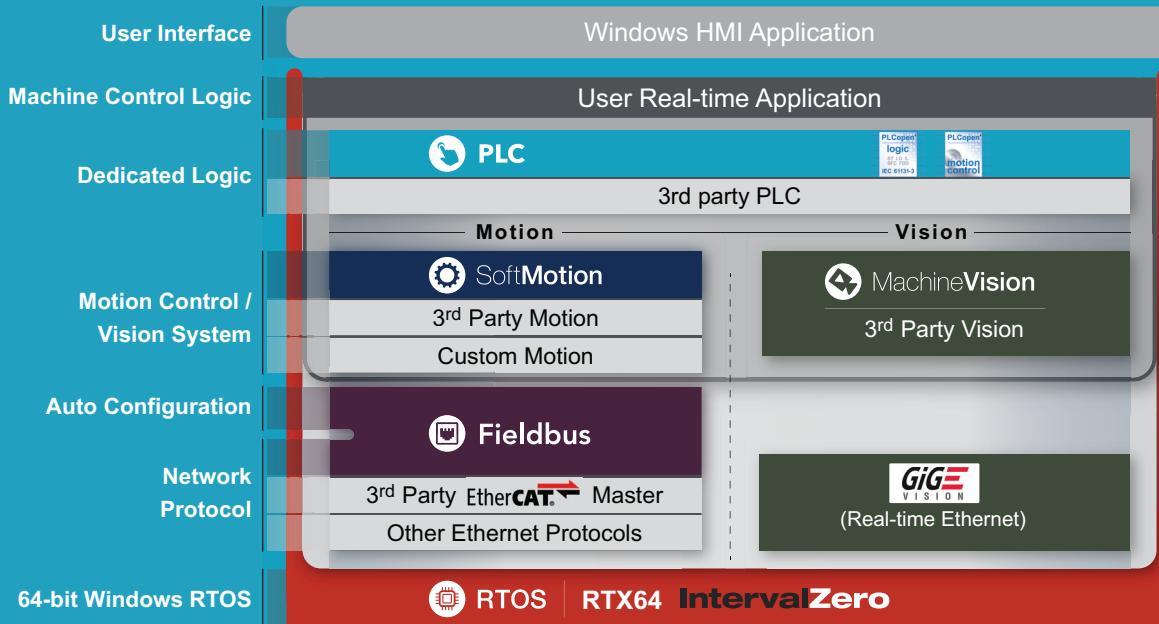


# The Complete “Plug-and-Play” Software Platform for Real-Time, PC-Based Motion Control & Machine Vision

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 Fieldbus

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

### KINGSTAR PLC

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

### KINGSTAR Machine Vision

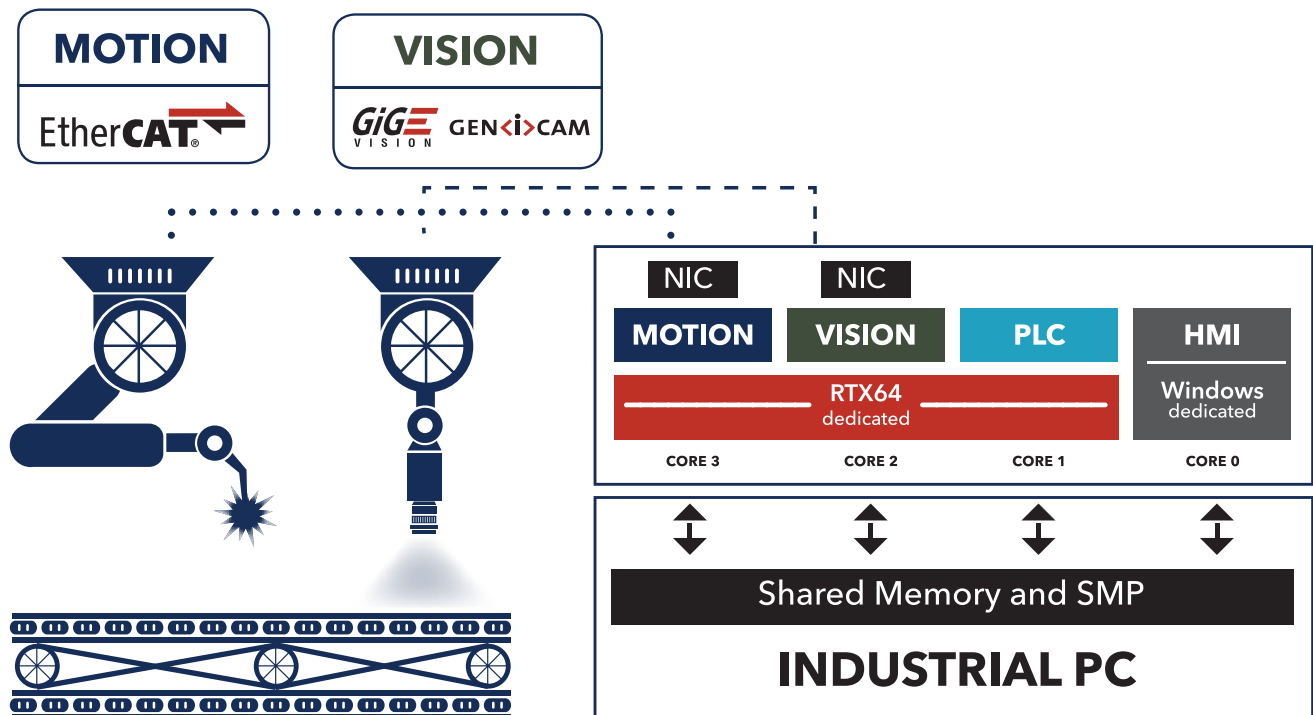
Powered by Matrox, run their imaging library (MIL) for real-time image capture and processing on 64-bit Windows

### 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.



- Enables coordinated motion at 125 microsecond intervals
- Up to 3 cores for dedicated motion control
- Machine control API for real-time precision and accessible from Visual Studio



- Enables coordinated motion at 125 microsecond intervals
- Up to 3 cores for dedicated motion control
- Integrates any customized motion control software



- Transform your industrial PC into a PLC with an intuitive HMI
- Handle all motion control and machine vision automation tasks
- Rely on modularity and ruggedness for real-time use



- Perform image capture, processing and analysis using GigE
- Run Matrox Imaging Library (MIL) natively on IntervalZero's RTX64 RTOS
- Partition a MIL app to run on RTX64 and Windows for response-critical parts



- Conduct real-time application processing up to 63 cores on a PC
- Scale up with x86/x64 to create next-gen products
- Up to 128 priorities for thread scheduling
- Full control over process load balancing
- Double performance every 18 months

