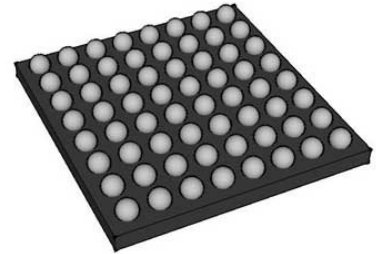


Complete Isolated RS485/RS422 μ Module Transceiver + Power, 32-Pin (15mm \times 11.25mm \times 3.42mm) BGA , Temperature Range: Industrial -40°C to 85°C

Manufacturers	Analog Devices, Inc
Package/Case	BGA 32
Product Type	Interface ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LTM2881IY-5#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LTM2881 is a complete galvanically isolated full-duplex RS485/RS422 μ Module[®] (micromodule) transceiver. No external components are required. A single supply powers both sides of the interface through an integrated, isolated, low noise, efficient 5V output DC/DC converter.

Coupled inductors and an isolation power transformer provide $2500V_{\text{RMS}}$ of isolation between the line transceiver and the logic interface. This device is ideal for systems where the ground loop is broken allowing for large common mode voltage variation. Uninterrupted communication is guaranteed for common mode transients greater than $30\text{kV}/\mu\text{s}$.

Maximum data rates are 20Mbps or 250kbps in slew limited mode. Transmit data, DI and receive data, RO, are implemented with event driven low jitter processing. The receiver has a one-eighth unit load supporting up to 256 nodes per bus. A logic supply pin allows easy interfacing with different logic levels from 1.62V to 5.5V, independent of the main supply.

Enhanced ESD protection allows this part to withstand up to $\pm 15\text{kV}$ (human body model) on the transceiver interface pins to isolated supplies and $\pm 10\text{kV}$ through the isolation barrier to logic supplies without latch-up or damage.

Applications

Features

RS485/RS422 Transceiver: 2500V

RMS

UL-CSA Recognized File #E151738

CSA Component Acceptance Notice 5A

Isolated DC Power: 5V at Up to 200mA

No External Components Required

20Mbps or Low EMI 250kbps Data Rate

High ESD: $\pm 15\text{kV}$ HBM on Transceiver Interface

High Common Mode Transient Immunity: $30\text{kV}/\mu\text{s}$

Integrated Selectable 120Ω Termination

3.3V (LTM2881-3) or 5.0V (LTM2881-5) Operation

1.62V to 5.5V Logic Supply Pin for Flexible Digital Interface

Maximum Continuous Working Voltage: 560V

PEAK

High Input Impedance Failsafe RS485 Receiver

Current Limited Drivers and Thermal Shutdown

Compatible with TIA/EIA-485-A and PROFIBUS

High Impedance Output During Internal Fault Condition

Low Current Shutdown Mode ($< 10\mu\text{A}$)

General Purpose CMOS Isolated Channel

15mm \times 11.25mm BGA and LGA Packages

Application

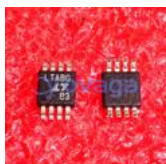
Isolated RS485/RS422 Interface

Industrial Networks

Breaking RS485 Ground Loops

Isolated PROFIBUS-DP Networks

Related Products



[LTC4300A-1IMS8#PBF](#)

Analog Devices, Inc
MSOP8



[LTC2870IUFD#PBF](#)

Analog Devices, Inc
28-QFN



[LTC2870IFE#PBF](#)

Analog Devices, Inc
TSSOP28



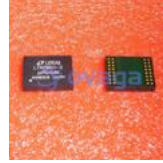
[LTC6820IMS#PBF](#)

Analog Devices, Inc
MSOP16



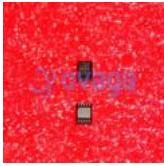
[LTC6820HMS#PBF](#)

Analog Devices, Inc
MSOP-16



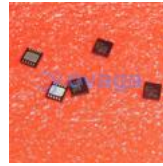
[LTM2881IV-3#PBF](#)

Analog Devices, Inc
LGA32



[LTC2854HDD#PBF](#)

Analog Devices, Inc
QFN-10



[LTC2852IDD#PBF](#)

Analog Devices, Inc
DFN10