

Triple-Channel Digital Isolator; Package: SOIC - Wide; No of Pins: 16; Temperature Range: Industrial

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



Images are for reference only

Please submit RFQ for ADUM1301BRWZ-RL or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADuM130x are triple-channel digital isolators based on the Analog Devices, Inc., iCoupler[®] technology. Combining high speed CMOS and monolithic transformer technology, these isolation components provide outstanding performance characteristics superior to alternatives, such as optocouplers.

By avoiding the use of LEDs and photodiodes, iCoupler devices remove the design difficulties commonly associated with optocouplers. The typical optocoupler concerns regarding uncertain current transfer ratios, nonlinear transfer functions, and temperature and lifetime effects are eliminated with the simple iCoupler digital interfaces and stable performance characteristics. The need for external drivers and other discrete components is eliminated with these iCoupler products. Furthermore, iCoupler devices consume one-tenth to one-sixth of the power of optocouplers at comparable signal data rates.

The ADuM130x isolators provide three independent isolation channels in a variety of channel configurations and data rates (see the Ordering Guide in the data sheet). Both models operate with the supply voltage on either side ranging from 2.7 V to 5.5 V, providing compatibility with lower voltage systems as well as enabling a voltage translation functionality across the isolation barrier. In addition, the ADuM130x provide low pulse width distortion (<2 ns for CRW grade) and tight channel-to-channel matching (<2 ns for CRW grade). Unlike other optocoupler alternatives, the ADuM130x isolators have a patented refresh feature that ensures dc correctness in the absence of input logic transitions and when power is not applied to one of the supplies.

APPLICATIONS

Features

Automotive versions qualified per AEC-Q100

Low power operation

Bidirectional communication

3 V/5 V level translation

High temperature operation: 125°C

High data rate: dc to 90 Mbps (NRZ)

Precise timing characteristics

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

See data sheet for additional features

Application

General-purpose multichannel isolation

SPI interface/data converter isolation

RS-232/RS-422/RS-485 transceivers

Industrial field bus isolation

Automotive 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](#)

Analog Devices, Inc
SOIC-16