

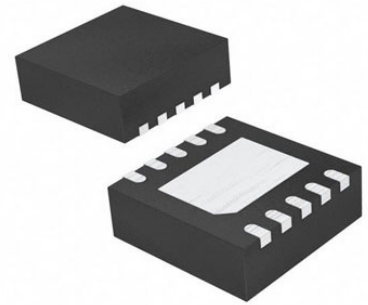
## Power Block 8-Pin VSON EP T/R

**Manufacturer:** [Texas Instruments, Inc](#)

**Package/Case:** VSON8

**Product Type:** Power Management ICs

**Lifecycle:** Active



Images are for reference only

[Inquiry](#)

## General Description

The TLIN2029A-Q1 is a local interconnect network (LIN) physical layer transceiver with integrated wake-up and protection features, compliant with LIN 2.0, LIN 2.1, LIN 2.2, LIN 2.2 A and ISO/DIS 17987-4 standards. LIN is a single-wire bidirectional bus typically used for in-vehicle networks using data rates up to 20 kbps. The TLIN2029A-Q1 is designed to support 12-V and 24-V applications with wider operating voltage and additional bus-fault protection.

The LIN receiver supports data rates up to 100 kbps for faster in-line programming. The TLIN2029A-Q1 converts the 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 EN pin.

## Key Features

AEC-Q100 (Grade 1) Qualified for automotive applications

Compliant with LIN 2.0, LIN 2.1, LIN 2.2, LIN 2.2 A and ISO/DIS 17987-4 electrical physical layer (EPL) specification

Conforms to SAE J2602-1 LIN network for vehicle applications

Functional Safety-Capable

Documentation available to aid in functional safety system design

Supports 12-V and 24-V applications

LIN transmit data rate up to 20-kbps

LIN receive data rate up to 100 kbps

Wide operational supply voltage range from 4 V to 48 V

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 on LIN bus and RXD output

Protection features:

±60 V LIN bus fault tolerant

Under voltage protection on V<sub>SUP</sub>

TXD Dominant time out protection (DTO)

Thermal shutdown protection

Unpowered node or ground disconnection failsafe at system level.

Available in SOIC (8) and leadless VSON (8) with wettable flanks

## Recommended For You

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### CSD87352Q5D

Texas Instruments, Inc

SON8

### CSD17313Q2T

Texas Instruments, Inc

WSON6

### CSD86360Q5D

Texas Instruments, Inc

QFN

### CSD87384M

Texas Instruments, Inc

PTAB-5

### CSD86311W1723

Texas Instruments, Inc

BGA12

### CSD87330Q3D

Texas Instruments, Inc

SON8

### CSD83325L

Texas Instruments, Inc

BGA6

### CSD87351ZQ5D

Texas Instruments, Inc

QFN

### CSD85302L

Texas Instruments, Inc

PICOSTAR-4

**CSD85312Q3E**

Texas Instruments, Inc

VSON-8

**CSD85301Q2T**

Texas Instruments, Inc

WSON-6

**CSD87381PT**

Texas Instruments, Inc

QFN

**CSD15380F3T**

Texas Instruments, Inc

PICOSTAR-3

**CSD86330Q3D**

Texas Instruments, Inc

SON8

**CSD88537NDT**

Texas Instruments, Inc

SOIC8