

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 

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

Low power operation

Bidirectional communication

3/5V Level translation

High temperature operation

Up to 10Mbps data rate (NRZ)

Programmable default output state

High common-mode transient immunity (>25kV/μs)

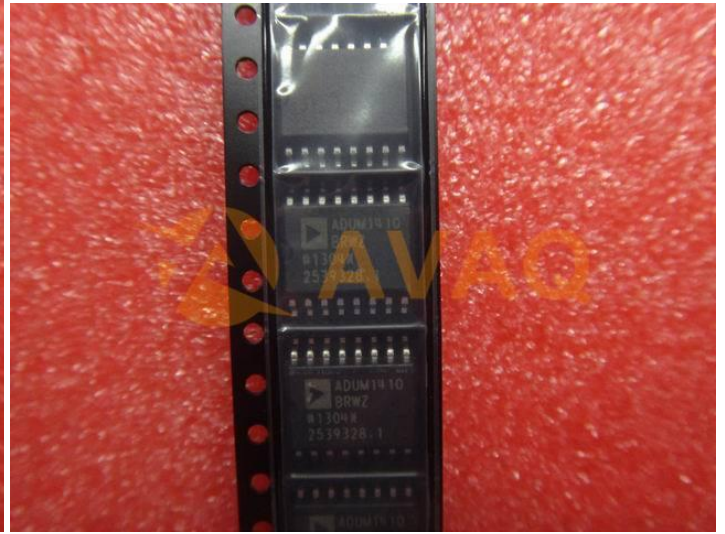
Application

General-purpose multichannel isolation

SPI interface/data converter isolation

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

Industrial field bus isolation



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

ADuMI201BRZ-RL7

Analog Devices, Inc

SOP8

ADV7623BSTZ

Analog Devices, Inc

LQFP144

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

ADAU1328BSTZ

Analog Devices, Inc

QFP