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THE PULSE OF REALTIME

USB 3.0 in Real-Time

The Universal Serial Bus is looking into a bright future—with real-time capabilities more than ever. USB 3.0 has already replaced quite a number of interfaces and has enjoyed a continuous and significant rise in popularity in industrial fields.

The real-time support of USB 3.0 represents an evolutionary step and is instrumental in bringing the bus system to the next level. Whenever USB 3.0 is to be utilized to meet time-critical requirements or to produce a significant increase in efficiency, then real-time is the only logical consequence.

In order to make this real-time communication possible, the »RealTime Suite« provides a specially programmed and easy-to-apply access to the Extensible Host Controller Interface (XHCI), which is capable of meeting the requirements for guaranteed jitter times.

The growing market share of the third generation of the Universal Serial Bus, also in the industrial sector, is based on its cost efficient implementation of standardized hardware as well as high transfer rates. It was not until USB 3.0 introduced the SuperSpeed mode, that competitive data rates and full-duplex communication became available.

The way for USB into industrial applications has already been paved but with real-time it achieves the breakthrough.



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