

Product Overview

NCV7327: Stand-alone LIN Transceiver

For complete documentation, see the data sheet.

The NCV7327 is a fully featured local interconnect network (LIN) transceiver designed to interface between a LIN protocol controller and the physical bus. The LIN bus is designed to communicate low rate data from control devices such as door locks, mirrors, car seats, and sunroofs at the lowest possible cost. The bus is designed to eliminate as much wiring as possible and is implemented using a single wire in each node. Each node has a slave MCU-state machine that recognizes and translates the instructions specific to that function. The main attraction of the LIN bus is that all the functions are not time critical and usually relate to passenger comfort.

Features

- LIN-Bus Transceiver ♦ Compliant to ISO 17987-4 (Backwards Compatible to LIN Specification rev. 2.x, 1.3) and SAE J2602 ♦ Bus Voltage 42 V ♦ Transmission Rate up to 20 kbps (No low limit due to absence of TxD Timeout function) ♦ Integrated Slope Control
- Protection ♦ Thermal Shutdown ♦ Undervoltage Protection ♦ Bus Pins Protected Against Transients in an Automotive Environment
- Modes ♦ Normal Mode: LIN Transceiver Enabled, Communication via the Bus is Possible ♦ Sleep Mode: LIN Transceiver Disabled, the Consumption from VBB is Minimized ♦ Standby Mode: Transition Mode Reached after Wake-up Event on the LIN Bus
- Compatibility ♦ Pin-Compatible Subset with NCV7321 ♦ K-line Compatible ♦ NCV7327 differs from NCV7329 only by absence of TxD Time out functionality
- Quality ♦ AEC-Q100 Qualified and PPAP Capable ♦ These Devices are Pb-Free, Halogen Free/BFR Free and are RoHS Compliant

Applications

- In-Vehicle Networking
- Automotive

End Products

- Automobiles

Part Electrical Specifications

| Product | Pricing (\$/Unit) | Compliance | Status | Data Transmission Standard | Data Rate | Number of Drivers | Number of Receivers | V _{CC} Min (V) | V _{CC} Max (V) | t _{PLH} Max (μs) | I _O Max (μA) | I _H Max (mA) | Package Type |
|---------------|-------------------|---|--------|----------------------------|-----------|-------------------|---------------------|-------------------------|-------------------------|---------------------------|-------------------------|-------------------------|--------------|
| NCV7327D10R2G | | AEC Qualified PPAP Capable Pb-free Halide free | Active | LIN | 20 kbaud | 1 | 1 | 5 | 18 | | | | SOIC-8 |
| NCV7327MW0R2G | | AEC Qualified PPAP Capable Pb-free Halide free | Active | LIN | 20 kbaud | 1 | 1 | 5 | 18 | | | | DFNW-8 |

For more information please contact your local sales support at www.onsemi.com.

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