

TLE7259-3GE

LIN Transceiver with Integrated Vreg 20kBd Automotive 8-Pin DSO T/R

Manufacturer:	Infineon Technologies Corporation
Package/Case:	SOP8
Product Type:	Discrete Semiconductor Modules
RoHS:	RoHS Compliant/Lead free RoHS
Lifecycle:	Unconfirmed



Images are for reference only

Inquiry

General Description

It is designed for in-vehicle networks using data transmission rates from 2.4 kBaud to 20 kBaud. The TLE7259-3GE functions as a bus driver between the protocol controller and the physical bus inside the LIN network. Compliant to all LIN standards and with a wide operational supply range the TLE7259-3GE can be used in all automotive applications. Different operation modes and the INH output allow the TLE7259-3GE to control external components, like voltage regulators. In Sleep-mode the TLE7259-3GE draws typically less than 8 µA of quiescent current while still being able to wake up off of LIN bus traffic and a local Wake-Up input. The very low leakage current on the BUS pin makes the TLE7259-3GE especially suitable for partially supplied networks and supports the low quiescent current requirements of the LIN network. Based on the Infineon Smart Power Technology SPT, the TLE7259-3GE provides excellent ESD Robustness together with a very high electromagnetic immunity (EMI). The TLE7259-3GE reaches a very low level of electromagnetic emission (EME) within a broad frequency range and independent from the battery voltage. The Infineon Smart Power Technology SPT allows bipolar and CMOS control circuitry in accordance with DMOS power devices existing on the same monolithic circuit. The TLE7259-3GE and the Infineon SPT technology are AEC qualified and tailored to withstand the harsh condition of the Automotive Environment.

Key Features

Single-wire transceiver, pin compatible to the predecessor TLE7259-2GE $% \left({{{\rm{TLE7259-2GE}}} \right)$	
Transmission rate up to 20 kBaud	
Compliant to LIN specification 1.3, 2.0, 2.1 and 2.2	
Very high ESD robustness, +/- 15 kV according to IEC61000-4-2	
Optimized for low electromagnetic emission (EME)	
Optimized for high immunity against electromagnetic interference (EMI)	
Very low current consumption of typically ${<}8\mu A$ in sleep mode	
Wake-Up source detection	
Very low leakage current on the BUS output	
Digital I/O levels compatible for 3.3 V and 5 V microcontrollers	
Digital I/O levels compatible for 3.3 V and 5 V microcontrollers Suitable for 12 V and 24 V board net	
Suitable for 12 V and 24 V board net	
Suitable for 12 V and 24 V board net Bus short to VBAT protection and Bus short to GND handling	
Suitable for 12 V and 24 V board net Bus short to VBAT protection and Bus short to GND handling Over temperature protection and Under voltage detection	

Recommended For You

TLE8458G

Infineon Technologies Corporation SOP8

TLE9221SXXUMA2 Infineon Technologies Corporation SSOP16

TLE7257SJXUMA1 Infineon Technologies Corporation SOP8

TLE7258SJXUMA1 Infineon Technologies Corporation SOP8 TLE7259-2GU Infineon Technologies Corporation SOP8

Infineon Technologies Corporation PG-TSON-8-1

TLE72593LEXUMA1

TLE7259-2GE Infineon Technologies Corporation SOP8

TLE72593GEXUMA3 Infineon Technologies Corporation SOP-8

Application

Body Controllers and Gateway Modules

Switch Panels

Wiper and Window Lift Modules

Door and Seat Control Modules

Engine Management Units

TLE6286G

Infineon Technologies Corporation SOP16

TLE7257LEXUMA1 Infineon Technologies Corporation PG-TSON-8

TLE9222PXXUMA1

Infineon Technologies Corporation TSSOP14

TLE9350VSJXTMA1 Infineon Technologies Corporation PG-DSO-8

TLE7258DXUMA1

Infineon Technologies Corporation

TSON-8

TLE8458GUV33

Infineon Technologies Corporation

TLE8457ASJXUMA1

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