



## Product Brief

# TLE8250SJ



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

The TLE8250SJ transceiver is designed for CAN networks in automotive applications for the Japanese market. It is available in standard DSO-8 package and is certified according to latest VeLIO (Vehicle LAN Interoperability and Optimization) test requirements. Being pin- and footprint compatible to existing ECU designs using the predecessor devices TLE6250G and TLE8250G, the TLE8250SJ is enabling easy drop in transition to CAN FD.

As an interface between the physical bus layer and the CAN protocol controller, the TLE8250SJ 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 TLE8250SJ transceiver has very low levels of Electromagnetic Emission (EME) over a wide frequency range. The TLE8250SJ is RoHS compliant and fulfills or exceeds the requirements of the ISO 11898-2 standard.

The TLE8250SJ draws very low quiescent current in power safe mode. Based on the very low leakage currents on the CAN bus interface, the TLE8250SJ transceiver provides excellent passive behavior in power-down state. The TLE8250SJ is specifically designed to interface with a 5 V microcontroller. These and other features make the TLE8250SJ 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 TLE8250SJ 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 and improved loop delay symmetry to support CAN FD up to 2 Mbit/s
- > 5 V microcontroller RxD/TxD interface
- > CMOS level switching thresholds on RxD and TxD for best CAN FD signal symmetry
- > Extended supply range on  $V_{CC}$  supply
- > TxD time-out safety feature
- > Available in standard DSO-8 package
- > High Electromagnetic Immunity (EMI) and low Electromagnetic Emissions (EME)
- > Excellent ESD robustness of  $\pm 10$  kV at HBM and  $\pm 8$  kV according to IEC 61000-4-2
- > Protected against automotive transients
- > Overtemperature protection
- > Green product (RoHS compliant)
- > AEC-qualified



Lead-Free



Halogen-Free



Green



CAN  
2 Mbits/s

FD



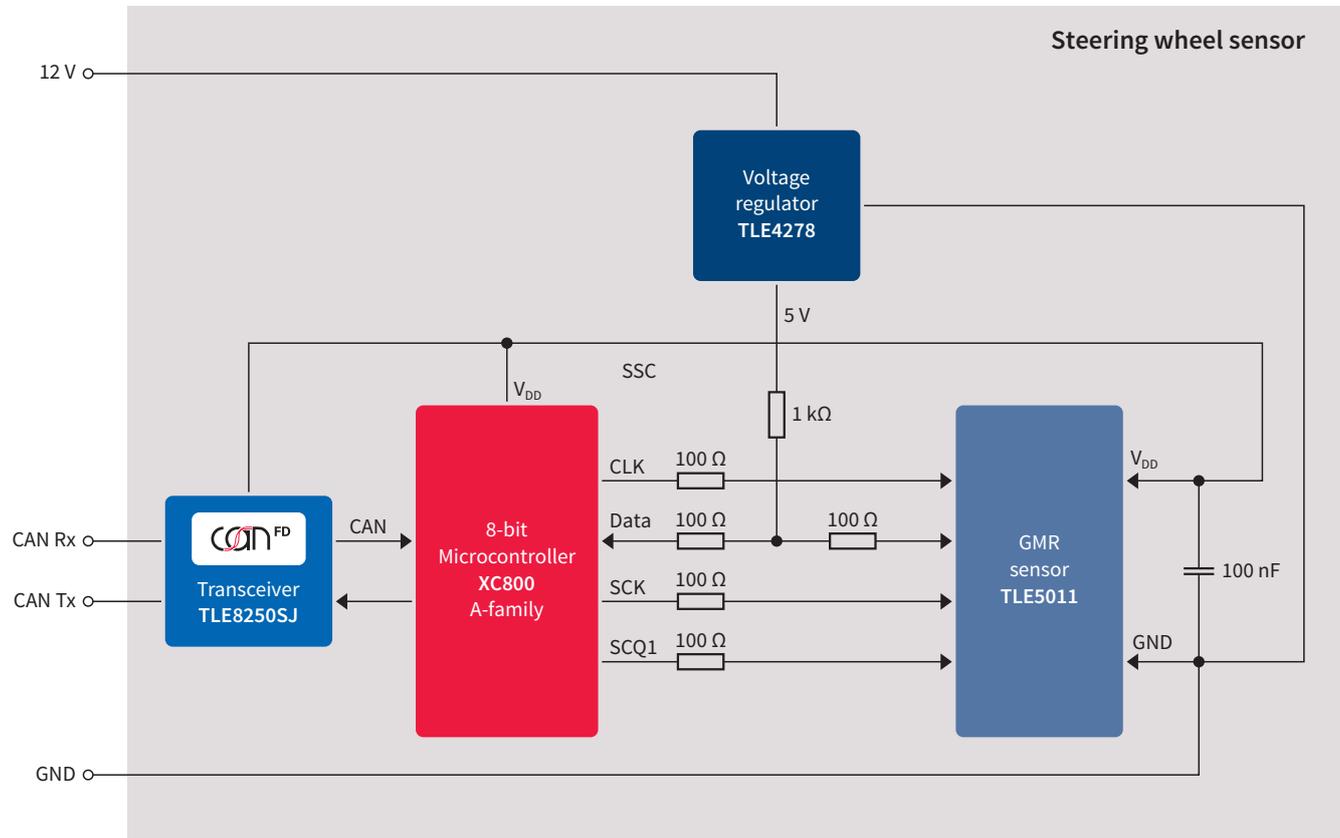
AEC  
Qualified

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### Application example: steering wheel sensor module



### Product summary

Type	Description	SP number / Orderable part number
TLE8250SJ	CAN FD 2 Mbit/s transceiver without bus wake capability in DSO-8	SP001417836/TLE8250SJXUMA1

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