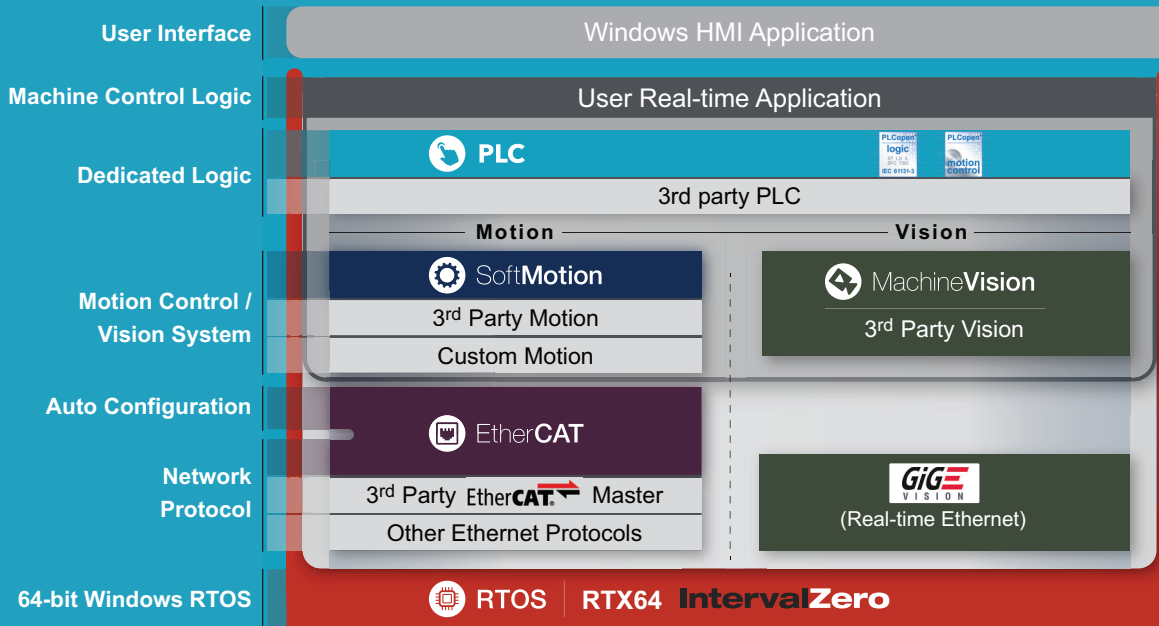


# The Complete "Plug-and-Play" Software Platform for Real-Time, PC-Based Motion Control & Machine Vision

The KINGSTAR Machine Automation Platform is an open and standards-based, integrated platform that enables engineers to design, develop, and integrate applications with either KINGSTAR's soft motion library and software PLC or third-party software. Using a single industrial PC enhanced by the power of a real-time operating system (RTOS) for 64-bit Windows, and leveraging the EtherCAT standard, you can deliver software-only motion controllers and machine vision positioning systems quickly and cost effectively.



**REDUCE COSTS**

Replace hardware with software to reduce machine control costs by 25-50%.

**SPEED TIME-TO-MARKET**

Improve productivity with pre-integrated motion libraries and EtherCAT auto-configuration.

**IMPROVE UX**

Build a powerful UI with a world-class Windows Interface (HMI).

**ENHANCE PERFORMANCE**

Improve performance and control by using the PC NIC, Ethernet cables and EtherCAT infrastructure.

**SCALE DYNAMICALLY**

Auto-configure an EtherCAT network when swapping any servo drives and I/O devices.

**EXTEND EASILY**

Add any 3rd party protocols or open-source libraries with no vendor lock-in.

The KINGSTAR Machine Automation Platform provides the most comprehensive set of product options

**KINGSTAR Soft Motion**

Deliver superior quality with pre-integrated and tested motion libraries that provide precision motion positioning performance

**KINGSTAR EtherCAT**

Integrate custom motion control on an auto-configured EtherCAT network for any servo or I/O device

**KINGSTAR PLC**

Powered by ISaGRAF, monitor app management and deployment from an intuitive HMI on an industrial PC

