



Main Features

- Provides a Real-Time Subsystem (RTSS) that runs on Windows
- Provides precise control of IRQs, I/O, and memory
- Dedicated Cores for Performance and Partitioning
- RTX implements deterministic scheduling of real-time threads
- RTX-based applications survive Windows crashes

Product Overview

The RTX hard real-time software transforms Microsoft Windows into real-time operating system and delivers real-time symmetric multiprocessing on x86 multicore processors.

Soft-Control Architecture is an Integrated Real-Time Development Platform comprising Microsoft Windows Embedded, multiprocessor x86 architectures, and IntervalZero's RTX, which provides real-time extension to Windows and enables SMP. OEMs can use it to design complex Human-Machine Interfaces require the precise coordination of multiple tasks and the deterministic hard real-time performance capabilities.

Specifications

Application Determinism

- Guaranteed precision – set timer periods down to 1 microsecond; IST latencies of less the 10 microseconds.
- Separation from Windows – Windows processes cannot interfere with your real-time applications.
- Scalability – one scheduler is used across all real-time processors. SMP-aware scheduler utilizes both priority-driven and pre-emptive algorithms to ensure critical thread context switches. Yields to threads of high priority occur in the sub-microsecond range.

Control of Real-Time Applications and Environment

- Flexibility – configure how much or how little of your processing capability is used for real-time processes (1 to 31 processors).
- Full control of our real-time processes – load balancing as needed. RTX provides the ability to set thread and interrupt affinities.
- Peace of mind if Windows issues a STOP message or shutdown – real-time applications have the ability to continue running to a safe shutdown.

Target Industry

- CNC and Industrial Automation Manufacturers
- Motion Control Vendors

- Medical Systems
- Digital Audio and Video Editing
- Test and Measurement

Ordering Information

- IntervalZero BUNDLE-RX2012-Solo-TCP (P/N: 6014401473X00)
- IntervalZero BUNDLE-RX2012-Entry-TCP (P/N: 6014401587X00)
- IntervalZero BUNDLE-RX2012-Basic-TCP (P/N: 6014401588X00)
- IntervalZero BUNDLE-RX2012-Professional-TCP (P/N: 6014401589X00)
- IntervalZero BUNDLE-RX2012-Premium-TCP (P/N: 6014401590X00)
- IntervalZero BUNDLE-RX2012-Ultimate-TCP (P/N: 6014401591X00)
- IntervalZero BUNDLE-RTX2012-Ultimate-TCP-SDK- MT (P/N: 6014401592X00)