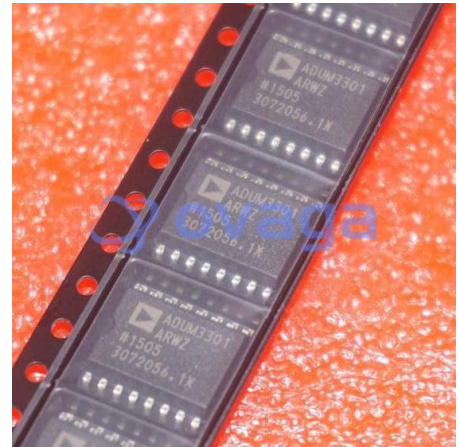


Triple-Channel, Digital Isolators, Enhanced System-Level ESD Reliability

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



Images are for reference only

Please submit RFQ for ADUM3301ARWZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADuM3300/ADuM3301 are 3-channel digital isolators based on the Analog Devices, Inc., iCoupler® technology. Combining high speed CMOS and monolithic air core transformer technology, these isolation components provide outstanding performance characteristics superior to alternatives, such as optocoupler devices.

iCoupler devices remove the design difficulties commonly associated with optocouplers. 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 the power of optocouplers at comparable signal data rates.

The ADuM3300/ADuM3301 isolators provide three independent isolation channels in a variety of channel configurations and data rates. All models operate with the supply voltage on either side ranging from 3.3 V to 5.5 V, providing compatibility with lower voltage systems as well as enabling a voltage translation functionality across the isolation barrier. The ADuM3300/ADuM3301 isolators have a patented refresh feature that ensures dc correctness in the absence of input logic transitions and during power-up/power-down conditions.

In comparison to ADuM1300/ADuM1301 isolators, ADuM3300/ADuM3301 isolators contain various circuit and layout changes to provide increased capability relative to system-level IEC 61000-4-x testing (ESD, burst, and surge). The precise capability in these tests for either the ADuM1300/ADuM1301 or ADuM3300/ADuM3301 products is strongly determined by the design and layout of the user's system.

Features

Enhanced system-level ESD performance per IEC 61000-4-x

Low power operation

5 V operation

2.0 mA per channel maximum at 0 Mbps to 2 Mbps

4.1 mA per channel maximum at 10 Mbps

36 mA per channel maximum at 90 Mbps

3.3 V operation

1.0 mA per channel maximum at 0 Mbps to 2 Mbps

2.8 mA per channel maximum at 10 Mbps

17 mA per channel maximum at 90 Mbps

Bidirectional communication

3.3 V/5 V level translation

High temperature operation: 105°C

High data rate: dc to 90 Mbps (NRZ)

Precise timing characteristics

2 ns maximum pulse width distortion

2 ns maximum channel-to-channel matching

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

Output enable function

16-lead SOIC wide body, RoHS-compliant package

Safety and regulatory approvals

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

CSA Component Acceptance Notice 5A

VDE Certificate of Conformity

DIN V VDE V 0884-10 (VDE V 0884-10):>

CQC Certification per GB4943.1-2011

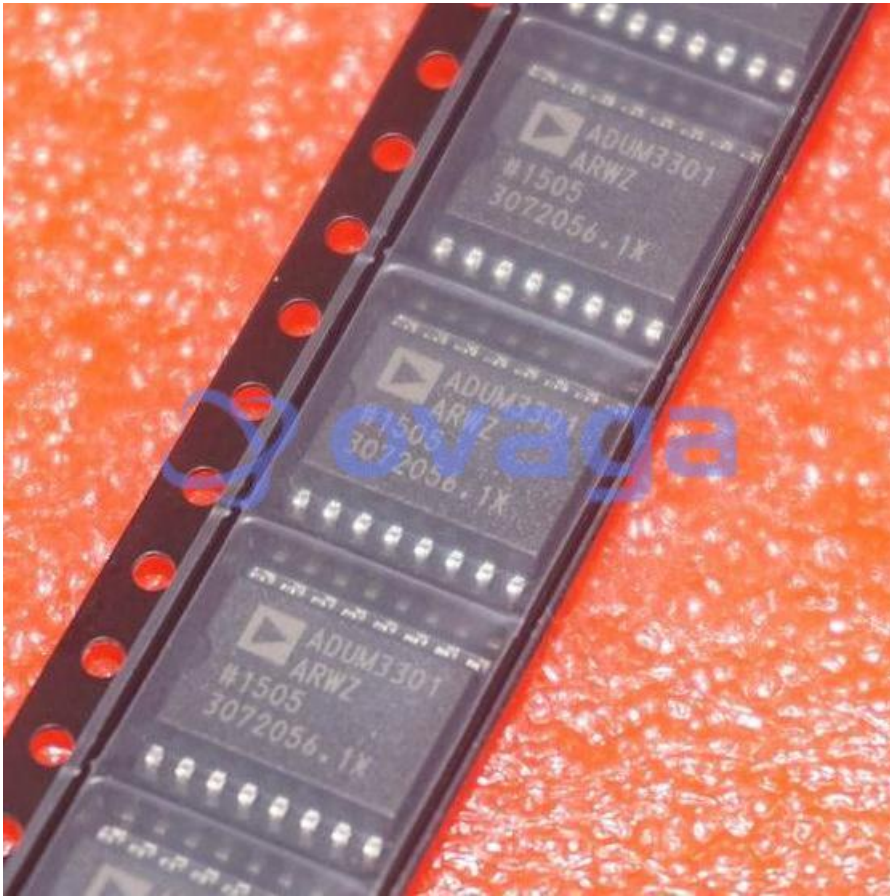
Application

General-purpose multichannel isolation

SPI interface/data converter isolation

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

Industrial field bus isolation



Related Products



[ADV7181CBSTZ](#)
Analog Devices, Inc
LQFP-64



[AD8170AR](#)
Analog Devices, Inc
SOP8



[AD724JR](#)
Analog Devices, Inc
SOIC-16



[ADV7393BCPZ](#)
Analog Devices, Inc
LFCSP-VQ-40



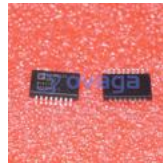
[ADV7391WBCPZ](#)
Analog Devices, Inc
LFSCP-3



[ADV7390BCPZ](#)
Analog Devices, Inc
QFN32



[AD7341BSTZ](#)
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[ADUM4160BRIZ](#)
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