



## Main Features

- Provides a Real-Time Subsystem (RTSS) that runs on 64-bit 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 64-bit 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 64-bit Windows Embedded, multiprocessor x86 architectures, and IntervalZero's RTX, which provides real-time extension to 64-bit 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 RX64-2013: Solo (P/N: 6014401598X00)**
- **IntervalZero RX64-2013: Entry (P/N: 6014401599X00)**
- **IntervalZero RX64-2013: Basic (P/N: 6014401600X00)**
- **IntervalZero RX64-2013: Professional (P/N: 6014401601X00)**
- **IntervalZero RX64-2013: Premium (P/N: 6014401602X00)**
- **IntervalZero RX64-2013:Ultimate (P/N: 6014401603X00)**
- **IntervalZero BUNDLE-RX64-2013-Ultimate-TCP-SDK- MT (P/N: 6014401597X00)**