NCV7344

CAN FD Transceiver, High Speed, Low Power

Product Overview

For complete documentation, see the data sheet.

The NCV7344 CAN transceiver is the interface between a controller area network (CAN) protocol controller and the physical bus. The transceiver provides differential transmit capability to the bus and differential receive capability to the CAN controller.
The NCV7344 is an addition to the CAN high-speed transceiver family complementing NCV734x CAN stand-alone transceivers and previous generations such as AMIS42665, AMIS3066x, etc.
The NCV7344 guarantees additional timing parameters to ensure robust communication at data rates beyond 1 Mbps to cope with CAN flexible data rate requirements (CAN FD). These features make the NCV7344 an excellent choice for all types of HS-CAN networks, in nodes that require a low-power mode with wake-up capability via the CAN bus.

Features

- Compatible with ISO 11898-2:2016
- CAN FD timing specified up to 5 Mbps
- VIO pin on NCV7344-3 Version Allowing Direct Interfacing with 3 V to 5 V Microcontrollers
- Very Low Current Standby Mode with Wake-up via the Bus
- Low Electromagnetic Emission (EME) and High Electromagnetic Immunity
- Very Low EME without Common-mode (CM) Choke
- No Disturbance of the Bus Lines with an Un-powered Node
- Transmit Data (TxD) Dominant Timeout Function
- Under All Supply Conditions the Chip Behaves Predictably
- Very High ESD Robustness of Bus Pins, >8 kV System ESD Pulses
  For more features, see the data sheet

Applications

- Automotive
- Industrial Networks

End Products

- Powertrain, Chassis, Body, ...

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_{IH} Max (mA)	Package Type
NCV7344AD10R2G	0.2959		Active	CAN	5 Mbps	1	1	4.75	5.25				SOIC-8
NCV7344AD13R2G	0.3172		Active	CAN	5 Mbps	1	1	4.75	5.25				SOIC-8
NCV7344AMW0R2G	0.4671		Active	CAN	5 Mbps	1	1	4.75	5.25				DFNW-8
NCV7344AMW3R2G	0.3223		Active	CAN	5 Mbps	1	1	4.75	5.25				DFNW-8
NCV7344D10R2G	0.3274		Active	CAN	5 Mbps	1	1	4.75	5.25				SOIC-8
NCV7344D13R2G	0.3307		Active	CAN	5 Mbps	1	1	4.75	5.25				SOIC-8
NCV7344MW0R2G	0.3166		Active	CAN	5 Mbps	1	1	4.75	5.25				DFNW-8
NCV7344MW3R2G	0.3259		Active	CAN	5 Mbps	1	1	4.75	5.25				DFNW-8
NCV7344MW3T1G	0.3133		Active										DFNW-8