
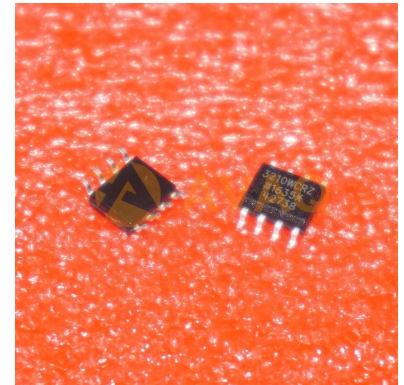


Digital Isolator CMOS 2-CH 25Mbps Automotive 8-Pin SOIC N Tube

Manufacturer:	Analog Devices, Inc
Package/Case:	SOP-8
Product Type:	Drivers
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active



Images are for reference only

[Inquiry](#)

General Description

The ADuM3210/ADuM3211 are dual-channel, digital isolators based on Analog Devices, Inc., iCoupler® technology. Combining high speed CMOS and monolithic transformer technology, this isolation component provides 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 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 ADuM3210/ADuM3211 isolators provide two independent isolation channels in two channel configurations with data rates up to 25 Mbps (see the Ordering Guide). They operate with 3.3 V or 5 V supply voltages on either side, providing compatibility with lower voltage systems, as well as enabling voltage translation functionality across the isolation barrier. The ADuM3210/ADuM3211 isolators have a default output low characteristic in comparison to the ADuM3200/ADuM3201 models, which have a default output high characteristic. The ADuM3210W and ADuM3211W models are automotive grade versions qualified for 125°C operation.

In comparison to the ADuM1200/ADuM1201 isolator, the ADuM3210/ADuM3211 isolators contain various circuit and layout changes providing increased capability relative to system-level IEC 61000-4-x testing (ESD, burst, and surge). The precise capability in these tests for either the ADuM1200/ADuM1201 or ADuM3210/ADuM3211 products 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.

Key Features

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

High temperature operation: 125°C

Default low output

Narrow body, RoHS-compliant, 8-lead SOIC

Low power operation

5 V operation (refer to data sheet)

3.3 V operation (refer to data sheet)

High data rate: dc to 25 Mbps (NRZ)

See data sheet for additional features

ADuM3210-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

Qualified for automotive applications

V62/14627 DSCC Drawing Number

Application

Size-critical multichannel isolation

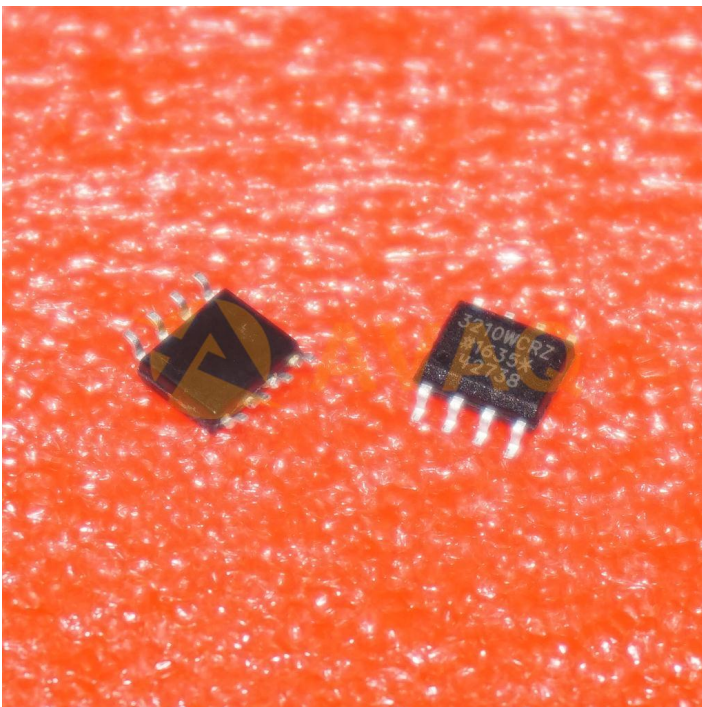
SPI interface/data converter isolation

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

Digital field bus isolation

Gate drive interface

Hybrid electric vehicles, battery monitor, and motor driver



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

ADuMI410BRWZ

Analog Devices, Inc

SOP16

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

ADUMI42E0BRZ

Analog Devices, Inc

SOP-16

ADuMI412BRWZ

Analog Devices, Inc

SOP16

ADV7622BSTZ

Analog Devices, Inc

TQFP144