

## Product Brief

# TLE7250XSJ and TLE7250XLE



## CAN transceiver for Flexible Data-rate up to 2 Mbit/s

The TLE7250X transceiver is designed for CAN networks in automotive and industrial applications and is available in two different packages. One package option is the TLE7250XSJ in standard DSO-8 package and the second option is the TLE7250XLE in tiny TSON-8 leadless package with Lead Tip Inspection (LTI) feature providing Automated Optical Inspection (AOI) capability. This makes the TLE7250XLE perfectly suited for applications where tight space restrictions mandate the use of the smallest package possible. The TLE7250X is providing a new pinout variant with receiver mode only and  $V_{IO}$  input. Being pin- and footprint compatible to existing ECU designs, the TLE7250X is enabling easy drop in replacement to CAN FD communication.

As an interface between the physical bus layer and the CAN protocol controller, the TLE7250X drives the signals to the bus and protects the microcontroller against transients generated from the network. Based on the excellent symmetry of the CANH and CANL signals, the TLE7250X transceiver has very low levels of Electromagnetic Emission (EME) over a wide frequency range. The TLE7250X is RoHS compliant and fulfills or exceeds the requirements of the ISO 11898-2 standard.

Based on the very low leakage currents on the CAN bus interface, the TLE7250X transceiver provides excellent passive behavior in power-down state. With the  $V_{IO}$  input the TLE7250X can interface either with 3.3 V or 5 V microcontrollers. These and other features make the TLE7250X very well suited for mixed supply CAN networks.

Two different operation modes, additional fail-safe features like a TxD time-out, and the optimized output slew rates on the CANH and CANL signals make the TLE7250X the ideal choice for large CAN networks with high data transmission rates as required in automotive CAN FD networks.

### Key features

- > Compliant to ISO11898-2: 2003
- > Guaranteed loop delay symmetry to support CAN FD up to 2 Mbit/s
- >  $V_{IO}$  input for voltage adaption to 3.3 V and 5 V microcontroller interfaces
- > CMOS level switching thresholds on RxD and TxD for best CAN FD signal symmetry
- > Receive-only mode
- > Extended supply range on  $V_{CC}$  supply
- > TxD time-out function
- > Available in DSO-8 or tiny leadless TSON-8 package.
- > Wide common mode range for Electromagnetic Immunity (EMI)
- > Very low Electromagnetic Emissions (EME)
- > Excellent ESD robustness of  $\pm 9$  kV at HBM and  $\pm 8$  kV according to IEC 61000-4-2
- > Protected against automotive transients
- > CAN short circuit proof to ground, battery and  $V_{CC}$
- > Overtemperature protection
- > Green product (RoHS compliant)
- > AEC-qualified



Lead-Free



Halogen-Free



Green



FD

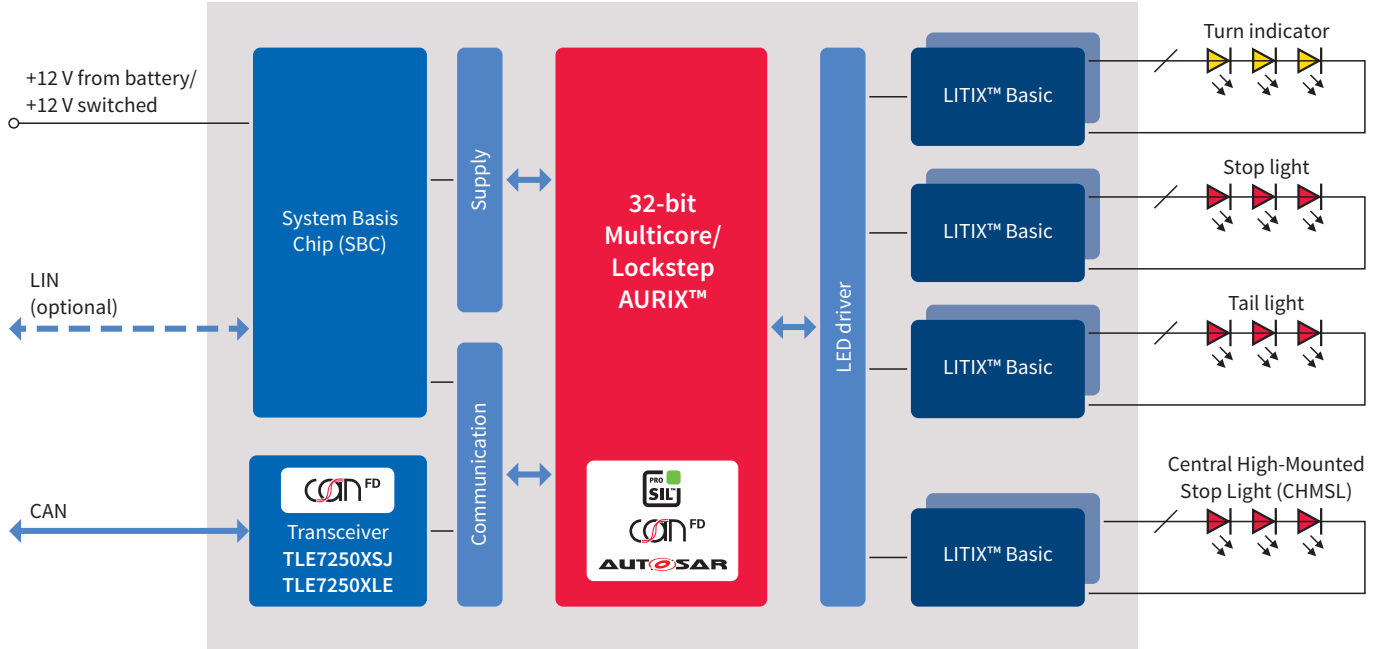


# TLE7250XSJ and TLE7250XLE



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Application example: rear light LED module



## Product summary

Type	Description	SP number/orderable part number
TLE7250XSJ	CAN FD transceiver without bus wake capability in DSO-8	SP001243722/TLE7250XSJXUMA1
TLE7250XLE	CAN FD transceiver without bus wake capability in TSON-8	SP001243720/TLE7250XLEXUMA1

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