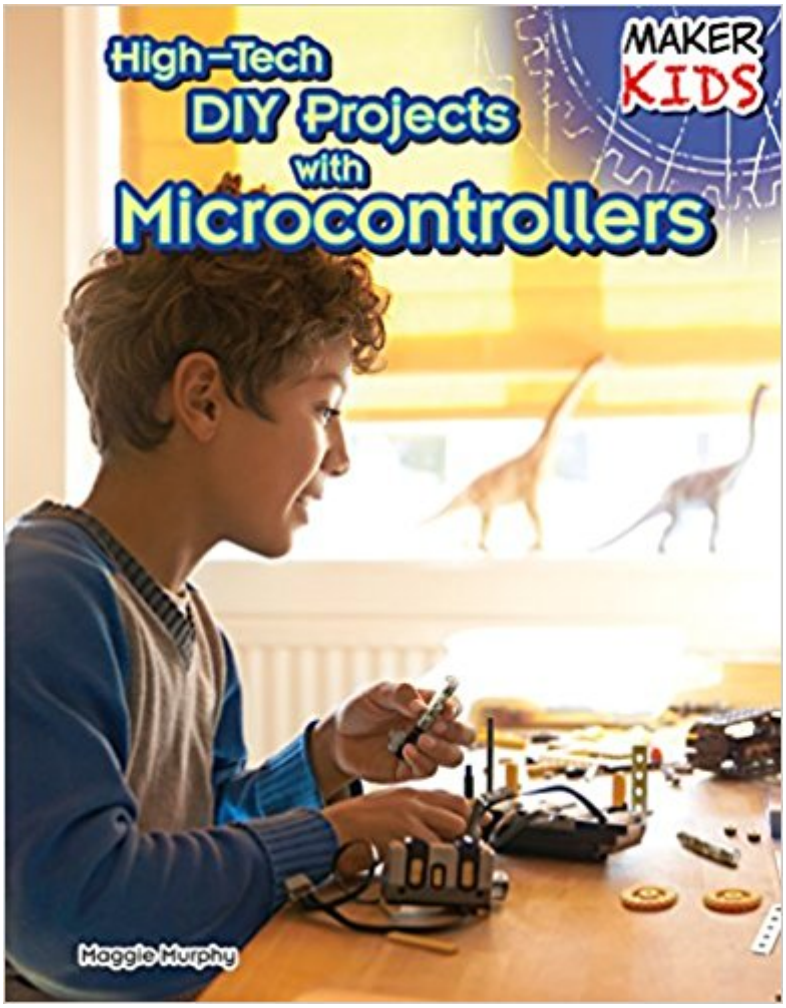
High-Tech DIY Projects With Microcontrollers (Maker Kids)



Synopsis

Microcontrollers are small computers embedded in many everyday devices. The average person interacts with several of them each day without even thinking about it. But why have microcontrollers become so ubiquitous, in what devices are they found, andmost importantlyhow does one go about making one? All this and more is explained in the engaging text. It will turn even the technologically illiterate into budding tech wizards.

Book Information

Series: Maker Kids

Hardcover: 32 pages

Publisher: PowerKids Press (August 1, 2014)

Language: English

ISBN-10: 1477766715

ISBN-13: 978-1477766712

Product Dimensions: 8.6 x 0.3 x 11 inches

Shipping Weight: 14.4 ounces (View shipping rates and policies)

Average Customer Review: 3.0 out of 5 stars 1 customer review

Best Sellers Rank: #2,348,793 in Books (See Top 100 in Books) #32 inÃ Â Books > Children's Books > Computers & Technology > Hardware & Robotics #257 inÃ Â Books > Children's Books > Computers & Technology > Programming #2483 inÃ Â Books > Children's Books > Activities, Crafts & Games > Crafts & Hobbies

Age Range: 8 - 11 years

Grade Level: 3 - 6

Customer Reviews

Gr 5-8-These slim volumes are designed to attract children to the maker movement, which has rapidly grown as an online community among adult and teenage builders of technology devices. Each book offers a few projects, some made with readily available materials and tools. Many require free downloading of online patterns or instruction, the purchase of components or kits, or the use of costly equipment. There's an emphasis on joining or forming science clubs to share in the making process. Libraries and schools already offering makerspace programs may find useful ideas, books, and websites here. Savvy tech users could likely find all this and much more online, but the books offer basic explanations and definitions along with intriguing ideas for projects. Some of the titles are disjointed, and there's also repetitive material. Intimidating supply lists and the many safety issues

are addressed with an emphasis on adult assistance and the value of collaborating with other DIY makers. Despite a few flaws, the subject matter makes these series relevant and solid additions to most collections.Ã Â (c) Copyright 2014. Library Journals LLC, a wholly owned subsidiary of Media Source, Inc. No redistribution permitted.

I checked this book out at the local library to see if it was fitting for Middle and High School students. It was helpful, but I found it to be a little on the light side. This book is an elementary intro to Microcontrollers and where they exist around us (RC cars, digital watches, etc.). Halfway through the book the author suggests joining a club. The rest of the book has a few DIY projects. The discussion builds by going over littleBits (3 pages, 1 project-make an auto-greeter, web address provided for more), Dreambits (1 page, reference next level of littleBits), and Arduino (8 pages, 1 project-make it blink, web link provided for more projects - RGB LED & Electronic Die).Overall, I had expected it to be filled with projects. This is a good book for elementary school aged kids, or those with no background in computers. The sad thing is that many schools do not promote computer science or programming within common curriculum. This book does help students and parents promote STEAM (STEM+Art) in the classroom through maker culture. It that case, the book is good first step. Those interested in DIY projects should look at the littleBits and Arduino websites for skill appropriate projects. For a book with DIY in the title I was hoping for more projects. I feel that the littleBits and Arduino Starter Kits themselves have more to offer.

Healthy DIY Protein Bars (diy protein bars, protein bars, high protein snacks) High Fiber Recipes: 101 Quick and Easy High Fiber Recipes for Breakfast, Snacks, Side Dishes, Dinner and Dessert (high fiber cookbook, high fiber diet, high fiber recipes, high fiber cooking) Make: Tech DIY: Easy Electronics Projects for Parents and Kids The Big Book of Maker Skills (Popular Science): Tools & Techniques for Building Great Tech Projects The Big Book of Maker Skills: Tools & Techniques for Building Great Tech Projects Books For Kids: Natalia and the Pink Ballet Shoes (KIDS FANTASY BOOKS #3) (Kids Books, Children's Books, Kids Stories, Kids Fantasy Books, Kids Mystery ... Series Books For Kids Ages 4-6 6-8, 9-12) Soapmaking, Body Butter & Essential Oils DIY Collection x 9: Soapmaking, Body Butter & Essential Oils Boxset Bundle: Making Soap At Home, DIY Soap Recipes, ... & MUCH MUCH MORE! (DIY Beauty Boxsets) PROJECTS WITH MICROCONTROLLERS AND PICC Basic Arduino Projects: 26 Experiments with Microcontrollers and Electronics Make: Like The Pioneers: A Day in the Life with Sustainable, Low-Tech/No-Tech Solutions