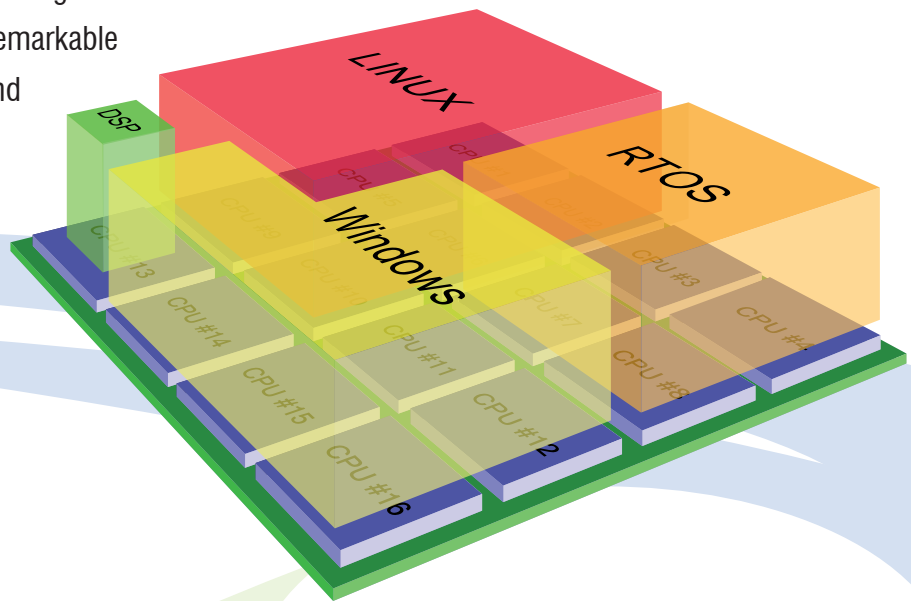
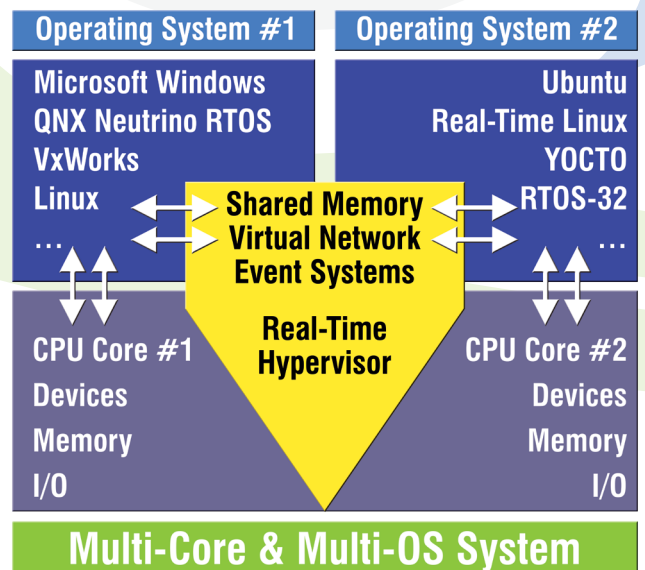


The innovative Real-Time Systems Hypervisor permits multiple operating systems – both real-time (RTOS) and general purpose operating systems (GPOS) like Microsoft™ Windows® or Linux – to run concurrently on multicore x86 processors. By utilizing this powerful and cost-effective software solution, designers 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
- ✓ Runs on Any PC from Low-Power Modules to Multi-Socket Servers
- ✓ Works Out of the Box without customization
- ✓ Proven in thousands of systems worldwide

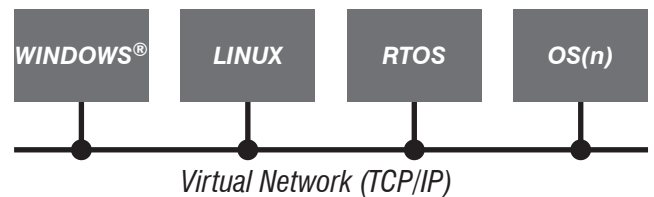
ABOUT OUR HYPERVISOR

- ✓ All operating systems safely separated and protected
- ✓ User defined startup sequence of operating systems
- ✓ Any operating system can reboot without affecting other operating systems
- ✓ Standard development tools can be used (supplied by the operating system vendors)
- ✓ Existing OS device drivers can be used without modification
- ✓ Commercial Fieldbus, EtherCat, TSN, etc. can be integrated seamlessly
- ✓ NUMA (Non-Uniform Memory Access) fully supported
- ✓ Disk Drive and Partition Assignment (AHCI Controller Sharing)
- ✓ USB Port Assignment (xHCI Controller Sharing)
- ✓ Cache Allocation Technology (CAT) for shared L2 and L3 Caches

OPERATING SYSTEMS SUPPORTED

- ✓ Microsoft™ Windows® (all current versions)
- ✓ Windows® Embedded Compact
- ✓ Wind River VxWorks
- ✓ QNX Neutrino RTOS
- ✓ On Time RTOS-32
- ✓ Linux, Real-Time Linux
- ✓ YOCTO
- ✓ T-Kernel
- ✓ Proprietary OS upon request

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



Gartenstrasse 33
D-88212 Ravensburg / Germany
Tel: +49 (0) 751 359 558 - 0
www.real-time-systems.com
sales@real-time-systems.com