

NCN5110

KNX Bit Transceiver for Twisted Pair Networks



Product Overview

For complete documentation, see the data sheet.

NCN5110 is a receiver-transmitter IC suitable for use in KNX twisted pair networks (KNX TP1-256). NCN5110 is an bit (or PHY-only) transceiver which handles the transmission and reception of data on the bus. It generates from the unregulated bus voltage stabilized voltages for its own power needs as well as to power external devices. NCN5110 assures safe coupling to and decoupling from the bus and does not require external XTAL for proper operation.

Features

- KNX certified TP transceiver with embedded PHY layer. 9600 Bauds communication speed.
- Two high efficient DC-DC converters + one linear regulator :- DC-DC1 : fixed 3.3 V- DC-DC2 : adjustable between 1.2 and 21 V- 20V linear regulator
- Bus Current Consumption up to 40 mA
- Supervision of temperature and of the power regulators
- Direct coupling of analog signaling to Host
- Extended ambient temperature range -40 to +105 degC

Benefits

- NCN5110 bit transceiver can be used in any TP1-256 application
- Most KNX applications can directly be supplied from the NCN5110 removing the need for external costly power supply. Best in Class overall system efficiency.
- Enables variety of high end/ power demanding KNX applications
- No external XTAL required for proper operation

Applications

- Smart Home
- Building Automation

End Products

- Smart lighting and switches
- Ventilation and air conditioning
- Thermostats
- Alarms and smoke detectors
- Shutters and blinds

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
NCN5110MNTWG	2.944		Active	KNX	9600 baud	1	1	3.13	3.47				QFN-40