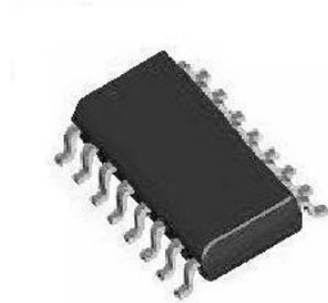


Single Transmitter/Receiver RS-422/RS-485 16-Pin SOIC W T/R

Manufacturers	Analog Devices, Inc
Package/Case	SOIC-16
Product Type	Interface ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for ADM2687EBRIZ-RL7 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADM2682E/ADM2687E are fully integrated 5 kV rms signal and power isolated data transceivers with ± 15 kV ESD protection and are suitable for high speed communication on multipoint transmission lines. The ADM2682E / ADM2687E include an integrated 5 kV rms isolated dc-to-dc power supply that eliminates the need for an external dc-to-dc isolation block.

They are designed for balanced transmission lines and comply with ANSI/TIA/EIA-485-A-98 and ISO 8482:1987(E).

The devices integrate Analog Devices, Inc., iCoupler® technology to combine a 3-channel isolator, a three-state differential line driver, a differential input receiver, and Analog Devices isoPower® dc-to-dc converter into a single package. The devices are powered by a single 5 V or 3.3 V supply, realizing a fully integrated signal and power isolated RS-485 solution.

The ADM2682E/ADM2687E drivers have an active high enable. An active low receiver enable is also provided, which causes the receiver output to enter a high impedance state when disabled.

The devices have current limiting and thermal shutdown features to protect against output short circuits and situations where bus contention may cause excessive power dissipation. The parts are fully specified over the industrial temperature range and are available in a highly integrated, 16-lead, wide-body SOIC package with >8 mm creepage and clearance.

The ADM2682E/ADM2687E contain isoPower technology that uses high frequency switching elements to transfer power through the transformer. Special care must be taken during printed circuit board (PCB) layout to meet emissions standards. Refer to AN-0971 Application Note, Recommendations for Control of Radiated Emissions with isoPower Devices, for details on board layout considerations.

Features

5 kV rms isolated RS-485/RS-422 transceiver, configurable as half or full duplex

isoPower® integrated isolated dc-to-dc converter

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

Data rate: 500 kbps

5 V or 3.3 V operation

Connect up to 256 nodes on one bus

Open- and short-circuit, fail-safe receiver inputs

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

See data sheet for additional features

Application

Isolated RS-485/RS-422 interfaces

Industrial field networks

Multipoint data transmission systems

Related Products



[ADV7181CBSTZ](#)

Analog Devices, Inc
LQFP-64



[AD724JR](#)

Analog Devices, Inc
SOIC-16



[ADV7391WBCPZ](#)

Analog Devices, Inc
LFSCP-3



[ADV7341BSTZ](#)

Analog Devices, Inc
LQFP-64



[AD8170AR](#)

Analog Devices, Inc
SOP8



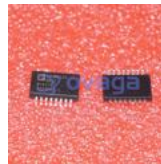
[ADV7393BCPZ](#)

Analog Devices, Inc
LFCSP-VQ-40



[ADV7390BCPZ](#)

Analog Devices, Inc
QFN32



[ADUM4160BRIZ](#)

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SOIC-16