Texas Instruments simplifies Industrial Communication Designs

Peter Peisker, European Director Embedded Processing
“As TI has been focusing on open technologies for many years, the support of the POWERLINK open technology for industrial Ethernet is a good fit for us to extend our portfolio for industrial automation solutions.”

Contact:
EPSC POWERLINK-OFFICE
Schaperstrasse 18
10719 Berlin · Germany
Tel.: +49(0)30-85 08 85-29
Fax: +49(0)30-85 08 85-86
info@ethernet-powerlink.org
www.ethernet-powerlink.org

The AM3359 industrial communication engine (ICE) is a cost optimized pocket-size development board for I/O devices and sensors. Photo: TI

TI Simplifies Industrial Communication Designs

With more than 50 years of experience in the industrial space, TI offers best-in-class analog and embedded processing semiconductor solutions including precision amplifiers, data converters, interface, isolation, clocking and power management products, as well as ARM®-based processors and microcontrollers to address a broad range of industrial applications. These solutions are complemented by TI’s software, design tools, reference designs and support, which simplify and accelerate design cycles. As the world’s largest industrial semiconductor manufacturer, TI’s system-optimized hardware and software allow customers to easily scale between product lines.

ARM Cortex-A8 Processors with POWERLINK-Support

TI Sitara™ AM335x microprocessors are the first low-power ARM Cortex-A8 devices to integrate a variety of industrial communication protocols as well as a scalable processor platform from 300 to 800 MHz on a single chip. They enable the design of compact system solutions for numerous applications in industrial automation.

An on-board programmable real-time unit replaces external communication ASICs or FPGAs. This results in a substantial reduction of system complexity and consequently in further material savings. Additionally, the TMDXICE3359 development board accelerates the design cycle.

POWERLINK Product & Services Overview

Hardware: Sitara™ AM335x ARM Cortex-A8 microprocessors, AM3359 Industrial Communication Engine
Software: Linux®, Windows® Embedded Compact 7, Sitara™ Sys/ BIOS and StarterWare™ plus an RTOS offer from partners
Multi Protocol: POWERLINK, CANopen, EtherCAT, PROFINET, EtherNet/IP, SERCOS III, PROFIBUS
Design Support: Application support through web forums such as e2e.ti.com and FAEs
Additional Offer: Industrial hardware such as Analog ICs, motor drivers, temperature sensors and power management devices as well as options for wireless connectivity