


Digital Isolator CMOS 2-CH 1Mbps 8-Pin SOIC N T/R

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



Images are for reference only

[Inquiry](#)

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.

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/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): 2006-12
VIORM = 560 V peak
Qualified for automotive applications

Application

General-purpose multichannel isolation
Data converter isolation
Industrial field bus isolation
Hybrid electric vehicles, battery monitor, and motor drive

Recommended For You

ADM3490EARZ

Analog Devices, Inc
SOP-8

ADuM3160BRWZ-RL

Analog Devices, Inc
SOP16

ADM3232EARUZ

Analog Devices, Inc
TSSOP-16

ADuM5211ARSZ

Analog Devices, Inc
SSOP20

ADuM1201BRZ-RL7

Analog Devices, Inc
SOP8

ADV7623BSTZ

Analog Devices, Inc
LQFP144

ADuM1410BRWZ

Analog Devices, Inc
SOP16

AD698APZ

Analog Devices, Inc
PLCC28

ADM3251EARWZ

Analog Devices, Inc
SOP20

ADM485ANZ

Analog Devices, Inc

DIP

ADuM6400ARWZ

Analog Devices, Inc

SOP16

ADuMI281BRZ

Analog Devices, Inc

SOP8

ADUM142E0BRZ

Analog Devices, Inc

SOP-16

ADuMI412BRWZ

Analog Devices, Inc

SOP16

ADV7622BSTZ

Analog Devices, Inc

TQFP144