

Single Transmitter/Receiver RS-232/RS-422/RS-485 Automotive 28-Pin QFN EP Tube

Manufacturers	Analog Devices, Inc
Package/Case	28-QFN
Product Type	Interface ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LTC2870IUFD#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LTC2870/LTC2871 are robust pin-configurable multiprotocol transceivers, supporting RS232, RS485, and RS422 protocols, operating on a single 3V to 5.5V supply. The LTC2870 can be configured as two RS232 single-ended transceivers or one RS485 differential transceiver on shared I/O lines. The LTC2871 offers independent control of two RS232 transceivers and one RS485 transceiver, each on dedicated I/O lines.

Pin-controlled integrated termination resistors allow for easy interface reconfiguration, eliminating external resistors and control relays. Half-duplex switches allow four-wire and two-wire RS485 configurations. Loopback mode steers the driver inputs to the receiver outputs for diagnostic self-test. The RS485 receivers support up to 256 nodes per bus, and feature full failsafe operation for floating, shorted or terminated inputs.

An integrated DC/DC boost converter uses a tiny 2mm × 1.6mm inductor and one capacitor, eliminating the need for multiple supplies for driving RS232 levels.

Features

One RS485 and Two RS232 Transceivers

3V to 5.5V Supply Voltage

20Mbps RS485 and 500kbps RS232

Automatic Selection of Integrated RS485 (120Ω) and RS232 (5kΩ) Termination Resistors

Half-/Full-Duplex RS485 Switching

High ESD: ±26kV (LTC2870), ±16kV (LTC2871)

Logic Loopback Mode

1.7V to 5.5V Logic Interface

Supports Up to 256 RS485 Nodes

RS485 Receiver Failsafe Eliminates UART Lockup

H-Grade Available (−40°C to 125°C)

Available in 28-Pin 4mm × 5mm QFN and TSSOP (LTC2870), and 38-Pin 5mm × 7mm QFN and TSSOP (LTC2871)

Application

Software Selectable RS232/RS485/RS422 Interface

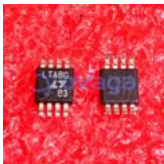
Point-of-Sale Terminals

Cable Repeaters

Protocol Translators



Related Products



[LTC4300A-1IMS8#PBF](#)

Analog Devices, Inc
MSOP8



[LTC2870IFE#PBF](#)

Analog Devices, Inc
TSSOP28



[LTC6820IMS#PBF](#)

Analog Devices, Inc
MSOP16



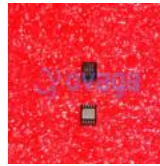
[LTC6820HMS#PBF](#)

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MSOP-16



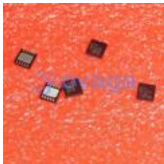
[LTM2881IV-3#PBF](#)

Analog Devices, Inc
LGA32



[LTC2854HDD#PBF](#)

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QFN-10



[LTC2852IDD#PBF](#)

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DFN10



[LTC1387IG](#)

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