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	
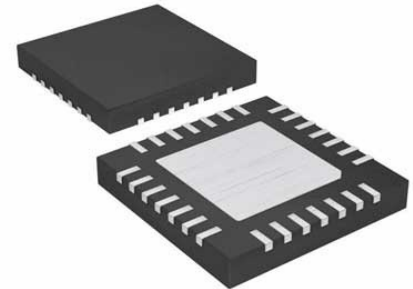
Images are for reference only

Please submit RFQ for LTC2870CUFD#PBF or Email to us: 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)
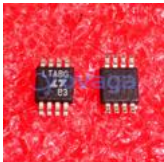
Application

Software Selectable RS232/RS485/RS422 Interface

Point-of-Sale Terminals

Cable Repeaters

Protocol Translators

Related Products
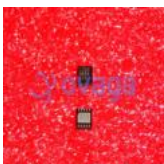
LTC4300A-1IMS8#PBF

Analog Devices, Inc

MSOP8

LTC2870IUFD#PBF

Analog Devices, Inc

28-QFN

LTC2870IFE#PBF

Analog Devices, Inc

TSSOP28

LTC6820IMS#PBF

Analog Devices, Inc

MSOP16

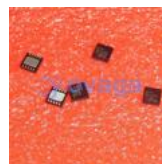**LTC6820HMS#PBF**

Analog Devices, Inc

MSOP-16

LTM2881IV-3#PBF

Analog Devices, Inc

LGA32

LTC2854HDD#PBF

Analog Devices, Inc

QFN-10

LTC2852IDD#PBF

Analog Devices, Inc

DFN10