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Practical Electronics for Inventors, Fourth Edition

by: Paul Scherz, Dr. Simon Monk
Abstract: A fully updated, no-nonsense guide to electronics. Advance your electronics knowledge and gain the skills necessary to develop and construct your own functioning gadgets. Written by a pair of experienced engineers and dedicated hobbyists, Practical Electronics for Inventors, Fourth Edition, lays out the essentials and provides step-by-step instructions, schematics, and illustrations. Discover how to select the right components, design and build circuits, use microcontrollers and ICs, work with the latest software tools, and test and tweak your creations. This easy-to-follow book features new instruction on programmable logic, semiconductors, operational amplifiers, voltage regulators, power supplies, digital electronics, and more. Coverage includes: • Resistors, capacitors, inductors, and transformers • Diodes, transistors, and integrated circuits • Optoelectronics, solar cells, and phototransistors • Sensors, GPS modules, and touch screens • Op amps, regulators, and power supplies • Digital electronics, LCDs, and logic gates • Microcontrollers and prototyping platforms • Combinational and sequential programmable logic • DC motors, RC servos, and stepper motors • Microphones, audio amps, and speakers • Modular electronics and prototypes

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Paul Scherz is a Systems Operation Manager who received his B.S. in physics from the University of Wisconsin. He is an inventor/hobbyist in electronics, an area he grew to appreciate through his experience at the University’s Department of Nuclear Engineering and Engineering Physics and Department of Plasma Physics. Dr. Simon Monk has a bachelor’s degree in cybernetics and computer science and a Ph.D. in software engineering. He spent several years as an academic before he returned to industry, co-founding the mobile software company Momote Ltd. He has been an active electronics hobbyist since his early teens and is a full-time writer on hobby electronics and open-source hardware. Dr. Monk is author of numerous electronics books, including Programming Arduino, Hacking Electronics, and Programming the Raspberry Pi.
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