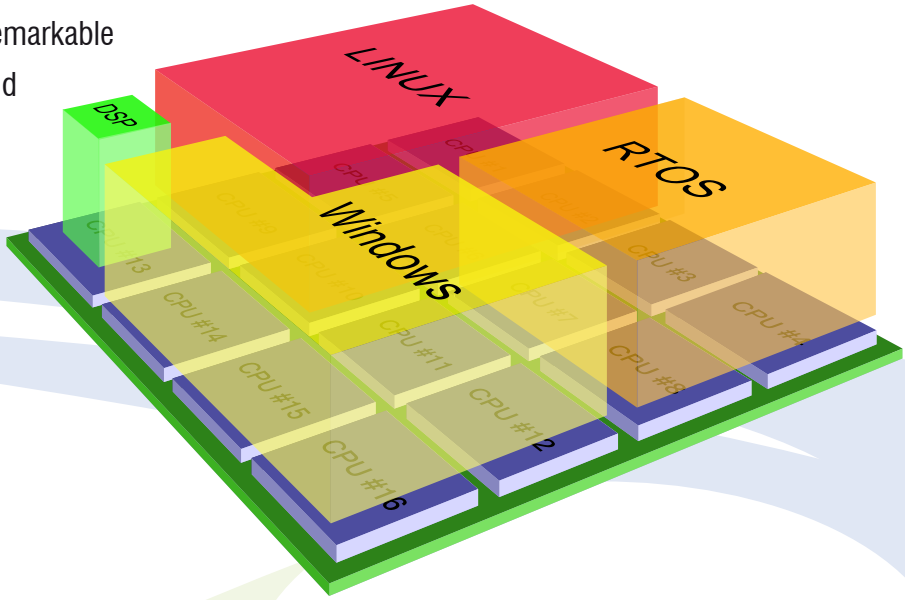
REAL TIME SYSTEMS GmbH

Harness the Power of Today's Multicore Processors

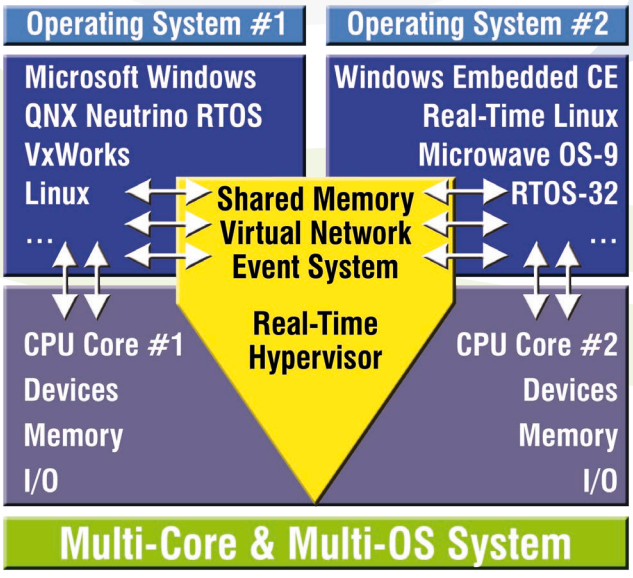
Real-Time Hypervisor

The innovative Real-Time Systems Hypervisor permits multiple operating systems – both real-time (RTOS) and general purpose operating systems (GPOS) like Microsoft™ Windows® or Linux – to run concurrently on multicore x86 processors. By utilizing this powerful and cost-effective software solution, designers attain increased flexibility in system design and remarkable enhancements to functionality and performance – at the same time reducing overall system cost.



Hard Real-Time Performance
Multiple Operating Systems in Perfect Harmony

- Combine real-time operating systems like VxWorks®, QNX Neutrino or Real-Time Linux , with e.g. Microsoft™ Windows®
- Operating systems reside simultaneously on an x86 computer while maintaining the hard real-time characteristics of an RTOS
- User-definable boot sequence
- Reboot any operating system anytime during undisturbed execution of other operating systems
- Communication via high performance virtual TCP/IP network and flexible shared memory



ADVANTAGES

- Reduced system costs and physical size through Hardware consolidation
- Hard real-time performance
- Maximum flexibility in system functionality
- Increased reliability (MTBF) as no additional hardware is required for additional operating system
- Works seamlessly with COTS and proprietary operating systems
- Proven in thousands of systems worldwide

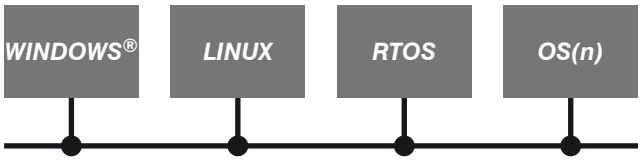
OPERATING SYSTEMS SUPPORTED

- Microsoft™ Windows® (all current versions)
- Windows® Embedded Compact (incl. CE 6)
- Wind River VxWorks
- QNX Neutrino RTOS
- Microware OS-9
- On Time RTOS-32
- Linux, Real-Time Linux
- T-Kernel
- Proprietary OS or stand alone “C-Code”
- ... others upon request

ABOUT OUR HYPERVISOR

- All operating systems operate completely independent
- User defined startup sequence of operating systems
- Any operating system can reboot without affecting other operating systems
- All operating systems safely separated and protected
- Standard development tools can be used (supplied by the operating system vendors)
- Standard drivers can be used ~ no special development required
- NUMA (Non-Uniform Memory Access) fully supported
- OS independent Drive Sharing

MEANS OF INTERNAL COMMUNICATION



- The RTS Hypervisor provides easy communication via high performance internal virtual network (TCP/IP)
- Shared memory with an easy to use API can be configured for direct data exchange
- Time Synchronization between Operating Systems
- High-Performance Event System
- APIs to monitor, start and stop Guest Operating Systems
- Rights Management for all APIs and Shared Memories

Windows Embedded Gold Partner

intel IoT Solutions Alliance

AMD

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