**KINGSTAR Machine Vision**

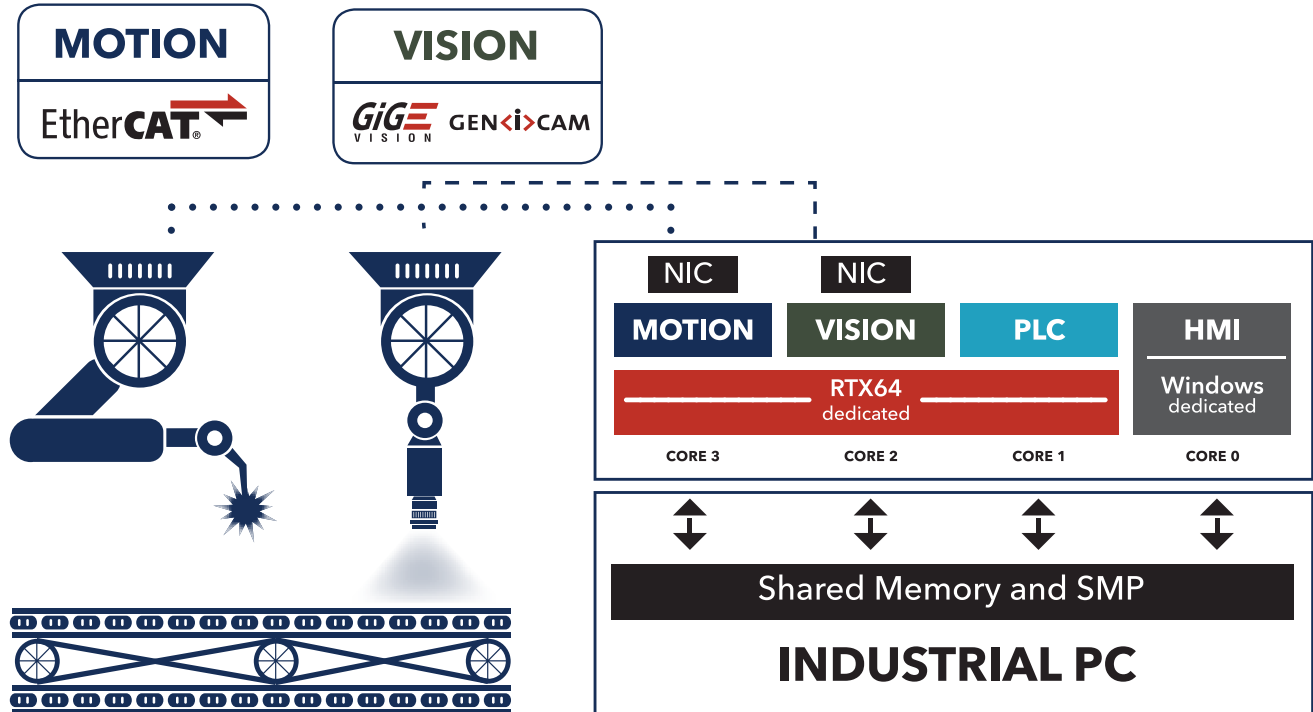
Powered by Matrox, run their imaging library (MIL) for real-time image capture and processing on 64-bit Windows

**IntervalZero RTX64**

Replace hardware FPGAs & DSPs with software that transforms 64-bit Windows into a real-time OS



Rapidly deliver PC-based industrial machine controllers with precision performance and superior quality at half the cost of hardware.



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|  | <ul style="list-style-type: none"> <li>• Enables coordinated motion at 125 microsecond intervals</li> <li>• Up to 3 cores for dedicated motion control</li> <li>• Machine control API for real-time precision and accessible from Visual Studio</li> </ul>   |
|  | <ul style="list-style-type: none"> <li>• Enables coordinated motion at 125 microsecond intervals</li> <li>• Up to 3 cores for dedicated motion control</li> <li>• Integrates any customized motion control software</li> </ul>   |
|  | <ul style="list-style-type: none"> <li>• Transform your industrial PC into a PLC with an intuitive HMI</li> <li>• Handle all motion control and machine vision automation tasks</li> <li>• Rely on modularity and ruggedness for real-time use</li> </ul>  |
|  | <ul style="list-style-type: none"> <li>• Perform image capture, processing and analysis using GigE</li> <li>• Run Matrox Imaging Library (MIL) natively on IntervalZero's RTX64 RTOS</li> <li>• Partition a MIL app to run on RTX64 and Windows for response-critical parts</li> </ul>   |
|  | <ul style="list-style-type: none"> <li>• Conduct real-time application processing up to 63 cores on a PC</li> <li>• Scale up with x86/x64 to create next-gen products</li> <li>• Up to 128 priorities for thread scheduling</li> <li>• Full control over process load balancing</li> <li>• Double performance every 18 months</li> </ul> |

