

## ADUM1200BRZ-RL7

Data Sheet

Digital Isolator CMOS 2-CH 10Mbps 8-Pin SOIC N T/R

Manufacturers Analog Devices, Inc

Package/Case SOIC-8

Product Type Interface ICs

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for ADUM1200BRZ-RL7 or <a href="mailto:sales@ovaga.com"><u>Emailto:sales@ovaga.com</u></a> We will contact you in 12 hours.

**RFO** 

## **General Description**

The ADuM1200 is a dual-channel, digital isolator with 2/0 directionality based on the Analog Devices, Inc., iCoupler® technology. Combining high speed CMOS and monolithic transformer technologies, this isolation component provides outstanding performance characteristics superior to alternatives, such as optocouplers.

By avoiding the use of LEDs and photodiodes, iCoupler devices remove the design difficulties commonly associated with optocouplers. The 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. Further-more, iCoupler devices consume one-tenth to one-sixth the power of optocouplers at comparable signal data rates.

The ADuM120x family of isolators provides two independent isolation channels in a variety of channel configurations and data rates (see the Ordering Guide). Both parts 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. In addition, the ADuM120x provide low pulse width distortion (<3 ns for CR grade) and tight channel-to-channel matching (<3 ns for CR grade). Unlike other optocoupler alternatives, the ADuM120x isolators have a patented refresh feature that ensures dc correctness in the absence of input logic transitions and during power-up/power-down conditions.

ADuM1200W and ADuM1201W are automotive grade versions qualified for 125°C operation per AEC-Q100. See the Automotive Products section for more details.

**Features** 

Narrow body, RoHS-compliant, SOIC 8-lead package

Low power operation

Bidirectional communication

3 V/5 V level translation

High temperature operation: 125°C

High data rate: dc to 25 Mbps (NRZ)

Automotive versions qualified per AEC-Q100

See data sheet for additional features

ADuM1200-EP supports defense and aerospace applications (AQEC standard)

Download(pdf)

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

Controlled manufacturing baseline

Enhanced product change notification

Qualification data available on request

V62/12630 DSCC Drawing Number

## **Application**

Size-critical multichannel isolation

SPI interface/data converter isolation

RS-232/RS-422/RS-485 transceiver isolation

Digital field bus isolation

Hybrid electric vehicles, battery monitor, and motor drive

The ADuM1200-EP supports defense and aerospace applications (AQEC)

## **Related Products**



ADV7181CBSTZ

Analog Devices, Inc
LQFP-64



AD724JR
Analog Devices, Inc
SOIC-16



ADV7391WBCPZ
Analog Devices, Inc
LFSCP-3



AD8170AR
Analog Devices, Inc
SOP8



ADV7393BCPZ
Analog Devices, Inc
LFCSP-VQ-40



ADV7390BCPZ
Analog Devices, Inc
QFN32



ADV7341BSTZ
Analog Devices, Inc
LQFP-64



Analog Devices, Inc SOIC-16