CAN FD Transceiver with Partial Networking, CAN FD Data Rates Up to 5 Mbit/s

TJA1445

Last Updated: Mar 12, 2025

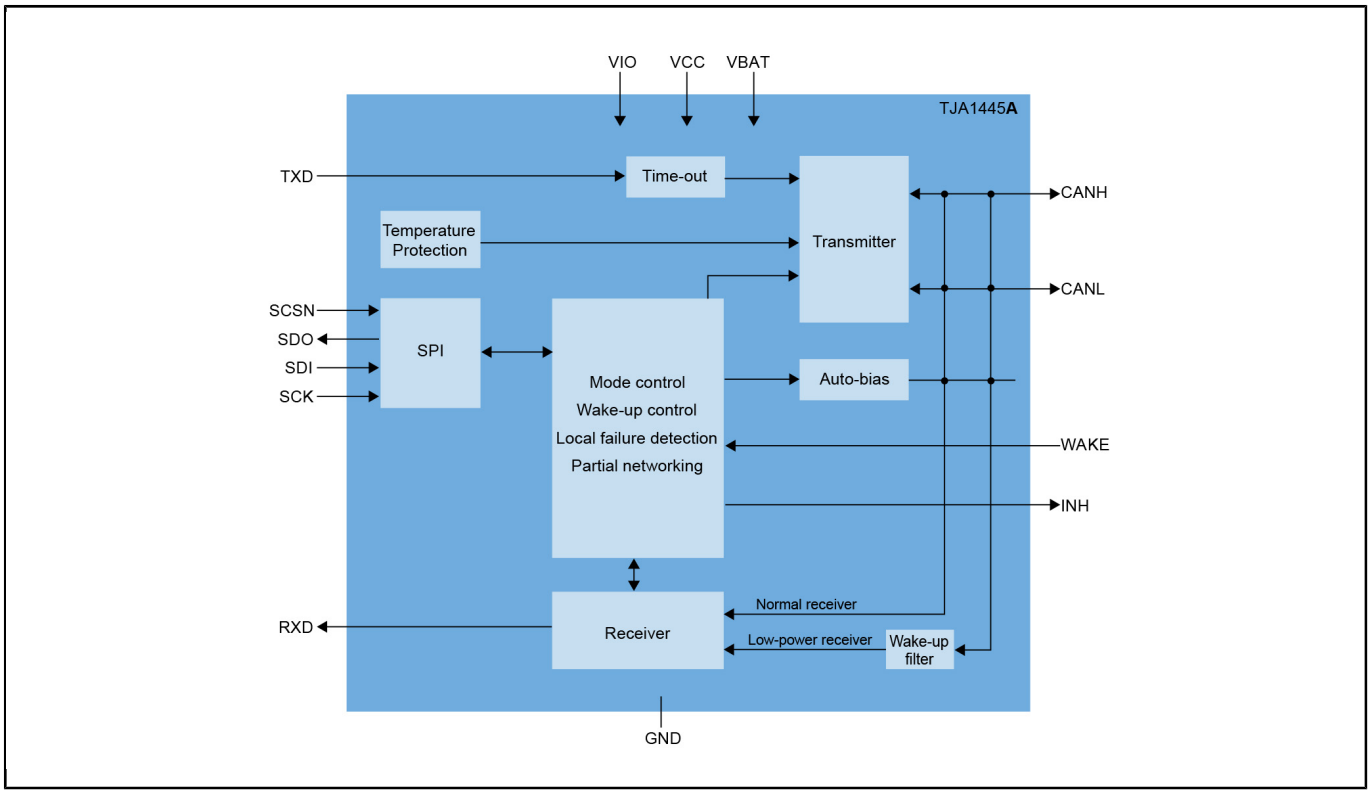
The TJA1445 CAN FD transceiver with partial networking sleep mode, is part of the TJA144x transceiver family that implements CAN FD as defined in ISO11898-2:2024 parameter sets A-B. The TJA1445 is fully interoperable with the high-speed classical CAN and CAN FD protocols, and fully developed and certified to be ISO 26262 ASIL-B compliant.

The TJA1445 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.

