeagleBone; starting from the very basics of GPIO control and progressing up to building a complete home automation solution
- Covers the operating principles of a range of useful environment sensors, including their programming and integration to the server application
- Easy-to-follow approach with electronics schematics, wiring diagrams, and controller code all broken down into manageable and easy-to-understand sections

In Detail

Home automation lets you control daily activities such as changing the temperature, opening the garage door, or dimming the lights of your house using microprocessors. BeagleBone is a low-cost, high-expansion, hardware-hacker-focused BeagleBoard. It is small and comes with the high-performance ARM capabilities you expect from a BeagleBoard. BeagleBone takes full-featured Linux to places it has never gone before.

Starting with the absolute basics, BeagleBone Home Automation gives you the knowledge you will require to create an Internet-age home automation solution. This book will show you how to set up Linux on BeagleBone. You will learn how to use Python to control different electronic components and sensors to create a standalone embedded system that also accepts control remotely from a smartphone.

This book starts with the very basics of Linux administration and application execution using terminal connections. You will learn the basics of the general purpose input/output pins and discover how various electronic sensors and electronic components work. The "hardware jargon" is explained, and example applications demonstrating their practical use are created so that you will feel in control of the capabilities provided.

Network programming is also a big part of this book, as the created server will be made accessible from the Internet through a smartphone application. You will also learn how to create a fully working Android application that communicates with the home automation server over the Internet.

What you will learn from this book

- Learn how to interface the BeagleBone board with various hardware components and environmental sensors
- Set up the programming logic necessary to enable standalone periodic tasks and their management
- Set up the programming logic necessary to enable standalone periodic tasks and their management
- Discover network programming over TCP/IP sockets, and enable encrypted access over the Internet
- Program an Android application that can interface with your home automation server
- Implement a framework to send any type of data, such as images captured from a camera, to your

smartphone

Approach

An easy-to-follow guide full of hands-on examples to help transform your house into a standalone home automation solution.

Who this book is written for

If you are looking for ways to create a highly capable home automation system that is easily extendable and highly configurable, then this book is for you. Basic knowledge of electronics and programming in Python and/or Java languages will be helpful, but not mandatory.

 [Download BeagleBone Home Automation ...pdf](#)

 [Read Online BeagleBone Home Automation ...pdf](#)

Download and Read Free Online BeagleBone Home Automation Juha Lumme

From reader reviews:

Kathleen Owens:

Now a day individuals who Living in the era wherever everything reachable by connect with the internet and the resources inside it can be true or not call for people to be aware of each data they get. How people have to be smart in obtaining any information nowadays? Of course the answer then is reading a book. Reading through a book can help persons out of this uncertainty Information specially this BeagleBone Home Automation book because this book offers you rich facts and knowledge. Of course the information in this book hundred % guarantees there is no doubt in it as you know.

Elizabeth Rodrigues:

The e-book with title BeagleBone Home Automation has a lot of information that you can study it. You can get a lot of gain after read this book. That book exist new expertise the information that exist in this reserve represented the condition of the world currently. That is important to yo7u to find out how the improvement of the world. That book will bring you with new era of the the positive effect. You can read the e-book on your smart phone, so you can read the idea anywhere you want.

Timmy Gallegos:

Your reading 6th sense will not betray anyone, why because this BeagleBone Home Automation guide written by well-known writer who really knows well how to make book which can be understand by anyone who also read the book. Written with good manner for you, dripping every ideas and producing skill only for eliminate your hunger then you still uncertainty BeagleBone Home Automation as good book not just by the cover but also by the content. This is one publication that can break don't ascertain book by its include, so do you still needing one more sixth sense to pick this particular!?! Oh come on your examining sixth sense already told you so why you have to listening to a different sixth sense.

Karina McDermott:

Is it a person who having spare time after that spend it whole day by watching television programs or just telling lies on the bed? Do you need something totally new? This BeagleBone Home Automation can be the response, oh how comes? A fresh book you know. You are consequently out of date, spending your free time by reading in this brand-new era is common not a nerd activity. So what these guides have than the others?

Download and Read Online BeagleBone Home Automation Juha Lumme #YNJAL1ZBIOM

Read BeagleBone Home Automation by Juha Lumme for online ebook

BeagleBone Home Automation by Juha Lumme Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read BeagleBone Home Automation by Juha Lumme books to read online.

Online BeagleBone Home Automation by Juha Lumme ebook PDF download

BeagleBone Home Automation by Juha Lumme Doc

BeagleBone Home Automation by Juha Lumme Mobipocket

BeagleBone Home Automation by Juha Lumme EPub