



Open-Source Robotics and Process Control Cookbook: Designing and Building Robust, Dependable Real-Time Systems

By Lewin A R W Edwards

ELSEVIER SCIENCE TECHNOLOGY, United Kingdom, 2004. Paperback. Book Condition: New. 236 x 188 mm. Language: English. Brand New Book. In this practical reference, popular author Lewin Edwards shows how to develop robust, dependable real-time systems for robotics and other control applications, using open-source tools. It demonstrates efficient and low-cost embedded hardware and software design techniques, based on Linux as the development platform and operating system and the Atmel AVR as the primary microcontroller. The book provides comprehensive examples of sensor, actuator and control applications and circuits, along with source code for a number of projects. It walks the reader through the process of setting up the Linux-based controller, from creating a custom kernel to customizing the BIOS, to implementing graphical control interfaces. Including detailed design information on: ESBUS PC-host interface Host-module communications protocol A speed-controlled DC motor with tach feedback and thermal cut-off A stepper motor controller A two-axis attitude sensor using a MEMS accelerometer Infrared remote control in Linux using LIRC Machine vision using Video4Linux The Accompanying companion site contains a wealth of design materials, including: Full schematics and source code for the projects described Ready-made disk images for the miniature Linux distribution uses as the basis for...

Reviews

Basically no terms to clarify. It is actually writter in basic terms rather than confusing. I found out this ebook from my dad and i suggested this book to find out.

-- Elinore Vandervort

If you need to adding benefit, a must buy book. I could possibly comprehended every little thing out of this composed e pdf. I am quickly could get a enjoyment of looking at a composed book.

-- Mrs. Mariam Hartmann