

# ADuM1412BRWZ

#### Digital Isolator CMOS 4-CH 10Mbps 16-Pin SOIC W Tube

Manufacturer:	Analog Devices, Inc.
Package/Case:	SOP16
Product Type:	Drivers
RoHS:	RoHS Compliant/Lead free RoHS
Lifecycle:	Active



Images are for reference only

Inquiry

#### **General Description**

The ADuM1410/ADuM1411/ADuM1412 are four-channel digital isolators based on Analog Devices, Inc. iCoupler® technology. Combining high speed CMOS and monolithic air core transformer technologies, these isolation components provide outstanding performance characteristics superior to alternatives such as optocoupler devices.

By avoiding the use of LEDs and photodiodes, iCoupler devices remove the design difficulties commonly associated with optocouplers. The usual concerns that arise with optocouplers, such as 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 ADuM1410/ADuM1411/ADuM1412 isolators provide four independent isolation channels in a variety of channel configurations and data rates (see the Ordering Guide) up to 10 Mbps. All 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 voltage translation functionality across the isolation barrier. All products also have a default output control pin. This allows the user to define the logic state the outputs are to adopt in the absence of the input power. Unlike other optocoupler alternatives, the ADuM1410/ADuM1411/ ADuM1412 isolators have a patented refresh feature that ensures dc correctness in the absence of input logic transitions and during power-up/power-down conditions.

Key Features	Application
Low power operation	General-purpose multichannel isolation
Bidirectional communication	SPI interface/data converter isolation
Up to 10Mbps data rate (NRZ)	PS 232/PS 122/PS 185 transceivers
Programmable default output state	K3-252/K3-422/K3-465 trailsceivers
$>25$ kV/ $\mu$ s High common-mode transient immunity	Industrial field bus isolation



#### **Recommended For You**

#### ADM3490EARZ

Analog Devices, Inc SOP-8

#### ADuM5211ARSZ

Analog Devices, Inc

SSOP20

#### ADuM1410BRWZ

Analog Devices, Inc SOP16

#### ADM485ANZ

Analog Devices, Inc

#### ADUM142E0BRZ

Analog Devices, Inc SOP-16

## 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

#### ADM3232EARUZ

Analog Devices, Inc TSSOP-16

#### ADV7623BSTZ

Analog Devices, Inc LQFP144

## ADM3251EARWZ Analog Devices, Inc

SOP20

#### ADuM1281BRZ

Analog Devices, Inc SOP8

ADAU1328BSTZ Analog Devices, Inc

QFP