

Product Release Notice

RTX64 2013

Release Date

Product Released for General Availability on January 7, 2013.

Product Overview

IntervalZero announces the release of RTX64 2013, the first 64-bit version of our market-leading hard real-time software products, which transform Windows into a real-time operating system. Symmetric multiprocessing-enabled RTX64 2013 takes full advantage of 64-bit memory and performance capabilities.

IntervalZero will continue the separate development of a 32-bit version of RTX, the latest of which is RTX 2012.

RTX64 2013 is supported on the 64-bit versions of Windows 7 with SP1, including Windows Embedded Standard 7 with SP1.

RTX64 2013 is a key component of the IntervalZero RTOS Platform that comprises x86 and x64 multicore multiprocessors, the Windows operating system, and real-time Ethernet (e.g. EtherCAT or PROFINET) to outperform real-time hardware such as DSPs and radically reduce the development costs for systems that require determinism or hard real-time.

Leading OEMs worldwide use the IntervalZero RTOS Platform to achieve system development cost reductions of 25 to 50%, as well as breakthroughs in throughput and yields, in production quality, and in a more compact physical footprint.

Features & Capabilities

RTX64 2013 includes the following features and capabilities:

- Real-time Subsystem
 - Scalable from 1 to 63 real-time processors
 - SMP-aware scheduler utilizes both priority driven and pre-emptive algorithms to ensure critical thread context switches; and yields to threads of high priority occur in the sub-microsecond range.
 - Real-time Win32 like API

- Configurable thread and interrupt affinity
- Configurable timer period
- Ability to attach to line-based and message-based (MSI/MSI-X) interrupts
- Shutdown handling on Windows STOP or shutdown
- Deterministic memory
- Access to Windows file system and registry
- Dynamic-link library support through RTDLLs, which can be loaded implicitly or explicitly
- Real-time Inter Process Communication between Windows user processes and real-time processes
 - Native and managed interface for 32-bit or 64-bit Windows processes
 - Objects available: events, mutexes, and semaphore
 - Data sharing through shared memory
- Windows user groups for limiting access to RTX64 features (RTX64Debuggers, RTX64Administrators, and RTX64Users)
- Tools and utilities
 - RTX64Config – configuring the Real-time Subsystem
 - RtssRun – running RTSS processes
 - RtssKill – stopping RTSS processes
 - RTX64 Server console – display print messages from RTSS processes
 - SRTM – provide information on Timer latency
- Software Development Kit
 - Headers and libraries for application development
 - Microsoft Visual Studio 2010 Support
 - Wizard for application development
 - Microsoft Visual Studio C-Runtime support
 - Debugger that allows for:
 - launching a process for debugging in Visual Studio
 - support for the following types of breakpoints:
 - function breakpoints
 - file breakpoints
 - address breakpoints
 - data breakpoints
 - Sample source to show basic concepts

- Product Documentation
 - Getting Started Guide
 - Real-time features and concepts
 - MiniTutorials and videos
 - API Reference

Additional Purchasable Features

RT-TCP/IP Stack provides the following networking capabilities to the RTX64 Subsystem:

- TCP/UDP/IP networking for RTX64 processes
- Support for IPv4 and IPv6
- Winsock 2.0 support
- RAW Sockets
- MAC layer filtering
- RT-TCP/IP network drivers for a number of common Network interface Cards
- Utilities (RtssArp, RtsslPConfig, and RtssPing)

Activation & Licensing

The IntervalZero product licensing system allows for flexibility in how features are activated and deployed.

For an overview of the IntervalZero product licensing please visit our web site www.intervalzero.com. For additional information on deployment options please refer to our RTX64 2013 deployment guide.

Availability

RTX64 2013 is available beginning January 7, 2013 through Partners and by contacting Sales: sales@intervalzero.com or (781) 996-4481.

We look forward to comments and feedback. If you have any recommendations or wish to suggest any product enhancements, please contact Sales at sales@intervalzero.com or Product Management at: productmanagement@intervalzero.com.