



High-Speed CAN Transceiver with Standby Mode – Mantis Family

TJA1044

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For security on TJA1042, TJA1044, TJA1049, go to [Secure CAN TJA1152](#), for higher data rates on these devices, go to [CAN SIC TJA1462](#).

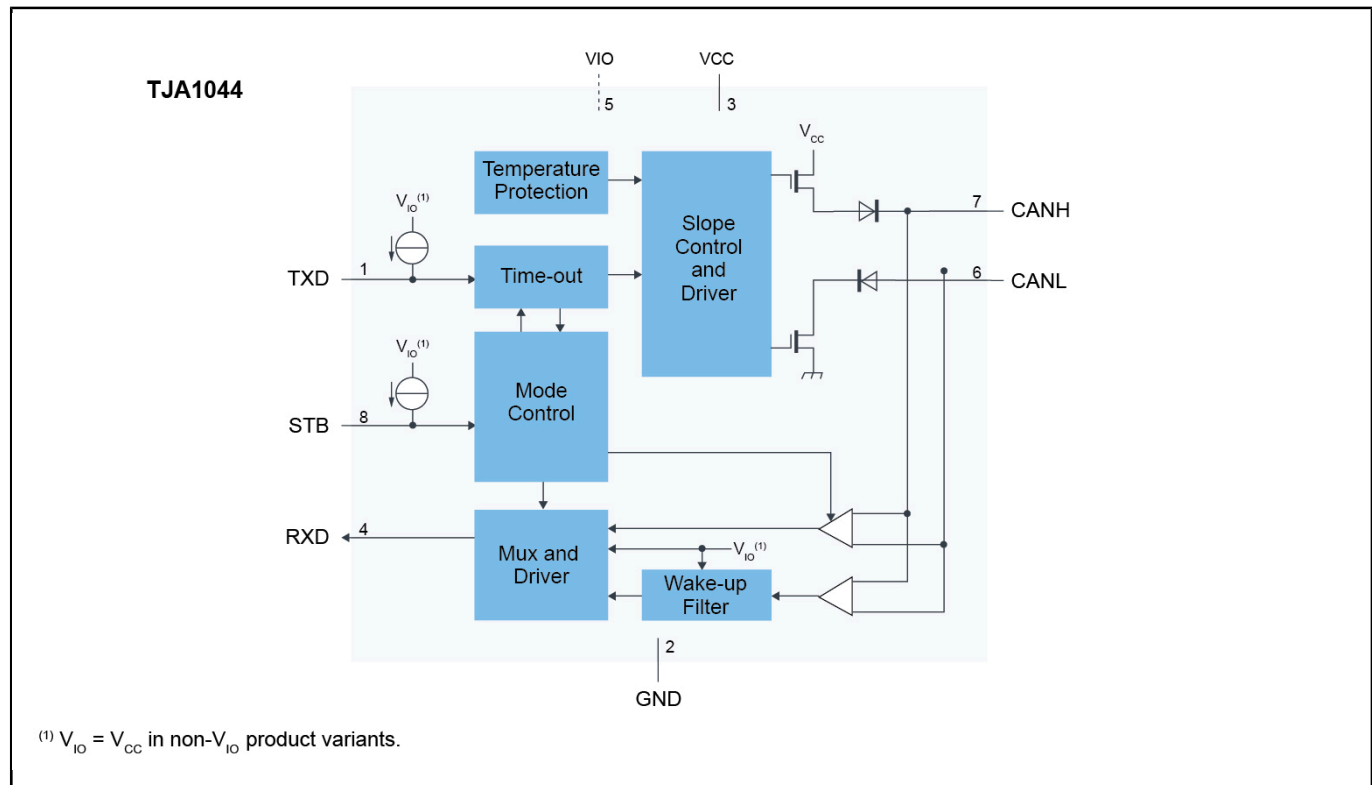
The TJA1044 is part of the Mantis family of high-speed CAN transceivers. It provides an interface between a controller area network (CAN) protocol controller and the physical two-wire CAN bus. The transceiver is designed for high-speed CAN applications in the automotive industry, providing the differential transmit and receive capability to (a microcontroller with) a CAN protocol controller. Ideal passive behavior to the CAN bus when the supply voltage is off.

A very low-current Standby mode with bus wake-up capability Excellent EMC performance, even without a common mode choke. Variants with a VIO pin can be interfaced directly with microcontrollers with supply voltages from 3.3 V to 5 V

These features make the TJA1044 an excellent choice for all types of HS-CAN networks, in nodes that require a low-power mode with wake-up capability via the CAN bus.

The TJA1044 implements the CAN physical layer as defined in the current 11898-2:2016 and SAE J2284-1 to SAE J2284-5. The TJA1044T is specified for data rates up to 1 Mbit/s. Additional timing parameters defining loop delay symmetry are specified for the other variants. This implementation enables reliable communication in the CAN FD fast phase at data rates up to 5 Mbit/s.

TJA1044 Block Diagram



View additional information for [High-Speed CAN Transceiver with Standby Mode - Mantis Family](#).

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