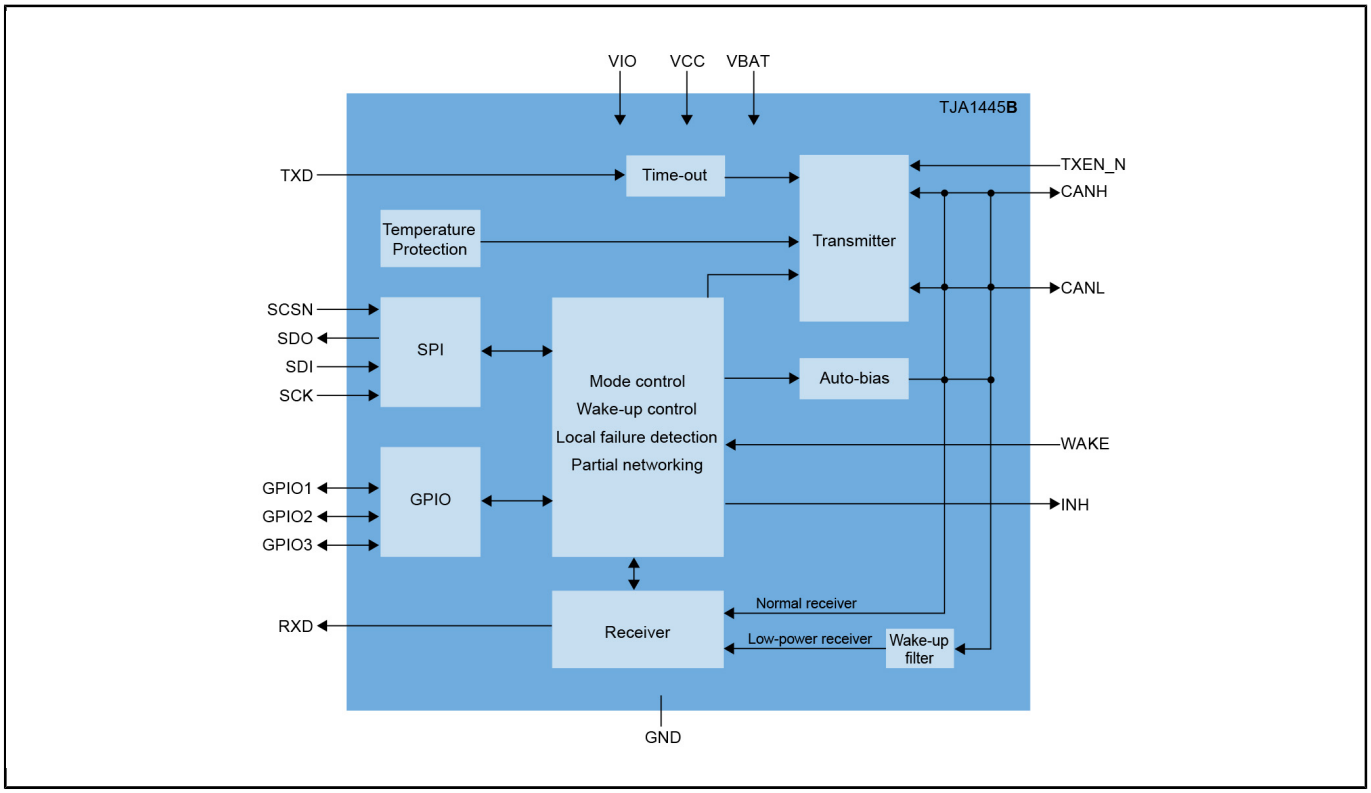
The TJA1445B offers an extended feature set on top of the TJA1445A, including a TXEN_N pin for disabling the transmitter through an external pin, and three GPIO pins which can be configured to an extended set of functionalities, including e.g. a second TXD/RXD channel.

The TJA1445 offers a CAN FD passive feature, which in sleep mode prevents the transceiver from waking up and shields the CAN controller from CAN FD messages when running a mixed bus communication.

TJA1445A Block Diagram



TJA1445B Block Diagram



View additional information for CAN FD Transceiver with Partial Networking, CAN FD Data Rates Up to 5 Mbit/s.

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