

ADUM1251WARZ

Data Sheet

Digital Isolator CMOS 3-CH 1Mbps Automotive 8-Pin SOIC N Tube

Manufacturers Analog Devices, Inc

Package/Case SOIC-8

Product Type Interface ICs

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for ADUM1251WARZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The ADuM1250/ADuM1251 are hot swappable digital isolators with nonlatching, bidirectional communication channels compatible with I2C interfaces. This eliminates the need for splitting I2C signals into separate transmit and receive signals for use with standalone optocouplers.

The ADuM1250 provides two bidirectional channels, supporting a complete isolated I2C interface. The ADuM1251 provides one bidirectional channel and one unidirectional channel for those applications where a bidirectional clock is not required.

Both the ADuM1250 and ADuM1251 contain hot swap circuitry to prevent glitching data when an unpowered card is inserted onto an active bus.

These isolators are based on iCoupler® chip scale transformer technology from Analog Devices, Inc. iCoupler is a magnetic isolation technology with functional, performance, size, and power consumption advantages as compared to optocouplers. With the ADuM1250/ADuM1251, iCoupler channels can be integrated with semiconductor circuitry, which enables a complete isolated I2C interface to be implemented in a small form factor.

Features

Automotive versions qualified per AEC-Q100

Bidirectional I2C communication

Open-drain interfaces

Suitable for hot swap applications

30 mA current sink capability

1000 kHz operation

High temperature operation: 125°C

Safety and regulatory approvals

UL recognition2500 V rms for 1 minute per UL 1577

CSA Component Acceptance Notice 5A

VDE certificate of conformityDIN V VDE V 0884-10 (VDE V>

3.0 V to 5.5 V supply/logic levels

8-lead SOIC RoHS-compliant package

Safety & Regulatory Compliance

Application

Isolated I2C, SMBus, or PMBus interfaces

Multilevel I2C interfaces

Power supplies

Networking

Power over Ethernet

Related Products



ADV7181CBSTZ

Analog Devices, Inc
LQFP-64



AD724JR
Analog Devices, Inc
SOIC-16



ADV7391WBCPZ
Analog Devices, Inc
LFSCP-3



ADV7341BSTZ

Analog Devices, Inc
LQFP-64



AD8170AR
Analog Devices, Inc
SOP8



ADV7393BCPZ

Analog Devices, Inc

LFCSP-VQ-40



ADV7390BCPZ
Analog Devices, Inc
QFN32



Analog Devices, Inc SOIC-16