

## Product Overview

### NCV7381: FlexRay® Transceiver, Clamp 30

For complete documentation, see the data sheet.



NCV7381 is a single-channel FlexRay transceiver compliant with the FlexRay Electrical Physical Layer Specification Rev. 3.0.1, capable of communicating at speeds of up to 10 Mbit/s. It provides differential transmit and receive capability between a wired FlexRay communication medium on one side and a protocol controller and a host on the other side. NCV7381 mode control functionality is optimized for nodes permanently connected to car battery. It offers excellent EMC and ESD performance.

### Features

- Compliant with FlexRay Electrical Physical Layer Specification Rev 3.0.1
- FlexRay Transmitter and Receiver in Normal-power Modes for Communication up to 10 Mbit/s
- Support of 60 ns Bit Time
- FlexRay Low-power Mode Receiver for Remote Wakeup Detection
- Excellent Electromagnetic Susceptibility (EMS) Level over Full Frequency Range. Very Low Electromagnetic Emissions (EME)
- Bus Pins Protected against >10 kV System ESD Pulses
- Safe Behavior under Missing Supply or No Supply Conditions
- Interface Pins for a Protocol Controller and a Host (TxD, RxD, TxEN, RxEN, STBN, BGE, EN, ERRN)
- INH Output for Control of External Regulators
- Local Wakeup Pin WAKE

For more features, see the data sheet

### Applications

- In Vehicle Networking
- Powertrain
- X-by-Wire
- Safety

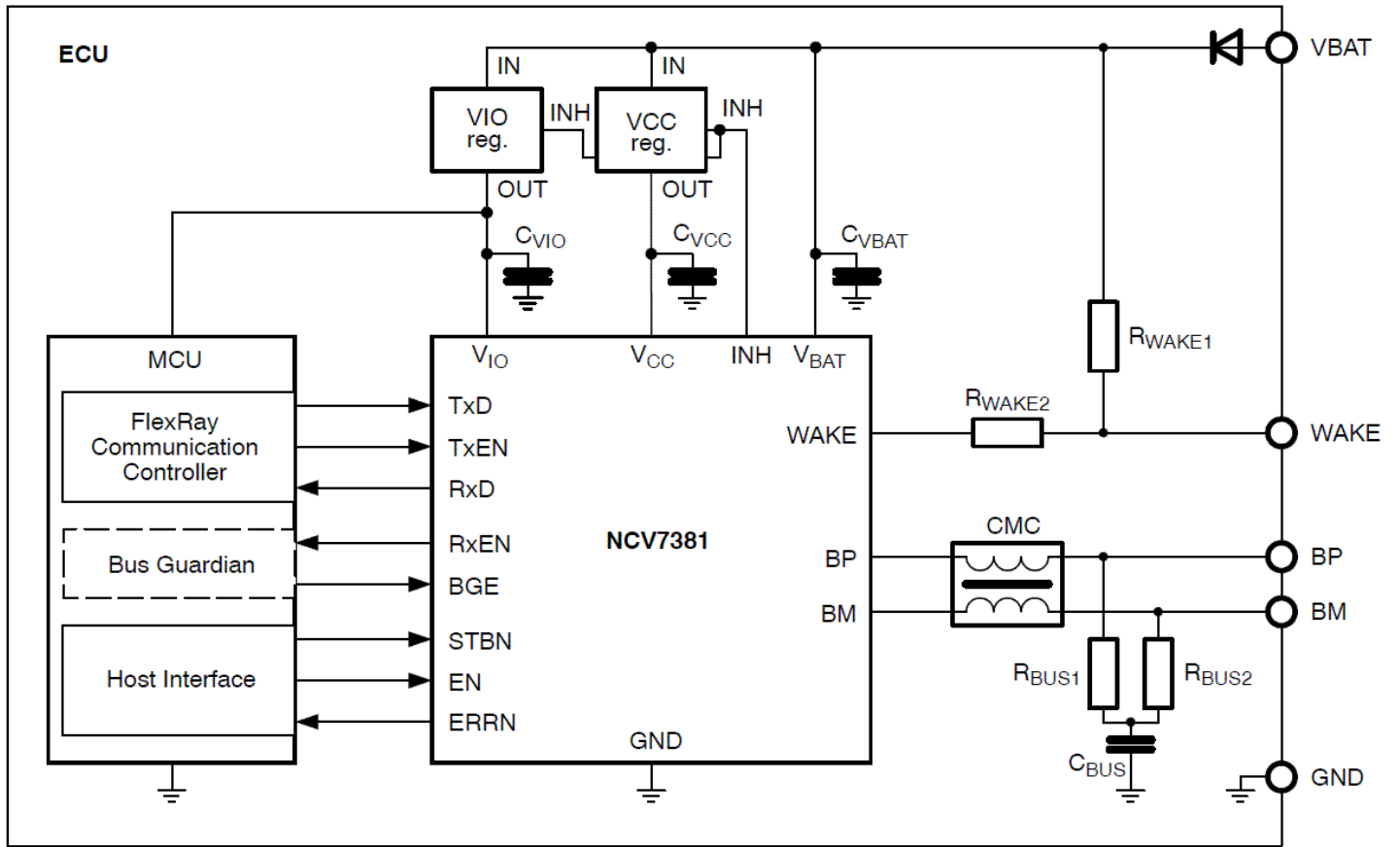
### End Products

- 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 |
|----------------|-------------------|---|--------|----------------------------|-----------|-------------------|---------------------|-------------------------|-------------------------|---------------------------|-------------------------|--------------------------|--------------|
| NCV7381ADP0R2G |                   | AEC Qualified<br>PPAP Capable<br>Pb-free<br>Halide free | Active | FlexRay                    | 10 Mb/s   | 1                 | 1                   | 5.5                     | 50                      |                           |                         |                          | SSOP-16      |

# Application Diagram



For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).  
 Created on: 11/30/2020