NCN5150

Wired M-BUS Slave Transceiver

Product Overview

For complete documentation, see the data sheet.

The NCN5150 is a single-chip integrated slave transceiver for use in two-wire Meter Bus (M-BUS) slave devices and repeaters. The transceiver provides all of the functions needed to satisfy the European Standards EN 13757-2 and EN 1434-3 describing the physical layer requirements for M-BUS. It includes a programmable power level of up to 2 (SOIC version) or 6 (NQFP version) unit loads which are available for use in external circuits through a 3.3V LDO regulator.
The NCN5150 can provide communication up to the maximum M-BUS communication speed of 38400 baud (half-duplex).

Features

- Single-chip M-Bus transceiver
- UART communication speeds up to 38400 baud
- Integrated 3.3 V VDD LDO regulator with extended peak current capability of 15 mA
- Supports powering slave device from the bus or from external power supply
- Adjustable I/O levels
- Adjustable constant current sink up to 2 or 6 unit loads depending on the package
- Low bus voltage operation
- Extended current budget for external circuits: at least 0.88 mA
- Polarity independent
- Power-fail function
  For more features, see the data sheet

Applications

- Multi-Energy Utility meters- Water- Gas- Electricity- Heating systems

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
NCN5150DG	0.5992	Pb H	Active	M-BUS	38400 baud	1	1	3.1	3.6				SOIC-16
NCN5150DR2G	0.5992	Pb H	Active	M-BUS	38400 baud	1	1	3.1	3.6				SOIC-16
NCN5150MNTWG	0.68	Pb H	Active	M-BUS	38400 baud	1	1	3.1	3.6				QFN-20