

LTC1535ISW#PBF

Data Sheet

Single Transmitter/Receiver RS-422/RS-485 16-Pin SOIC W Tube

Manufacturers Analog Devices, Inc

Package/Case SOIC28

Product Type Interface ICs

RoHS Pb-free Halide free

Lifecycle



Images are for reference only

Please submit RFQ for LTC1535ISW#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The LTC1535 is an isolated RS485 full-duplex differential line transceiver. Isolated RS485 is ideal for systems where the ground loop is broken to allow for much larger common mode voltage ranges. An internal capacitive isolation barrier provides 2500VRMS of isolation between the line transceiver and the logic level interface. The powered side contains a 420kHz push-pull converter to power the isolated RS485 transceiver. Internal full-duplex communication occurs through the capacitive isolation barrier. The transceiver meets RS485 and RS422 requirements.

The driver and receiver feature three-state outputs, with the driver maintaining high impedance over the entire common mode range. The drivers have short-circuit current limits in both directions and a slow slew rate select to minimize EMI or reflections. The $68k\Omega$ receiver input allows up to 128 node connections. A fail-safe feature defaults to a high output state when the receiver inputs are open or shorted.

Features

UL Rated Isolated RS485: 2500VRMS

Eliminates Ground Loops

250kBd Maximum Data Rate

Self-Powered with 420kHz Converter

Half- or Full-Duplex

Fail-Safe Output High for Open or Shorted Receiver Inputs

Short-Circuit Current Limit

Slow Slew Rate Control

 $68k\Omega$ Input Impedance Allows Up to 128 Nodes

Thermal Shutdown

8kV ESD Protection On Driver Outputs and Receiver Inputs

Available in 28-Lead SW Package

Application

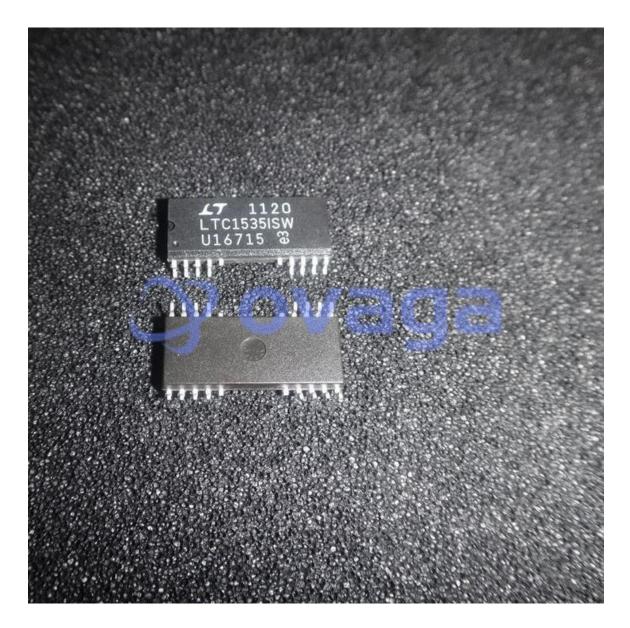
Isolated RS485 Receiver/Driver

RS485 with Large Common Mode Voltage

Breaking RS485 Ground Loops

Multiple Unterminated Line Taps





Related Products



LTC4300A-1IMS8#PBF

Analog Devices, Inc MSOP8



LTC2870IFE#PBF

Analog Devices, Inc TSSOP28



LTC6820HMS#PBF

Analog Devices, Inc MSOP-16



LTC2870IUFD#PBF

Analog Devices, Inc 28-QFN



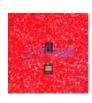
LTC6820IMS#PBF

Analog Devices, Inc MSOP16



LTM2881IV-3#PBF

Analog Devices, Inc LGA32



LTC2854HDD#PBF
Analog Devices, Inc
QFN-10



Analog Devices, Inc
DFN10

LTC2852IDD#PBF