



High-speed CAN FD transceiver

Features

- Fully compliant to ISO 11898-2:2024 and SAE J2284-4/-5
- Loop delay symmetry for *controller area network (CAN)* FD data frames up to 5 Mbit/s
- Very low *electromagnetic emission (EME)* allows the use without additional common mode choke
- V_{IO} input for voltage adaption to the microcontroller interface (3.3 V or 5 V)
- Excellent *electrostatic discharge (ESD)* robustness
- TxD timeout function
- Very low CAN bus leakage current in power-down state
- Overtemperature protection
- Protected against automotive transients according to ISO 7637 and SAE J2962-2
- Receive-only mode
- Green Product (RoHS compliant)



Potential applications

- Engine control units
- Body control modules (BCM)
- Electric power steering
- Transmission control units (TCUs)
- Chassis control modules

Product validation

Qualified for automotive applications. Product validation according to AEC-Q100.

Description

The TLE9350BXLE is a high speed *CAN* transceiver, used in HS CAN systems for automotive applications as well as for industrial applications. It is designed to fulfill the requirements of ISO 11898-2:2024 physical layer specification as well as SAE J1939 and SAE J2284.

The TLE9350BXLE is available in a *Restriction of Hazardous Substances in Electrical and Electronic Equipment (RoHS)* compliant, halogen free PG-TSON-8 package.

As an interface between the physical bus layer and the HS CAN protocol controller, the TLE9350BXLE is designed to protect the microcontroller against interferences generated inside the network. A very high *ESD* robustness and the optimized RF immunity allows the use in automotive applications without additional protection devices, such as suppressor diodes or common mode chokes.

Based on the high symmetry of the CANH and CANL output signals, the TLE9350BXLE provides a very low level of *EME* within a wide frequency range. The TLE9350BXLE fulfills even stringent *electromagnetic compatibility (EMC)* test limits without an additional external circuit, such as a common mode choke.

The optimized transmitter symmetry combined with the optimized delay symmetry of the receiver enables the TLE9350BXLE to support CAN FD data frames. The device supports data transmission rates up to 5 Mbit/s, depending on the size of the network and the inherent parasitic effects.

Fail-safe features, such as overtemperature protection, output current limitation or the TxD timeout feature are designed to protect the TLE9350BXLE and the external circuitry from irreparable damage.

Type	Package	Marking
TLE9350BXLE	PG-TSON-8	9350BX

Trademarks

All referenced product or service names and trademarks are the property of their respective owners.

Edition 2025-12-01

Published by

Infineon Technologies AG

81726 Munich, Germany

© 2025 Infineon Technologies AG

All Rights Reserved.

Do you have a question about any aspect of this document?

Email: erratum@infineon.com

Document reference

IFX-mvh1752764629198

Z8F80815199

Important notice

The information given in this document shall in no event be regarded as a guarantee of conditions or characteristics ("Beschaffheitsgarantie").

With respect to any examples, hints or any typical values stated herein and/or any information regarding the application of the product, Infineon Technologies hereby disclaims any and all warranties and liabilities of any kind, including without limitation warranties of non-infringement of intellectual property rights of any third party.

In addition, any information given in this document is subject to customer's compliance with its obligations stated in this document and any applicable legal requirements, norms and standards concerning customer's products and any use of the product of Infineon Technologies in customer's applications.

The data contained in this document is exclusively intended for technically trained staff. It is the responsibility of customer's technical departments to evaluate the suitability of the product for the intended application and the completeness of the product information given in this document with respect to such application.

Warnings

Due to technical requirements products may contain dangerous substances. For information on the types in question please contact your nearest Infineon Technologies office.

Except as otherwise explicitly approved by Infineon Technologies in a written document signed by authorized representatives of Infineon Technologies, Infineon Technologies' products may not be used in any applications where a failure of the product or any consequences of the use thereof can reasonably be expected to result in personal injury.