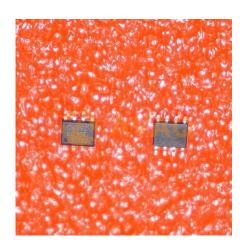


# ADuM1281BRZ

#### Digital Isolator CMOS 2-CH 25Mbps 8-Pin SOIC N Tube

Manufacturer:	Analog Devices, Inc
Package/Case:	SOP8
Product Type:	Drivers
RoHS:	RoHS Compliant/Lead free Mass
Lifecycle:	Active



Images are for reference only

Inquiry

#### **General Description**

The ADuM1280/ADuM1281/ADuM1285/ADuM1286 are dualchanneldigital 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 lessthan 2 ns for C grade. Channel-to-channel matching is tight at5 ns for C grade. The two channels of the ADuM1280/ADuM1281/ADuM1285/ADuM1286 are independent isolation channelsand are available in two channel configurations with threedifferent data rates up to 100 Mbps (see the Ordering Guide).Industrial grade models operate with the supply voltage oneither side ranging from 3.135 V to 5.5 V and the automotivegrades operate from 3.135 V to 5.5 V, providing compatibility with lower voltage systems as well as enabling a voltagetranslation functionality across the isolation barrier. Unlikeother optocoupler alternatives, the ADuM1280/ADuM1281/ADuM1285/ADuM1286 isolators have a patented refreshfeature that ensures dc correctness in the absence of input logictransitions. When power is first applied or is not yet applied tothe input side, the ADuM1280 and ADuM1281 have a defaulthigh output, and the ADuM1285 and ADuM1286 have a defaulthow output.

For more information on safety and regulatory approvals, go towww.analog.com/icouplersafety.

## **Key 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/ $\mu$ s

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): 2006-12

VIORM = 560 V peak

Qualified for automotive applications



## **Recommended For You**

Application

General-purpose multichannel isolation

Data converter isolation

Industrial field bus isolation

Hybrid electric vehicles, battery monitor, and motor drive

#### ADM3490EARZ

Analog Devices, Inc SOP-8

# ADuM5211ARSZ Analog Devices, Inc SSOP20

## ADuM1410BRWZ

Analog Devices, Inc SOP16

#### ADM485ANZ

Analog Devices, Inc

## ADuM1412BRWZ

Analog Devices, Inc SOP16

#### ADuMB160BRWZ-RL

Analog Devices, Inc SOP16

# ADuM1201BRZ-RL7

Analog Devices, Inc SOP8

# AD698APZ

Analog Devices, Inc PLCC28

# ADuM6400ARWZ Analog Devices, Inc SOP16

ADV7622BSTZ Analog Devices, Inc TQFP144

#### ADMB232EARUZ

Analog Devices, Inc TSSOP-16

# ADV7623BSTZ Analog Devices, Inc LQFP144

# ADMB251EARWZ

Analog Devices, Inc SOP20

## ADUM142E0BRZ

Analog Devices, Inc SOP-16

# ADAU1328BSTZ Analog Devices, Inc QFP

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