

## ADM2485BRWZ

Data Sheet

RS422/RS485 Transceiver Isolated, Differential, 1 Driver, 1 Receiver, 2.7V to 5.5V, WSOIC-16

Manufacturers Analog Devices, Inc

Package/Case SOIC-16

Product Type Interface ICs

RoHS Pb-free Halide free

Lifecycle



Images are for reference only

Please submit RFQ for ADM2485BRWZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

The ADM2485 differential bus transceiver is an integrated, galvanically isolated component designed for bidirectional data communication on multipoint bus transmission lines. It is designed for balanced transmission lines and complies with ANSI/TIA/EIA RS-485-A-98 and ISO 8482:1987(E).

The device employs Analog Devices, Inc., iCoupler® technology to combine a 3-channel isolator, a three-state differential line driver, and a differential input receiver into a single package. An on-chip oscillator outputs a pair of square waveforms that drive an external transformer to provide isolated power with an external transformer. The logic side of the device can be powered with either a 5 V or a 3.3 V supply, and the bus side is powered with an isolated 5 V supply.

The ADM2485 driver has an active high enable. The driver differential outputs and the receiver differential inputs are connected internally to form a differential input/output port that imposes minimal loading on the bus when the driver is disabled or when VDD1 or>

The device has current-limiting and thermal shutdown features to protect against output short circuits and situations where bus contention might cause excessive power dissipation. The part is fully specified over the industrial temperature range and is available in a 16-lead, wide-body SOIC package.

**Features** 

Half-duplex, isolated RS-485 transceiver

Integrated oscillator driver for external transformer

PROFIBUS® compliant

Complies with ANSI/TIA/EIA RS-485-A-98 and ISO 8482:1987(E)

Data rate: 16 Mbps

5 V or 3.3 V operation (VDD1)

High common-mode transient immunity: >25 kV/µs

Wide-body, 16-lead SOIC package

50 nodes on bus

Isolated DE OUT status output

Thermal shutdown protection

Safety and regulatory approvals

UL recognition: 2500 V rms for 1 minute per UL 1577

VDE Certificate of Conformity

DIN V VDE V 0884-10 (VDE V 0884-10):2006-12

Reinforced insulation,>

Operating temperature range: -40°C to +85°C

Wide-body, 16-lead SOIC package

## **Application**

Isolated RS-485/RS-422 interfaces

PROFIBUS networks

Industrial field networks

Multipoint data transmission systems

## **Related Products**



ADV7181CBSTZ

Analog Devices, Inc
LQFP-64



Analog Devices, Inc SOIC-16

AD724JR



AD8170AR
Analog Devices, Inc
SOP8

Analog Devices, Inc LFCSP-VQ-40



ADV7391WBCPZ

Analog Devices, Inc LFSCP-3



ADV7390BCPZ

Analog Devices, Inc QFN32



ADV7341BSTZ

Analog Devices, Inc LQFP-64



ADUM4160BRIZ

Analog Devices, Inc SOIC-16