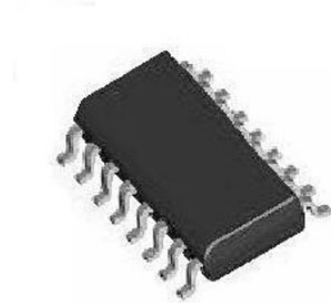


Quad-Channel, Digital Isolators, Enhanced System-Level ESD Reliability

|               |                                     |
|---------------|-------------------------------------|
| Manufacturers | <a href="#">Analog Devices, Inc</a> |
| Package/Case  | SOIC-16                             |
| Product Type  | Interface ICs                       |
| RoHS          | Rohs                                |
| Lifecycle     |                                     |



Images are for reference only

Please submit RFQ for ADUM3402ARWZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The ADuM3400/ADuM3401/ADuM3402 are 4-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.

iCoupler devices remove the design difficulties commonly associated with optocouplers. Typical optocoupler concerns regarding 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 isolators provide four independent isolation channels in a variety of channel configurations and data rates (see the Ordering Guide). 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 a voltage translation functionality across the isolation barrier. The isolators have a patented refresh feature that ensures dc correctness in the absence of input logic transitions and during power-up/power-down conditions.

In comparison to the ADuM1400/ADuM1401/ADuM1402 isolators, the ADuM3400/ADuM3401/ADuM3402 isolators contain various circuit and layout changes to provide increased capability relative to system-level IEC 61000-4-x testing (ESD/burst/surge). The precise capability in these tests for either set of isolators is strongly determined by the design and layout of the user's board or module. For more information, see the AN-793 application note, ESD/Latch-Up Considerations with iCoupler Isolation Products.

## Features

For AEC-Q100 Automotive Qualified Devices Specifications view

Enhanced system-level ESD performance per IEC 61000-4-x

Bidirectional communication

3 V/5 V level translation

High temperature operation: 105°C

High data rate: dc to 90 Mbps (NRZ)

See data sheet for additional features

ADuM3402-EP supports defense and aerospace applications (AQEC standard)

[Download\(pdf\)](#)

Military temperature range (-55°C to +125°C)

Controlled manufacturing baseline

One assembly/test site

One fabrication site

Enhanced product change notification

Qualification data available on request

V62/14631 DSCC Drawing Number

## Application

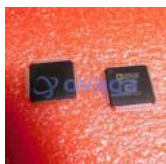
General-purpose multichannel isolation

SPI/data converter isolation

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

Industrial field bus isolation

## Related Products



### [AD7181CBSTZ](#)

Analog Devices, Inc  
LQFP-64



### [AD724JR](#)

Analog Devices, Inc  
SOIC-16



### [AD7391WBCPZ](#)

Analog Devices, Inc  
LFSCP-3



### [AD8170AR](#)

Analog Devices, Inc  
SOP8



### [AD7393BCPZ](#)

Analog Devices, Inc  
LFCSP-VQ-40



### [AD7390BCPZ](#)

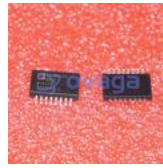
Analog Devices, Inc  
QFN32



[ADV7341BSTZ](#)

Analog Devices, Inc

LQFP-64



[ADUM4160BRIZ](#)

Analog Devices, Inc

SOIC-16