Product Release Notice

KINGSTAR 3.6.1

General Availability Release Date

August 19, 2019

Product Overview

KINGSTAR is an all-software, complete "plug-and-play" PC-based machine automation platform for IoT and Industry 4.0. Key pre-tested and pre-integrated industrial machine components include software-based motion control, machine vision, programmable logic controller (PLC) and the industry's only plug-and-play EtherCAT master that auto-discovers any vendor's EtherCAT drive, IO or device and auto-configures the EtherCAT environment at startup. Built on the EtherCAT standard and supported by a real-time 64-bit Windows operating-system (RTOS) from IntervalZero, KINGSTAR empowers engineers to design, develop and integrate machine control applications or a system of controllers on a single Industrial PC. The KINGSTAR platform can replace all hardware with software-only motion controllers and machine vision positioning systems, quickly and cost effectively

There are two product lines: **KINGSTAR Motion** and **KINGSTAR EtherCAT**:

- **KINGSTAR Motion** replaces hardware motion cards with an all-software solution that creates PC-based machine controllers for premium precision and performance.
- **KINGSTAR EtherCAT** offers support for CANopen over EtherCAT and simplifies configuration of EtherCAT networks with its unique plug-and-play approach.

KINGSTAR Soft Motion

New Features

- Adds **ForceServoDI** (RT and Win32), **ForceDI** (.NET API), and **ForceDigitalInputAsync** (.NET Class) to write data to a digital input of an axis. [KS-1423]
- Adds **EnableDcMasterShift** (RT and Win32), **EnableDcMasterShift** (.NET API), **DcMasterShift** (.NETClass) to support master shift distributed clock mode. [KS-1425]

Updates & Resolved Issues

- Adds support for the TouchProbe feature with simulated drives. [KS-1422]
- Resolves an issue regarding KINGSTAR providing a warning instead of an alarm when the Following Error bit of the servo drive is TRUE. This allowed an axis to keep working without being interrupted by an alarm. [KS-1570]
- Adds support for the PDO Assignments for I/O modules in KINGSTAR ESI Import Tool. [KS-1575]
- Resolves an issues regarding servo drives vibrating and becoming unstable when switched between the CSP and CST modes. [KS-1200]
- Resolves a memory leak found when using **GetServoStatus** in Win32 API and LabVIEW from National Instruments. [KS-1420]
- Resolves an issues regarding incorrect error messages being displayed when the network card is not configured for use with KINGSTAR. [KS1429]
- Resolves calculation errors of the MC_CAM ramp mode during startup when called repeatedly. [KS-1598]

KINGSTAR EtherCAT

New Features

- Adds **RtEcatSetDcMasterShift** to support master shift distributed clock mode. [KS-1425]

Updates & Resolved Issues

- Resolves an issues regarding incorrect error messages being displayed when the network card is not configured for KINGSTAR. [KS1429]
- Resolves an issue regarding incorrect data being uploaded for SDO segment. [KS-1430]
- Resolved an issue regarding KINGSTAR crashing during the distributed clock (DC) calculations under some condition. [KS-1574]

Hardware Support

KINGSTAR Motion & KINGSTAR EtherCAT have added out-of-the-box support for the following new hardware. See the KINGSTAR Supported Hardware document for a full list of hardware supported by KINGSTAR.

Servo drives

- Nexcom AXE-5904 [KS-1409]

Stepper drives

- Kinco FM880 [KS-1408]
- MOONS' SSDC06-EC [KS-1413]
- TPM STP-K121B [KS-1411]

EtherCAT I/O modules

- Beckhoff EL6695 bridge terminal [KS-1407]
- Berghof ECCI/O modules [KS-1414]
- Berghof EtherCAT I/O modules [KS-1415]
- TPM 207-D402H [KS-1432]

Availability

KINGSTAR 3.6 Soft Motion and KINGSTAR EtherCAT are available beginning August 19, 2019 through Partners and by contacting KINGSTARSales@kingstar.com or (781) 996-4481.

We look forward to your comments and feedback. If you have any recommendations or wish to suggest any product enhancements, please contact Product Management.