

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

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	TSSOP28
Product Type	Interface ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LTC2870IFE#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)

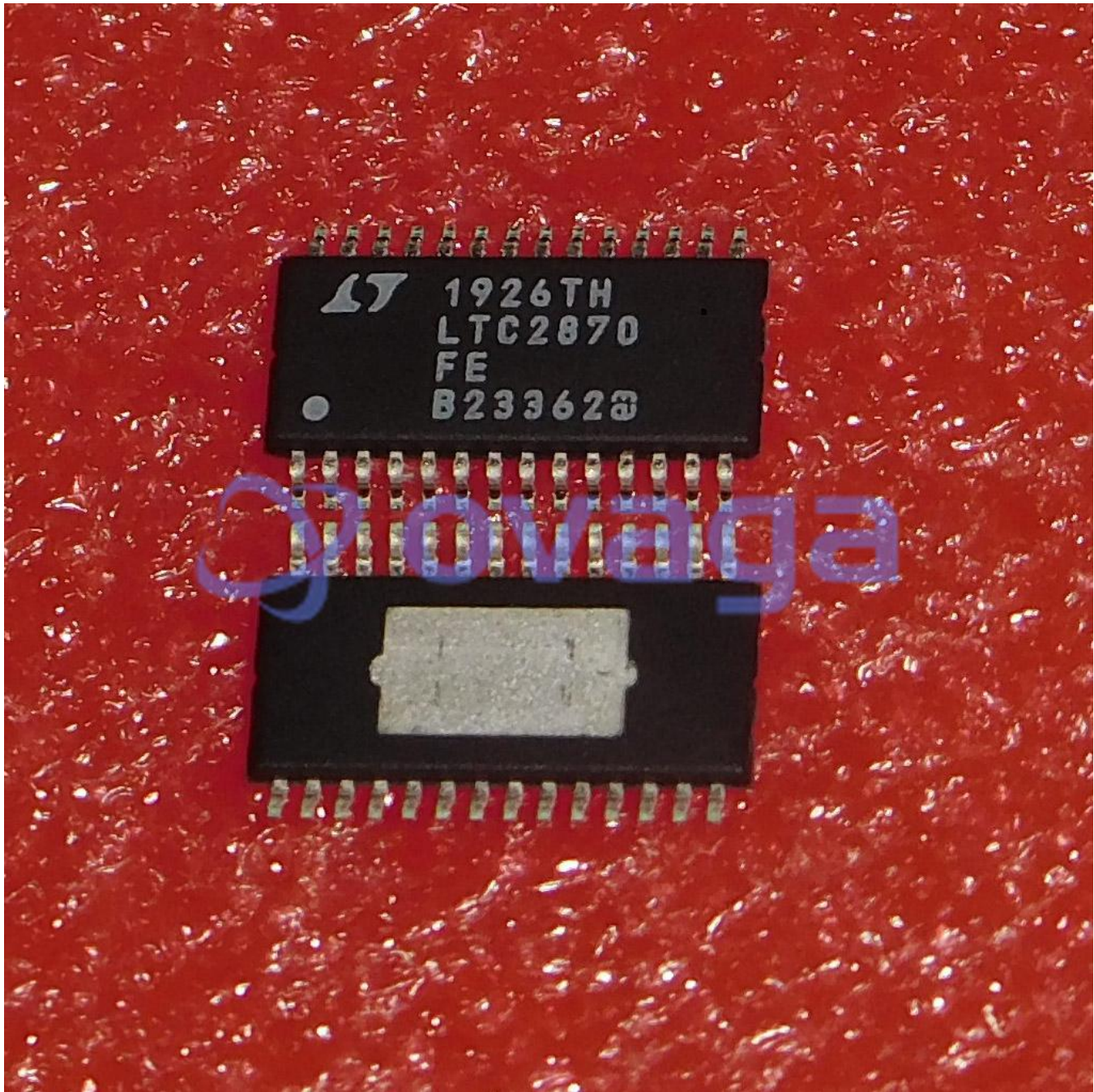
## Application

Software Selectable RS232/RS485/RS422 Interface

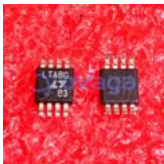
Point-of-Sale Terminals

Cable Repeaters

Protocol Translators



### Related Products



[LTC4300A-1IMS8#PBF](#)

Analog Devices, Inc  
MSOP8



[LTC2870IUFD#PBF](#)

Analog Devices, Inc  
28-QFN



[LTC6820IMS#PBF](#)

Analog Devices, Inc  
MSOP16



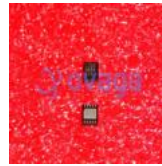
[LTC6820HMS#PBF](#)

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MSOP-16



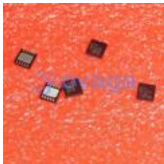
[LTM2881IV-3#PBF](#)

Analog Devices, Inc  
LGA32



[LTC2854HDD#PBF](#)

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[LTC1387IG](#)

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