

INTERFACE CARDS

For up to 30 automotive networks

The Flexcard PXIe3 and PCIe3 cards from Star Cooperation enable realization of real-time remaining bus simulations or gateways solutions for automotive networks.



Flexcard PXIe3 and PCIe3 cards enable data acquisition from up to 30 automotive networks (Source: Star Cooperation)

The interface cards are dedicated for integration of automotive networks in measuring environments. Interfacing solutions for diverse networks, remaining bus simulation, signal manipulation, data-logging, and rapid prototyping are some of the cards' use cases. Streaming of the network data to the PCIe host system (e.g. a PC) is possible without influencing the current application. Together with the Flexconfig software family, the developers are enabled to set up and control their networks and ECU (electronic control unit) environments.

The cards integrate the Altera Cyclone V system on chip (SOC) with the ARM Cortex-A9 dual-core CPU (central processing unit). Five network connectors can be allocated flexible via pluggable transceiver modules. The latter are available for Classical CAN, CAN FD, Flexray, and Ethernet. The Flextiny3 CAN-FD/HS module integrates two TJA1145T/FD CAN (FD) transceivers from

NXP. Thus, a solution with up to ten CAN (FD) interfaces can be realized. Combination of several networks is possible.

For CAN (FD), the silent mode useable for listening without network interference is supported. A transmit FIFO (first in, first out) for up to 512 messages, configurable Tx-acknowledges, and significant network error messages are provided. Switchable on-board bus termination, sleep mode support (wake-up via CAN), and synchronous time-stamp generation are offered as well.

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