

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

Manufacturer:	Texas Instruments, Inc	<input type="text" value="TLIN1029DRBRQ1 Image"/>
Package/Case:	VSON-8	Images are for reference only
Product Type:	Discrete Semiconductor Modules	<input type="button" value="Inquiry"/>
RoHS:	RoHS Compliant/Lead free 	
Lifecycle:	Active	

General Description

The TLIN1029-Q1 is a Local Interconnect Network (LIN) physical layer transceiver with integrated wake-up and protection features, compliant to LIN 2.0, LIN 2.1, LIN 2.2, LIN 2.2A and ISO/DIS 17987-4.2 standards. LIN is a single wire bidirectional bus typically used for low speed in-vehicle networks using data rates up to 20 kbps. The TLIN1029-Q1 is designed to support 12 V applications with wider operating voltage and additional bus-fault protection. The LIN receiver supports data rates up to 100 kbps for in-line programming. The TLIN1029-Q1 converts the LIN protocol data stream on the TXD input into a LIN bus signal using a current-limited wave-shaping driver which reduces electromagnetic emissions (EME). The receiver converts the data stream to logic level signals that are sent to the microprocessor through the open-drain RXD pin. Ultra-low current consumption is possible using the sleep mode which allows wake-up via LIN bus or pin. The integrated resistor, ESD and fault protection allows designers to save board space in their applications.

Key Features

AEC-Q100 Qualified for Automotive Applications
Device Temperature: -40°C to 125°C Ambient

Device HBM Certification Level: ±8 kV

Device CDM Certification Level: ±1.5 kV

Compliant to LIN 2.0, LIN 2.1, LIN 2.2, LIN 2.2A and ISO/DIS 17987-4.2

Conforms to SAEJ2602 Recommended Practice for LIN

Supports 12 V Applications

LIN Transmit Data Rate up to 20 kbps.

Wide Operating Ranges
4 V to 36 V Supply Voltage

±45 V LIN Bus Fault Protection

Sleep Mode: Ultra-Low Current Consumption Allows Wake-Up Event From:
LIN Bus

Local Wake up through EN

Power Up and Down Glitch Free Operation

Protection :
Under Voltage Protection on VSUP

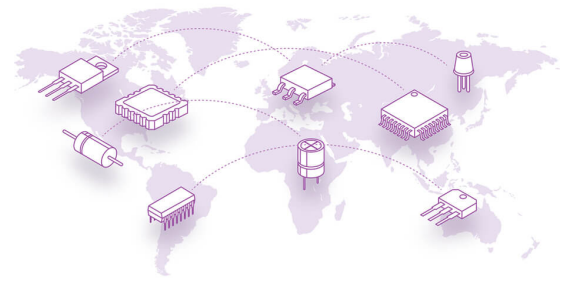
TXD Dominant Time Out Protection (DTO)

Thermal Shutdown Protection

Unpowered Node or Ground Disconnection Failsafe at System Level.

Available in SOIC (8) Package and Leadless VSON (8) Package with Improved Automated Optical Inspection (AOI) Capability

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Recommended For You

TLV320AIC23BIPWR

Texas Instruments, Inc

TSSOP28

TLV320AIC3104IRHBR

Texas Instruments, Inc

QFN32

TL16C554AIPN

Texas Instruments, Inc

LQFP80

TLV320AIC3101IRHBR

Texas Instruments, Inc

QFN32

TL16C554APN

Texas Instruments, Inc

LQFP80

TLV320AIC24KIPFBR

Texas Instruments, Inc

TQFP-48

TL16C554PN

Texas Instruments, Inc

QFP

TLV320AIC24KIPFB

Texas Instruments, Inc

TQFP-48

TL16C752BLPTREP

Texas Instruments, Inc

LQFP-48

TL16C550DIPFBR

Texas Instruments, Inc

48-TQFP

TLC320AC01CFN

Texas Instruments, Inc

PLCC28

TL16C552AFN

Texas Instruments, Inc

PLCC

TL16C450FN

Texas Instruments, Inc

PLCC44

TL16C554FN

Texas Instruments, Inc

PLCC

TLV320AIC311RHBR

Texas Instruments, Inc

VQFN32