EPSG Appearance at SPS/IPC/Drives Show proves: POWERLINK and openSAFETY in Passing Lane

More than 500,000 POWERLINK-based Systems have been installed in the field, with high growth rates. More and more system and component manufacturers no longer want to miss out on this fast-growing market potential. At the Nuremberg SPS/IPC/DRIVES trade show (November 22.-24., 2011), the Multi-Vendor presentation wall at the EPSG booth (6-114/6-115) is seven meters (23 ft.) long.

Additionally, a tripod robot powered by drives and motors from three different suppliers demonstrates suitability of POWERLINK for highly dynamic drive solutions requiring strict synchronicity. Also on display, a SafeLOGIC controller for Profinet is proof that openSAFETY is truly carrier independent, while an exhibit featuring servo drives mounted in a rotating assembly and connected via slip ring shows the EMC immunity of POWERLINK and openSAFETY. Come an see for yourself!

HMS to Integrate POWERLINK in Anybus® Modules

„Anybus“ by the Swedish manufacturer, HMS Industrial Networks AB, is a sizeable range of plug-in or fully integrated modules to be used in automation equipment. These modules help connect each device with virtually any network. This makes the creation of interfaces for field bus and Industrial Ethernet connectivity feasible even at low quantities.

Particularly in high performance machinery, HMS expects a growing demand for a network technology that combines uncompromising reliability with high data transfer rates. Due to this demand as well as its growing popularity, HMS have started integrating POWERLINK functionality with their Anybus modules.

The first POWERLINK compatible HMS product presented is Anybus CompactCom. Production parts are to be expected as from the second quarter of 2012. With the Anybus integration, about 900 automation hardware products already equipped with Anybus will become available with POWERLINK compatibility.

A win-win situation for automation equipment manufacturers and their customers“ is what Staffan Dahlström, Managing Director of HMS Industrial Networks AB (left) and Stefan Schönegger, Open Automation Technologies Manager of B&R and chairman of the Ethernet Powerlink Standardization Group EPSG, perceive in the integration of POWERLINK with Anybus modules.
POWERLINK holds World Record in Synchronization of Live Axles

The growing number of electronically controlled drives and the increasing amount of data they need to be supplied with, has POWERLINK show its strong points. This is proven by the recently achieved “World Record” in the synchronization of drives: The latest sequential film stretching line by the German manufacturer, Brückner Maschinenbau GmbH & Co. KG features direct drive, working in close synchronicity of 384 modules with two drives each.

Over POWERLINK, full synchronization of the 728 servo drives happens within 400 µs. This makes POWERLINK the only real-time Industrial Ethernet system that not only claims the ability of system-wide synchronicity in large plant but delivers proof in day to day tough use in the real world of industrial production.

Orientation in the Network Jungle

Decisions should be based on the foundation of objective information. At the SPS/IPC/Drives show, the publication Ethernet Facts is released as an orientation aid for machinery system architects. It includes a presentation of the five most significant varieties of Industrial Ethernet and a comparison between them in 42 aspects. Sales statements are naturally biased. Ethernet Facts sticks with the facts.
Consortium including Airbus and the French National Railway define openSAFETY as standard

openSAFETY, the first completely open safety-oriented data transfer protocol for use in all areas of automation, has been declared an official communication standard by the DDASCA Consortium (Dependable Distributed Architecture for Safety Critical Applications). This consortium - formed in Paris in March 2011 on the initiative of Arion Enterprise, EADS, HPC Project, ENSTA, Alstom Power, EDF R&D, SNCF, Windriver, B&R, and others - handles the standardization, definition and implementation of open solutions for safety-critical applications up to SIL4. These solutions are then applied in a wide range of areas, from factory automation and energy management to the railway, automotive, medical and defense industries.

The DDASCA Consortium brings together suppliers, manufacturers, integrators, users and academics who are involved in applications that demand high levels of dependability. By selecting innovative safety technologies such as openSAFETY, the consortium continues to promote modular approaches based on scalable solutions that use open, standardized components.

Arrow XKit for POWERLINK Master and Slaves

The POWERLINK evaluation XKit from Arrow makes design of POWERLINK compatible products easier. With its wide variety of applications, the EPC XKit is similarly attractive to systems designers and hardware equipment manufacturers, as it can be used for Master and Slave designs alike.

The EPC XKit POWERLINK features a software image for Linux including a POWERLINK Master driver. In spite of its huge processing capacity due to use of a high performance CPU, the board impresses with a low power consumption. Data exchange is performed utilizing POWERLINK Stacks. The XKit includes two BeMicro RTE (Real Time Ethernet).

The founding meeting of the DDASCA Consortium in Paris, France, brought together representatives from the aviation, aerospace, medical, and railway industries as well as the energy sector and leading research institutions.

The EPC XKit POWERLINK from Arrow excels with impressive power and elegant visual design.
Open Automation Conferences 2011 in India: Cost optimization with POWERLINK and openSAFETY

Ways to reduce costs and simultaneously increase productivity through the use of open technologies and standards such as POWERLINK and openSAFETY for automation in the manufacturing sector were topical of the Open Automation Technology Conferences 2011 on 21 and 22 July in Coimbatore and Chennai, India.

Stefan Schönegger, General Manager of the EPSG, opened the event with an introduction to open automation. He focussed on the pivotal role of automation protocols and networks and demonstrated the particular cost advantages that POWERLINK and openSAFETY offer through their flexibility and scalability as opposed to patented systems. Bhagath Singh Karunakaran, the Managing Director of Kalycito India, explained how simply these protocols can be implemented and which components are necessary to do so.

More than 200 visitors had followed the invitation by the Confederation of Indian Industry and the PSG College of Technology Coimbatore as well as the PSG Science and Technology Entrepreneurial Park. The event was supported by the Ethernet POWERLINK Standardization Group (EPSG), B&R, and Kalycito.

“The Open Automation Conferences in India were a great success”, declared Schönegger. “The high number of participants showed us the importance that open, patent-free technologies have in the emerging industrial nations.”