



## Product Overview

### NCV7321: LIN Transceiver, Stand-alone

For complete documentation, see the data sheet.



The NCV7321 is a fully featured local interconnect network (LIN) transceiver designed to interface between a LIN protocol controller and the physical bus. The transceiver is implemented in I3T technology enabling both high-voltage analog circuitry and digital functionality to co-exist on the same chip. The NCV7321 LIN device is a member of the in-vehicle networking (IVN) transceiver family. 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

- Bus voltage  $\pm 45$  V
- Integrated slope control
- Normal, Sleep and Stand-By modes
- LIN compliant to specification revision 2.x (backwards compatible to version 1.3) and J2602
- Transmission rate 1 kbps to 20 kbps
- Thermal shutdown
- Indefinite short-circuit protection on pins LIN and WAKE towards supply and ground
- Bus pins protected against transients in an automotive environment

#### Benefits

- Load dump protection
- Improved EMI
- Lower power consumption

#### Applications

- In-Vehicle Networking

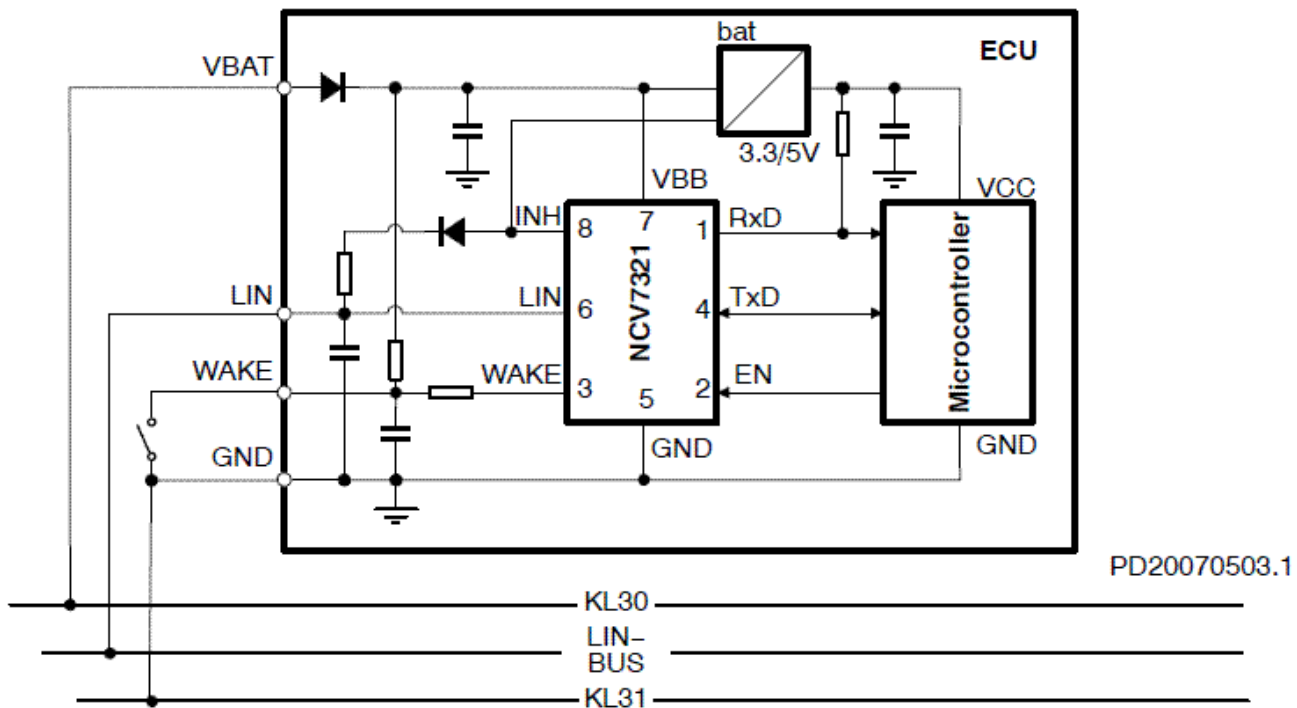
#### End Products

- Automobiles

### Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Data Transmission Standard	Data Rate	Number of Drivers	Number of Receivers	V <sub>CC</sub> Min (V)	V <sub>CC</sub> Max (V)	t <sub>PLH</sub> Max (μs)	I <sub>O</sub> Max (μA)	I <sub>IH</sub> Max (mA)	Package Type
NCV7321D12R2G		AEC Qualified PPAP Capable Pb-free Halide free	Active	LIN	20 kbaud	1	1	5	27				SOIC-8
NCV7321MW2R2G		AEC Qualified PPAP Capable Pb-free Halide free	Active	LIN	20 kbaud	1	1	5	27				DFN-8

# Application Diagram



For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).

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