

LTM2889HY-3#PBF

Data Sheet

Isolated CAN FD µModule Transceiver and Power

Manufacturers <u>Analog Devices, Inc</u>

Package/Case 32-Lead BGA (15mm x 11.25mm x 3.42mm)

Product Type Interface ICs

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for LTM2889HY-3#PBF or <u>Emailto:sales@ovaga.com</u> We will contact you in 12 hours.

RFO

General Description

The LTM2889 is a complete galvanically-isolated Controller Area Network (CAN) μ Module[®] (micromodule) transceiver. No external components are required – a single supply powers both sides of the interface through an integrated, isolated DC/DC converter. Separate versions are available for 3.3V and 5V power supplies. The dual voltage CAN transceiver and the adjustable regulator allow 3.3V or 5V isolated power with either the 3.3V or 5V version.

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 where the ground loop is broken, allowing for large common mode voltage ranges. Communication remains uninterrupted for common mode transients greater than $30kV/\mu s$.

Supports up to 4Mbps CAN with Flexible Data Rate (CAN FD). 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 $\pm 25 \text{kV}$ Human Body Model (HBM) on the transceiver interface pins and $\pm 10 \text{kV}$ HBM across the isolation barrier without latchup or damage.

Applications

Features

Isolated 4Mbps CAN FD Transceiver

2500V

RMS

Isolated DC Power: 5V (Adjustable to 3.3V)

Up to 150mA Available Isolated Power Output

3.3V or 5V Input Supply Voltage Options

UL-CSA Recognized File #E151738

No External Components Required

High Bus Fault Voltage Tolerance: ±60V

Low Power OFF Mode: <1 µA Typical

High Common Mode Transient Immunity: 30kV/µs

Variable Slew Rate Driver with Active Symmetry Control and SPLIT Pin for Low EME

Fully ISO 11898-2 and CAN FD Compliant

Ideal Passive Behavior to CAN Bus with Supply Off

Transmit Data (TXD) Dominant Timeout Function

High ESD: ±25kV CANH, CANL to GND2 and V

CC2

Ambient Operation from -40°C to 125°C

Low Profile 15mm × 11.25mm BGA Package

Related Products



LTC4300A-1IMS8#PBF

Analog Devices, Inc MSOP8



LTC2870IFE#PBF

Analog Devices, Inc

TSSOP28



Isolated CAN Bus Interface

Industrial Networks

DeviceNet Applications





LTC2870IUFD#PBF

Analog Devices, Inc 28-QFN



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