



Product Brief

TLE8250VSJ



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

The TLE8250VSJ 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 TLE6250GV33 and TLE8250GVIO, the TLE8250VSJ is enabling easy drop in transition to CAN FD.

As an interface between the physical bus layer and the CAN protocol controller, the TLE8250VSJ 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 TLE8250VSJ transceiver has very low levels of Electromagnetic Emission (EME) over a wide frequency range. The TLE8250VSJ is RoHS compliant and fulfills or exceeds the requirements of the ISO 11898-2 standard.

The TLE8250VSJ draws very low quiescent current in power safe mode. Based on the very low leakage currents on the CAN bus interface, the TLE8250VSJ transceiver provides excellent passive behavior in power-down state. With the V_{IO} input the TLE8250VSJ can interface either with 3.3 V or 5 V microcontrollers. These and other features make the TLE8250VSJ 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 TLE8250VSJ 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
- > V_{IO} input for voltage adaption to 3.3 V and 5 V microcontrollers
- > CMOS level switching thresholds on RxD and TxD for best CAN FD signal symmetry
- > Extended supply range on V_{CC} and V_{IO} 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 ± 10 kV at HBM and ± 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

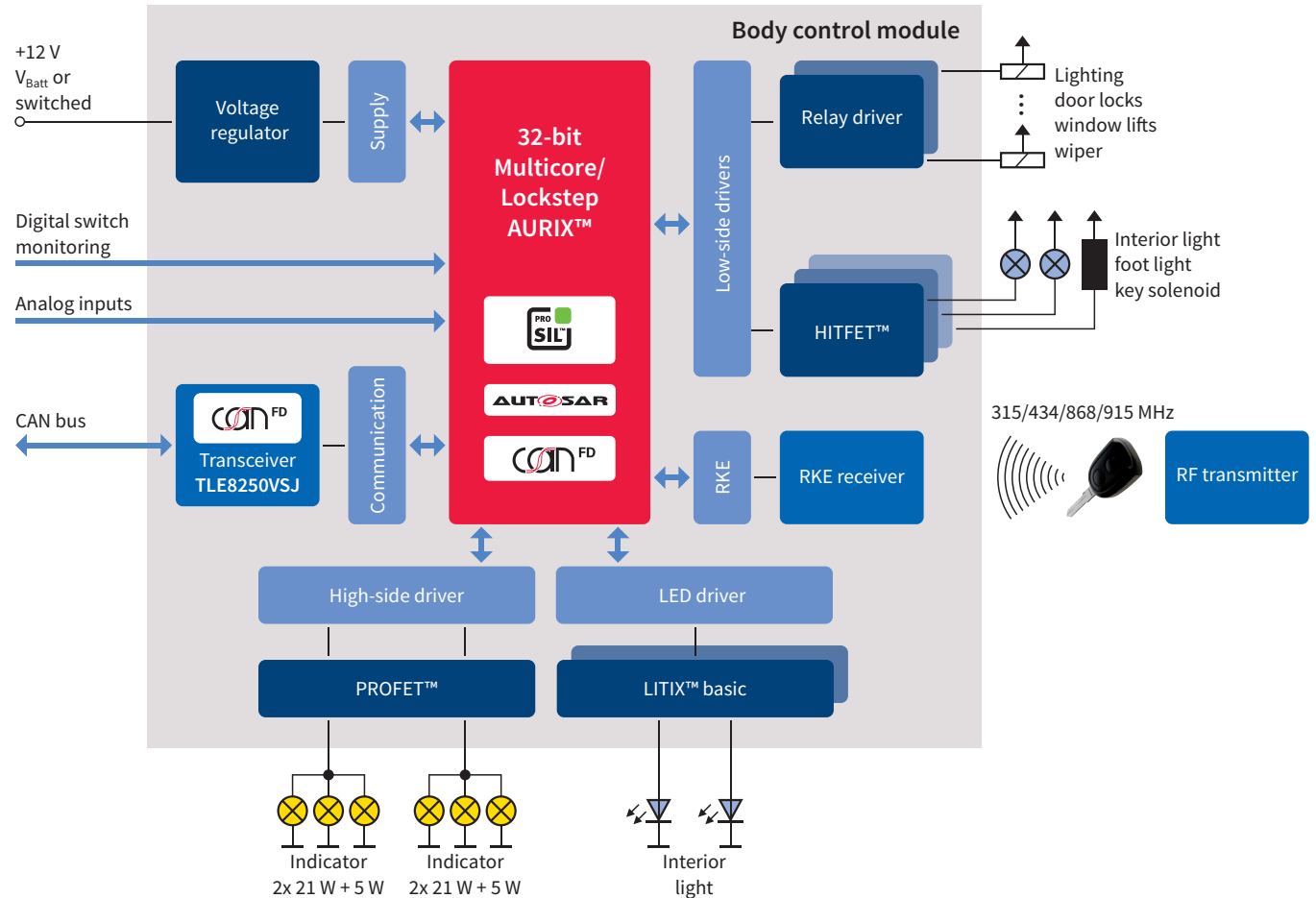


AEC
Qualified

TLE8250VSJ

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Application example: body control module



Product summary

| Type | Description | SP number / orderable part number |
|------------|--|-----------------------------------|
| TLE8250VSJ | CAN FD 2 Mbit/s transceiver without bus wake capability in DSO-8 | SP001417840/TLE8250VSJXUMA1 |

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