

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

Manufacturer:	<u>Analog Devices, Inc</u>	<input type="text" value="ADuM1201BRZ-RL7 Image"/>
Package/Case:	SOP8	Images are for reference only
Product Type:	Drivers	Inquiry
RoHS:	RoHS Compliant/Lead free 	
Lifecycle:	Active	

General Description

The ADuM1201 is a dual-channel, digital isolator with 1/1 channel directionality based on the Analog Devices, Inc., iCoupler® technology. Combining high speed CMOS and monolithic transformer technologies, these isolation components provide 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 product 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.

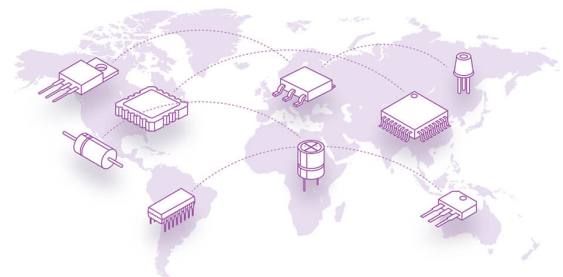
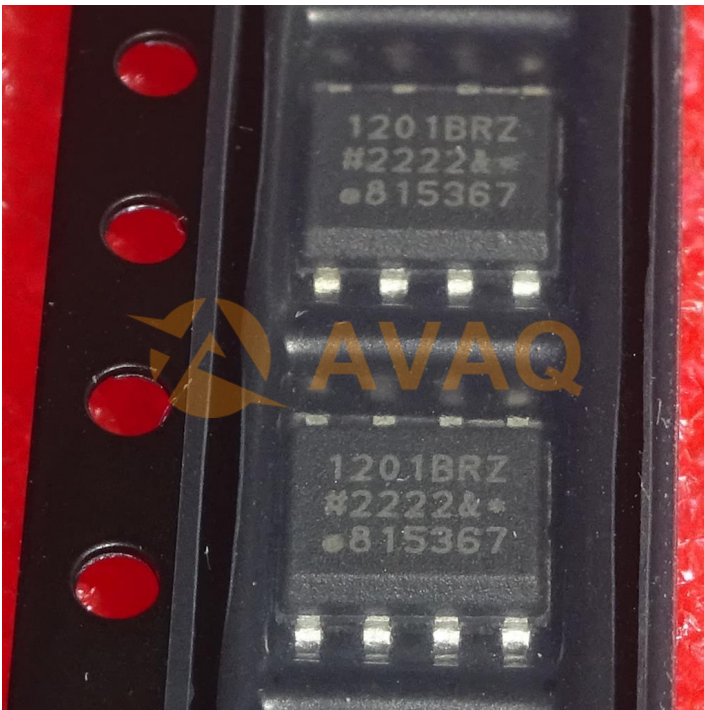
ADuM1200W and ADuM1201W are automotive grade versions qualified for 125°C operation per AEC-Q100. See the Automotive Products section for more details.

Key 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)
- Precise timing characteristics
- High common-mode transient immunity:>25 kV/μs
- Automotive versions qualified per AEC-Q100
- See data sheet for additional features

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



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

ADV7623BSTZ

Analog Devices, Inc
LQFP144

ADuM1410BRWZ

Analog Devices, Inc
SOP16

AD698APZ

Analog Devices, Inc
PLCC28

ADMB251EARWZ

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