

The book was found

# UC/OS-III, The Real-Time Kernel, Or A High Performance, Scalable, ROMable, Preemptive, Multitasking Kernel For Microprocessors, Microcontrollers & DSPs (Board NOT Included)



## Synopsis

This book puts the spotlight on how a real-time kernel works. Using Micrium's uC/OS-III as a reference, the book consists of two complete parts. The first describes real-time kernels in generic terms. Part II provides examples to the reader, using STMicroelectronics' STM32F107 microcontroller, based on the popular ARM Cortex-M3 architecture. A companion evaluation board (uC/Eval-STM32F107) NOT INCLUDED, and tools (IAR Systems Embedded Workbench for ARM), enable the reader to be up and running quickly, and have an amazing hands-on experience, leading to a high level of proficiency. This book is written for serious embedded systems programmers, consultants, hobbyists, and students interested in understanding the inner workings of a real-time kernel. uC/OS-III is not just a great learning platform, but also a full commercial-grade software package, ready to be part of a wide range of products. uC/OS-III is a highly portable, ROMable, scalable, preemptive real-time, multitasking kernel designed specifically to address the demanding requirements of today's embedded systems. uC/OS-III is the successor to the highly popular uC/OS-II real-time kernel but can use most of uC/OS-II's ports with minor modifications. Some of the features of uC/OS-III are: Preemptive multitasking with round-robin scheduling of tasks at the same priority Supports an unlimited number of tasks and other kernel objects Rich set of services: semaphores, mutual exclusion semaphores with full priority inheritance, event flags, message queues, timers, fixed-size memory block management, and more Built-in performance measurements

## Book Information

Hardcover: 820 pages

Publisher: Micrium Press (September 21, 2009)

Language: English

ISBN-10: 9780982337530

ISBN-13: 978-0982337530

ASIN: 0982337531

Product Dimensions: 7 x 1.9 x 10 inches

Shipping Weight: 4 pounds

Average Customer Review: 4.2 out of 5 stars [See all reviews](#) (14 customer reviews)

Best Sellers Rank: #838,745 in Books (See Top 100 in Books) #33 in [Books > Computers & Technology > Hardware & DIY > Microprocessors & System Design > DSPs](#) #330 in [Books > Computers & Technology > Programming > Languages & Tools > C & C++ > C](#) #893 in [Books >](#)

## Customer Reviews

If you use the uC/OS-III ("micro see oh ess three") real time operating system, this book is compulsory. It's the only reference that covers all features of the 2009 release of this popular RTOS. Unlike some other "only references" on their subjects, I find this one well-written, well-organized, and easy to use. Roughly the first half of the book explains the OS operation in extraordinary detail. This isn't an OS for novice users. It comes in source form, for embedded system developers who need to port it to novel processors and who need to understand every instruction when the debugging turns ugly. The text supports those developers well, explaining the intent and usage of all the major OS subsystems. Appendices in the second half of this massive book present the programmers' reference, including configuration controls. Embedded systems are as different from each other as your car's airbags are from your cell phone, so these options let you include all and only the features needed for the application at hand - an important way to reduce ROM requirements in cost-critical applications. The last 150 pages walk the user through examples based on Micrium's eval board. As a reference, I fault this book only for its maddeningly brief index - but weaknesses there are largely made up for in the detailed (15 page) table of contents. I'm not creating embedded systems right now, though. I'm teaching an OS course, one where the students will appreciate a concentration on real-time and embedded systems. This makes a great secondary reference for that class, as a case study in what an industrial-strength RTOS looks like. Best of all, it deals with the OS source, sometimes line by line.

[Download to continue reading...](#)

uC/OS-III, The Real-Time Kernel, or a High Performance, Scalable, ROMable, Preemptive, Multitasking Kernel for Microprocessors, Microcontrollers & DSPs (Board NOT Included) Real-Time Digital Signal Processing from MATLAB® to C with the TMS320C6x DSPs, Second Edition Real Time Systems and Programming Languages: Ada 95, Real-Time Java and Real-Time C/POSIX (3rd Edition) Real Estate: Learn to Succeed the First Time: Real Estate Basics, Home Buying, Real Estate Investment & House Flipping (Real Estate income, investing, Rental Property) Ouija Board Stories: Chilling True Horror Stories Of Ouija Boards Gone Wrong (Ouija Board Stories, Ghost Stories, True Horror Stories, Ouija Board Nightmares, Haunted Places Book 1) INTEL Microprocessors 8086/8088, 80186/80188, 80286, 80386, 80486, Pentium, Prentium ProProcessor, Pentium II, III, 4 (7th Edition) Kernel of the Kernel (Suny Series in Islam) NCLEX Review: EASY Nursing Drug Guide (Ace Nursing School and the NCLEX®!): + Bonus Practice Exam Included!

(LIMITED TIME BONUS - MASSIVE Nursing Study Pack Included!) Practical Node.js: Building Real-World Scalable Web Apps Fundamentals of Microcontrollers and Applications in Embedded Systems with PIC Microcontrollers High Blood Pressure Cure: How To Lower Blood Pressure Naturally in 30 Days (Alternative Medicine, Natural Cures, Natural Remedies, High Blood Pressure ... Cures for High Blood Pressure, High BI) Embedded Systems: Real-Time Interfacing to Arm® CortexM-Microcontrollers Embedded Systems: Real-Time Operating Systems for Arm Cortex M Microcontrollers Real-time Operating Systems (The engineering of real-time embedded systems Book 1) Memory Controllers for Real-Time Embedded Systems: Predictable and Composable Real-Time Systems: 2 Shell Scripting Tutorial For Unix Linux - Included Free 6+ Hours of Online Tutorial Included Police Oral Board Tactics Manual: Deconstructing The Oral Board Process HOA WARRIOR II: Responding to Pets, Paint, & Parking in Your HOA: (templates, forms, letters, and philosophy to use when dealing with your board or when you become the board) Anesthesiology Examination and Board Review 7/E (McGraw-Hill Specialty Board Review) Definitive Neurological Surgery Board Review (Board Review Series)

[Dmca](#)