

High Speed, ESD-Protected, Full-Duplex, iCoupler, Isolated RS-485 Transceiver

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	SOIC-16
Product Type	Interface ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for ADM2490EBRWZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The ADM2490E is an isolated data transceiver with  $\pm 8$  kV ESD protection that is suitable for high speed, full-duplex communication on multipoint transmission lines. It is designed for balanced transmission lines and complies with ANSI TIA/EIA-485-A-1998 and ISO 8482: 1987(E). The device employs Analog Devices, Inc., iCoupler<sup>®</sup> technology to combine a 2-channel isolator, a three-state differential line driver, and a differential input receiver into a single package.

The differential transmitter outputs and receiver inputs feature electrostatic discharge circuitry that provides protection to  $\pm 8$  kV using the human body model (HBM). The logic side of the device can be powered with either a 5 V or a 3 V supply, whereas the bus side requires an isolated 5 V supply.

The device has current-limiting and thermal shutdown features to protect against output short circuits and situations where bus contention could cause excessive power dissipation.

The ADM2490E is available in a wide body, 16-lead SOIC package and operates over the  $-40^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$  temperature range.

## Features

Isolated, full-duplex RS-485/RS-422 transceiver

16 Mbps data rate

Complies with ANSI TIA/EIA-485-A-1998 and ISO 8482: 1987(E)

Suitable for 5 V or 3 V operation (VDD1)

High common-mode transient immunity: >25 kV/ $\mu$ s

Receiver has open-circuit, fail-safe design

32 nodes on the bus

Thermal shutdown protection

Safety and regulatory approvals

UL recognition: 5000 V rms isolation voltage for 1 minute per UL 1577

VDE certificate of conformity

DIN EN 60747-5-2 (VDE 0884-10 Part 2): 2003-01

DIN EN 60950 (VDE 0805): 2001-12; EN 60950:>

Operating temperature range:  $-40^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$

Wide body, 16-lead SOIC package

## Application

Isolated RS-485/RS-422 Interfaces

Industrial Field Networks

INTERBUS

Multipoint Data Transmission Systems





## Related Products



### [ADV7181CBSTZ](#)

Analog Devices, Inc  
LQFP-64



### [AD724JR](#)

Analog Devices, Inc  
SOIC-16



### [ADV7391WBCPZ](#)

Analog Devices, Inc  
LFSCP-3



### [AD8170AR](#)

Analog Devices, Inc  
SOP8



### [ADV7393BCPZ](#)

Analog Devices, Inc  
LFCSP-VQ-40



### [ADV7390BCPZ](#)

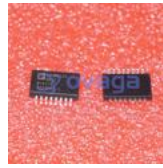
Analog Devices, Inc  
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[ADV7341BSTZ](#)

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