CAN SIC Transceiver with Partial Networking and Advanced System Monitoring, CAN FD Data Rates Up to 8 Mbit/s

TJA1466

Last Updated: Feb 7, 2025

The TJA1466 CAN signal improvement capability (SIC) transceiver with partial networking sleep mode, is part of the TJA146x transceiver family that implements CAN SIC as defined in ISO11898-2:2024 parameter sets A-C. The TJA1466 is fully interoperable with the high-speed classical CAN and CAN FD protocols, and fully developed and certified to be ISO 26262 ASIL-B compliant.

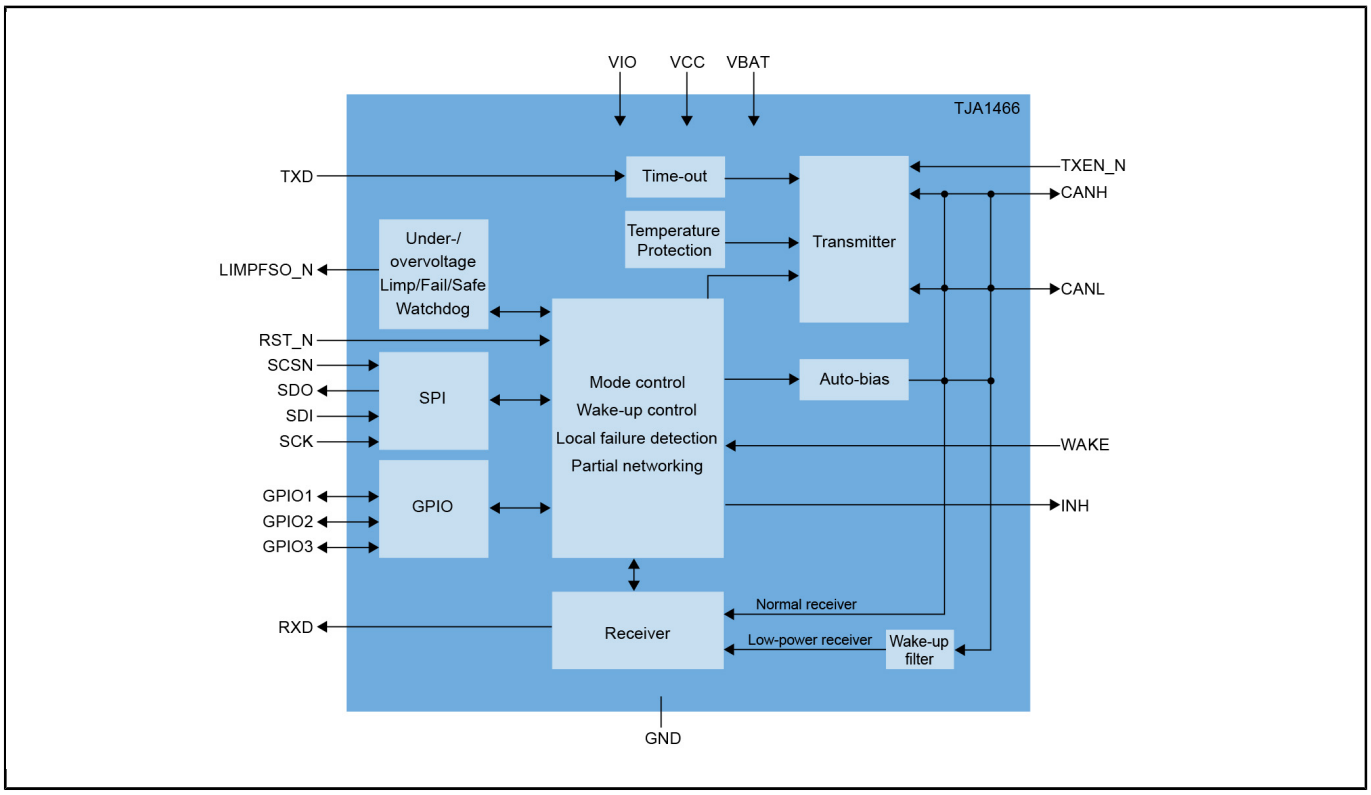
CAN signal improvement significantly reduces signal ringing on a network, allowing reliable CAN FD communication at 5 Mbit/s in larger topologies, and due to a much tighter bit timing symmetry performance even enables CAN FD communication up to 8 Mbit/s.

The TJA1466 supports CAN partial networking by means of selective wake-up functionality as specified in ISO 11898-2:2024, allowing the transceiver to remain in sleep mode even when CAN bus traffic is running, when it is not required to be active.

The TJA1466 offers an extended feature set on top of the TJA1465, including two configurable GPIO pins, a Q&A watchdog with dedicated reset and failsafe/limp home pins and accurate VIO undervoltage and overvoltage monitoring.

The TJA1466 offers a CAN FD/ CAN XL passive feature, which in sleep mode prevents the transceiver from waking up and shields the CAN controller from CAN FD and CAN XL messages when running a mixed bus communication.

TJA1466 Block Diagram



View additional information for CAN SIC Transceiver with Partial Networking and Advanced System Monitoring, CAN FD Data Rates Up to 8 Mbit/s.

Note: The information on this document is subject to change without notice.