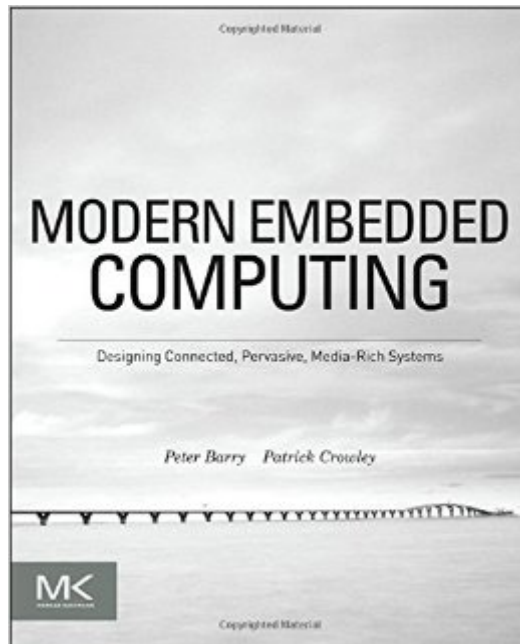


The book was found

# Modern Embedded Computing: Designing Connected, Pervasive, Media-Rich Systems



## Synopsis

Modern embedded systems are used for connected, media-rich, and highly integrated handheld devices such as mobile phones, digital cameras, and MP3 players. All of these embedded systems require networking, graphic user interfaces, and integration with PCs, as opposed to traditional embedded processors that can perform only limited functions for industrial applications. While most books focus on these controllers, Modern Embedded Computing provides a thorough understanding of the platform architecture of modern embedded computing systems that drive mobile devices. The book offers a comprehensive view of developing a framework for embedded systems-on-chips. Examples feature the Intel Atom processor, which is used in high-end mobile devices such as e-readers, Internet-enabled TVs, tablets, and net books. Beginning with a discussion of embedded platform architecture and Intel Atom-specific architecture, modular chapters cover system boot-up, operating systems, power optimization, graphics and multi-media, connectivity, and platform tuning. Companion lab materials compliment the chapters, offering hands-on embedded design experience. Learn embedded systems design with the Intel Atom Processor, based on the dominant PC chip architecture. Examples use Atom and offer comparisons to other platforms. Design embedded processors for systems that support gaming, in-vehicle infotainment, medical records retrieval, point-of-sale purchasing, networking, digital storage, and many more retail, consumer and industrial applications. Explore companion lab materials online that offer hands-on embedded design experience.

## Book Information

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## Customer Reviews

I'm a mechanical engineer, sorta bored at my job so I look for a book on embedded systems to build some neat stuff in my spare time. I get this book in 2013 because I like the table of contents and that it was written in 2012. It turns out to NOT be the stock, boring type on programming 8-bit/16-bit microcontrollers but a great survey of building entire systems from the ground up. So here's my 2 cents on why the book is great and where it can improve: Pros:- Good coverage of every layer of embedded systems: hardware (32-bit CPU's/GPUs, networking ASIC's, peripherals) to software (OS fundamentals, kernels, application frameworks) to networking (protocols and key considerations)- Useful example code in Python and C/C++ to illustrate concepts- Great introductory coverage of advanced concepts in modern embedded hardware (instruction pipelining, multiprocessing and the like) Cons (consider as suggestions for 2nd edition):- So many typos!- Motivate topics better. For example, in the chapter on networking, there's a lot of "this is a cool concept but we'll talk about it later". If it's that important, talk about it first Overall, these authors know what they are talking about and are actually quite visionary. I may even start a company based on some ideas picked up here, besides enriching my hobby life! PS: Perhaps some EE / CS major will think this is a pretty shallow book but if you are a beginner serious about learning embedded systems the right way, this is the book for you!

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