

Isolator Interface IC Small 3kV DUAL-CH DIGITAL ISOLATORS

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	SOIC-8
Product Type	Interface ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for ADUM1281ARZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The ADuM1280/ADuM1281/ADuM1285/ADuM1286 are dual 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 and other integrated couplers.

With propagation delay at 23 ns, pulse width distortion is less than 2 ns for C grade. Channel-to-channel matching is tight at 5 ns for C grade. The two channels of the ADuM1280/ADuM1281/ADuM1285/ADuM1286 are independent isolation channels and are available in two channel configurations with three different data rates up to 100 Mbps (see the Ordering Guide). Industrial grade models operate with the supply voltage on either side ranging from 3.135 V to 5.5 V and the automotive grades operate from 3.135 V to 5.5 V, providing compatibility with lower voltage systems as well as enabling a voltage translation functionality across the isolation barrier. Unlike other optocoupler alternatives, the ADuM1280/ADuM1281/ADuM1285/ADuM1286 isolators have a patented refresh feature that ensures dc correctness in the absence of input logic transitions. When power is first applied or is not yet applied to the input side, the ADuM1280 and ADuM1281 have a default high output, and the ADuM1285 and ADuM1286 have a default low output.

For more information on safety and regulatory approvals, go to [www.analog.com/icouplersafety](http://www.analog.com/icouplersafety).

## Features

Up to 100 Mbps data rate (NRZ)

Low propagation delay: 23 ns typical

Low dynamic power consumption

Bidirectional communication

3.3 V to 5 V level translation

High temperature operation: 125°C

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

Default high output: ADuM1280/ADuM1281

Default low output: ADuM1285/ADuM1286

Narrow body, RoHS-compliant, 8-lead SOIC

Safety and regulatory approvals

UL recognition: 3000 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)>

Qualified for automotive applications

## Application

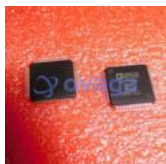
General-purpose multichannel isolation

Data converter isolation

Industrial field bus isolation

Hybrid electric vehicles, battery monitor, and motor drive

## Related Products



### [ADV7181CBSTZ](#)

Analog Devices, Inc  
LQFP-64



### [AD724JR](#)

Analog Devices, Inc  
SOIC-16



### [ADV7391WBCPZ](#)

Analog Devices, Inc  
LFSCP-3



### [AD8170AR](#)

Analog Devices, Inc  
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### [ADV7393BCPZ](#)

Analog Devices, Inc  
LFCSP-VQ-40



### [ADV7390BCPZ](#)

Analog Devices, Inc  
QFN32



[ADV7341BSTZ](#)

Analog Devices, Inc

LQFP-64



[ADUM4160BRIZ](#)

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SOIC-16