

Press Release

21st November 2014, Zurich

Enclustra and InES present Profinet[®] RT/IRT Device Solution for Xilinx[®] Artix[®]-7 FPGA and Zynq[®]-7000 All Programmable SoC families

Enclustra, Xilinx and the Institute of Embedded Systems (InES) of the Zurich University of Applied Sciences, present the new Profinet RT/IRT Device Solution from the 25th to the 27th of November 2014 at SPS IPC Drives in Nuremberg, Europe's leading exhibition for electric automation. Get more information and see a demonstration at the Xilinx booth 4-169.

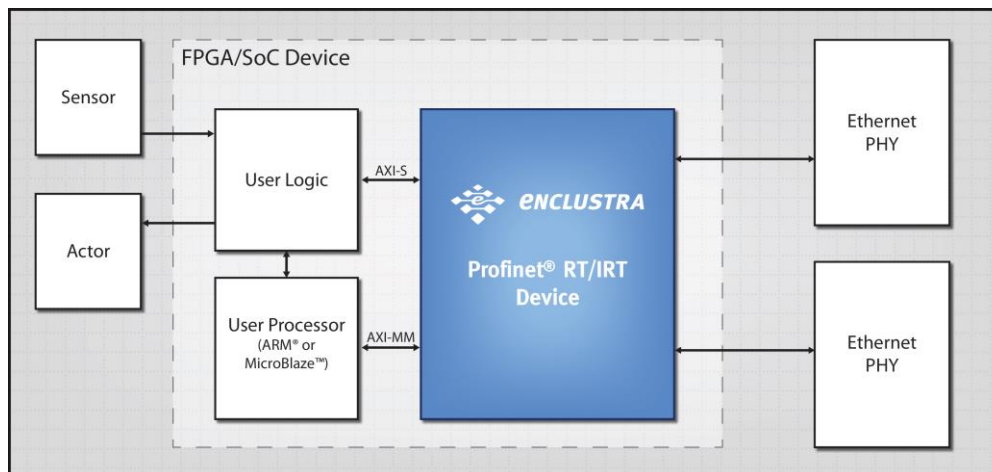
The software execution of complex protocol stacks for Industrial Ethernet normally limits the throughput to a fraction of the theoretical wire speed. The Enclustra Profinet RT/IRT Device Solution splits traffic to different CPUs and reaches a non-real-time (TCP/IP) throughput of >90 Mbit/s – very close to wire-speed – without affecting real-time traffic.

The Enclustra Profinet RT/IRT Device Solution is completely written in VHDL and optimized for the Xilinx[®] Artix[®]-7 FPGA and Zynq[®]-7000 All Programmable SoC families. Supporting advanced features such as Dynamic Frame Packing and including a complete IEEE 1588 PTP implementation, the core can uphold standard cycle times of 31.25µs.

Synchronization accuracy of 60 ns over 20 nodes can be reached by using a 400 MHz timestamping unit. In addition, real-time traffic can completely bypass the software stack and stream directly into FPGA logic.

For evaluation or rapid prototyping, Enclustra offers FPGA and Zynq-based modules and compatible base boards. The IP core is delivered with Vivado[®] drag-and-drop support.

The Profinet RT/IRT Device Solution is available royalty-free with a SignOnce license.



The Enclustra Profinet RT/IRT Device Solution reaches a maximum speed of >90 Mbit/s - very close to wire-speed. Real-time traffic remains unaffected even with maximum traffic on the network. (Picture: Enclustra GmbH)

About Enclustra

Enclustra GmbH provides embedded processing modules, FPGA modules, IP cores and FPGA development services.

As well as embedded software, firmware and hardware design, the company has a proven track record in the application areas embedded processing, digital communications, smart visions systems, software defined radio, and motion and drive control.

Since the company was founded in 2004, it has developed a reputation for quality products, comprehensive development services and excellent after-sales support. The company is located centrally in Europe, in Zurich, Switzerland, and continues to expand its close collaboration with customers worldwide. For more information, visit www.enclustra.com.

About InES

InES, an R&D-orientated institute of the Zurich University of Applied Sciences, is primarily occupied with networked embedded systems in the automation industry. As one of the major R&D centres in real time communication systems, InES can offer clients and partners low-risk access to innovative and/or high-risk technologies..

Contact details

Enclustra GmbH
 Technoparkstrasse 1
 CH-8005 Zurich
 Switzerland
 Tel. +41 43 343 39 43
Info14@enclustra.com
www.enclustra.com

Press contact:

Enclustra GmbH

Patrick Müller

VP Marketing & Sales

Technoparkstr. 1

8005 Zürich

Schweiz

Tel. +41 43 343 39 33

www.enclustra.com/press

patrick.mueller@enclustra.com

Information contained in this press release is subject to change without notice. No obligations for Enclustra GmbH may be inferred. Trademarks used are property of their respective owners. Copyright © 2014 Enclustra GmbH. All rights reserved.