

# REAL-TIME MOTION CONTROL AND MACHINE VISION WITH AXIOMTEK AND KINGSTAR

## Partner With Axiomtek and KINGSTAR for End-to-End, Real-Time Motion and Vision Control Solutions

The traditional approach to machine motion control using FPGA and DSP has prompted many challenges and left a gap between the automation industry's desired level of operational efficiency, productivity and expected return on investment. **Axiomtek**, a leading design manufacturer of x86, open-architecture industrial PCs and embedded systems, in conjunction with a leading real-time, soft motion control technology partner – **KINGSTAR**, has combined years of industry expertise in both hardware and software development

to deliver fully-featured and integrated motion control and machine vision solutions based on Axiomtek's highly reliable industrial PC, KINGSTAR's real-time operating system (RTOS) and soft motion control/EtherCAT software. Axiomtek's comprehensive line of industrial PCs and EtherCAT master controllers work seamlessly with KINGSTAR's RTOS. They also offer rich I/Os and easy integration with other motion and vision systems, field networks, cameras and other peripherals.

## CUSTOMER BENEFITS

As technology partners, Axiomtek and KINGSTAR's customers will benefit from options of all-in-one motion control/PLC/EtherCAT systems - including a feature-rich EtherCAT master controller - which has been verified for compatibility with KINGSTAR's EtherCAT, Soft Motion and Soft PLC as well as RTX and RTX64 OS. The collaborated solution offers the advantages of KINGSTAR's plug-and-play platform, IntervalZero's extensive hard real-time and control capabilities and Axiomtek's high quality and high product longevity - to allow for cost-efficient operations with enhanced productivity level.

## AXIOMTEK'S RECENT INDUSTRIAL COMPUTER PRODUCT

### ***Expandable EtherCAT Master Controller – the IPC932-230-FL-ECM.***

- Scalable 4th Generation Intel® Core™ i7/i5/i3 and Celeron® Processors, up to 45W with two expansion slots
- 10~30 VDC to DC power supply
- -10°C to +50°C fanless operation with W.T. SSD or W.T. CFast™
- 1 EtherCAT port, 1 GbE LAN port
- Supports Intel® AMT 9.0, IntervalZero Windows real-time extension RTX64 and verified with KINGSTAR EtherCAT solution



## WHY AXIOMTEK?

- One of the global leading manufacturers of industrial computer hardware products
- 27 years of experience in designing and manufacturing products to serve specific industry needs
- Great breadth and depth of specialized product lines, including automation - with seven to ten years product life cycle and support
- Design-in services and personalized assistance from a dedicated team of experienced engineers

## WHY KINGSTAR?

- Expertise in motion control, machine vision software and RTOS - with single integrated development environment
- Strong customer-centric philosophy, with 30 years of embedded software innovation
- Extensive soft motion library which is built on the foundation of EtherCAT and Real-time 64-bit Windows OS
- Provides a cost-effective approach for streamlined, quick-deploy systems that fulfill real-time motion control needs

## REVOLUTIONIZE YOUR PRODUCTION PROCESS WITH AXIOMTEK AND KINGSTAR SOLUTIONS

KINGSTAR's real-time motion control and machine vision solutions offer enhanced Windows user interface and easy expandability. Any third-party protocol or open source libraries can be added with no vendor lock-in. The platform scales dynamically and easily with auto-configuration for an EtherCAT network. The software platform works extremely well with Axiomtek's controllers, especially the EtherCAT master controllers. Axiomtek's feature-rich and scalable products offer numbers of expansion slots for ease of customization, EtherCAT and GbE LAN ports, wide operating temperature ranges, wide ranges of DC power supply and verified support of IntervalZero RTOS and KINGSTAR solutions. Axiomtek and KINGSTAR offer a complete solution that can be scaled and quickly deployed in a variety of automation environments. The partnership delivers true customer value and enhanced benefits.

### ARCHITECTURE: Enhance your production control process with Axiomtek Industrial PC, KINGSTAR Soft Motion/EtherCAT Software and Real-time OS

