

VxWorks 6.x Asymmetric Multiprocessing

Wind River Education Services enables you to unleash the power of Wind River's technology. Our training and mentoring empower developers with the knowledge and proficiency required to program and manage device software faster and more reliably. Reduce your project risks and shorten your development timelines by equipping your engineers with the right training by our experts.

Course Description

The VxWorks 6.x Asymmetric Multiprocessing course provides engineers with an efficient way to acquire the knowledge necessary to implement a multi-core design on a Wind River platform with the most full-featured, deterministic, and scalable solutions available in the embedded software market.

After this course, participants will be able to do the following:

- Describe the challenges and strengths of multi-core and asymmetric multiprocessing.
- Design applications for VxWorks native asymmetric multiprocessing.
- Increase program performance using multi-core technologies.

Products Supported

- VxWorks 6.7
- Wind River Workbench 3.1

Who Should Attend

- Developers migrating a VxWorks design to multi-core AMP
- Engineers starting a new real-time design on multi-core
- Multi-core developers who work with Wind River Workbench and VxWorks

Prerequisite Skills

- One year experience programming with VxWorks 6.x and Workbench
- Two years of C programming
- Basic understanding of real-time operating systems and debugging techniques
- Basic knowledge of multi-core concepts and parallel programming

Prerequisite Courses

- VxWorks 6.x and Workbench Fundamentals
- Multi-core Technologies and Designing for Concurrency

Course Title:	VxWorks 6.x Asymmetric Multiprocessing
Duration:	Two days
Format:	Instructor-led lectures and hands-on lab sessions; instructor-led Live Remote delivery available
Price:	Contact your local sales representative

Related Courses

- VxWorks 6.x Symmetric Multiprocessing

Course Format

- This two-day instructor-led course consists of lectures and lab sessions.
- Students receive personal guidance from expert Wind River instructors.
- Students use VxWorks 6.7 and Wind River Workbench 3.1 to gain experience with the topics presented.
- Lab sessions allow hands-on application of course concepts.

Global Reach of Wind River Education Services

With more than 20 years of device software experience, we provide education services in every region of the world. You can rely on our expertise—acquired by delivering hundreds of classes each year to thousands of students—to provide a highly effective learning experience, wherever your developers are located.

Private Classes

Private classes are conducted at your location, scheduled for your convenience. Private classes include the use of a preconfigured laboratory environment that may consist of a connection to a remote lab environment or equipment that we bring to your facility. Private classes can be tailored to your specific needs by adding or removing topics from multiple courses, maximizing the benefit of your time in class.

Mentoring

Our Rapid Integration and Mentoring programs provide coaching from a seasoned expert who can increase your team's productivity and reduce your project's risk. An experienced engineering specialist will review your specific goals, project environment, and challenges and address productivity obstacles. Whether you need assistance with product installation and configuration, advice on development workflow, debug assistance, or optimization best practices, mentoring can shorten your trial-and-error cycle, document recommended procedures, and ensure your developers are using tools and technology efficiently.

Syllabus

Day 1

Overview: Understanding Multi-core

- Introduction to Multi-core
- The Multi-core Use Cases

AMP Multi-core Architecture

- Overview
- Shared Resources and Hardware Considerations
- IPC for Multi-core Concepts
- Programming Models on AMP Review

Wind River VxWorks AMP

- Feature Implementation Details
- Project Life Cycle
- Market Differentiators
- CPU Portfolio and BSP Support
- VxWorks AMP Configuration Lab

Day 2

Migration to Multi-core

- Migration to AMP
- VxWorks AMP Performance Lab

Debug and Analysis Tools

- Workbench Overview
- Debug Agents Over MIPC
- OCD for AMP
- VxWorks AMP Programming Lab

Appendix: BSP Support for VxWorks AMP

Wind River World Headquarters

500 Wind River Way
Alameda, CA 94501
USA
Toll-free: 800-545-9463
Tel.: 510-748-4100
Fax: 510-749-2454
training@windriver.com

Wind River EMEA

Osterfeldstrasse 84
85737 Ismaning
Germany
Tel.: +49 89 962 445 0
Fax: +49 89 962 445 999
emea-training@windriver.com