

LTM2882IY-5#PBF

Data Sheet

<u>RFO</u>

Transceiver RS232, 2 Drivers, 4.5V-5.5V supply, BGA-32

Manufacturers	Analog Devices, Inc		
Package/Case	32-BBGA		
Product Type	Interface ICs		
RoHS			
Lifecycle		Images are for reference only	
Please submit RFQ for LTM2882IY-5#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.			^C O

General Description

The LTM2882 is a complete galvanically isolated dual RS232 µModule® (micromodule) transceiver. No external components are required. A single 3.3V or 5V supply powers both sides of the interface through an integrated, isolated DC/DC converter. A logic supply pin allows easy interfacing with different logic levels from 1.62V to 5.5V, independent of the main supply.

Coupled inductors and an isolation power transformer provide 2500V_{RMS} of isolation between the line transceiver and the logic interface. This device is ideal for systems with different grounds, allowing for large common mode voltages. Uninterrupted communication is guaranteed for common mode transients greater than 30kV/µs.

This part is compatible with the TIA/EIA-232-F standard. Driver outputs are protected from overload and can be shorted to ground or up to $\pm 15V$ without damage. An auxiliary isolated digital channel is available. This channel allows configuration for half-duplex operation by controlling the DE pin.

Enhanced ESD protection allows this part to withstand up to ± 10 kV (human body model) on the transceiver interface pins to isolated supplies and across the isolation barrier to logic supplies without latch-up or damage.

Applications

Features

RS232 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
- 1.62V to 5.5V Logic Supply for Flexible Digital Interfacing
- High Speed Operation
- 1Mbps for 250pF/3k Ω Load
- 250kbps for $1nF/3k\Omega$ Load
- 100kbps for $2.5nF/3k\Omega$ TIA/EIA-232-F Load
- 3.3V (LTM2882-3) or 5V (LTM2882-5) Operation
- No Damage or Latchup to ±10kV HBM ESD on Isolated RS232 Interface or Across Isolation Barrier
- High Common Mode Transient Immunity: 30kV/µs
- Maximum Continuous Working Voltage: 560V

PEAK

- True RS232 Compliant Output Levels
- $15 \text{mm} \times 11.25 \text{mm}$ BGA and LGA Packages
- 1Mbps for 250pF/3k Ω Load
- 250kbps for $1nF/3k\Omega$ Load
- 100kbps for 2.5nF/3k Ω TIA/EIA-232-F Load

Related Products



LTC4300A-1IMS8#PBF

Analog Devices, Inc MSOP8



LTC2870IUFD#PBF

Analog Devices, Inc 28-QFN

Isolated RS232 Interface

Application

Industrial Communication

Test and Measurement Equipment

Breaking RS232 Ground Loops



LTC2870IFE#PBF

Analog Devices, Inc TSSOP28



LTC6820IMS#PBF

Analog Devices, Inc MSOP16



LTC6820HMS#PBF Analog Devices, Inc

MSOP-16



LTC2854HDD#PBF Analog Devices, Inc

QFN-10



0

6

LTM2881IV-3#PBF

Analog Devices, Inc LGA32

LTC2852IDD#PBF

Analog Devices, Inc DFN10