Product Focus

A New Milestone for Real-Time Ethernet

Ethernet is the future. As one of the most reliable, upscalable communication technologies, the interface has already a set place in automated industrial application fields. Thanks to years of experience in real-time network communication, Kithara has taken the next step. For the very first time, Ethernet in real time can be used with 200 gigabit per second.

Specifically, this refers to the Intel controller E810, whose implementation within Kithara RealTime Suite allows for network data rates of 200 Gbit/s in conjunction with hard real-time capabilities. With this high quality of data rates combined with deterministic reaction times, even the most demanding requirements in research and industry can be fulfilled. This way, Kithara further expands its continued support for nearly every network controller by Intel.

E810 cards have ports for QSFP28 transceivers, an extension of QSFP+, commonly used for 40 gigabit Ethernet. Instead of using four parallel 25 gigabit channels, it is possible to utilize a single channel for 200 Gbit/s.

For Intel E810, Kithara supports controller-specific features such as interrupt throttling for improved performance, adjusted data communication with flow control, hardware timestamping according to IEEE-1588 or checksum offload for the host CPU. Furthermore, jumbo frames can be used with up to approx. 9.5 KBytes.

The latest information about Kithara products as well as a free 90-day trial version can be found › **on our website**.