

ADUM2401BRWZ

Data Sheet

Digital Isolator, Quad, 4 Channel, 50 ns, 2.7 V, 5.5 V, WSOIC, 16 Pins

Manufacturers	Analog Devices, Inc		
Package/Case	SOP-16	-2222	
Product Type	Interface ICs	22	
RoHS	Rohs		
Lifecycle		Images are for reference only	
Please submit RFQ for ADUM2401BRWZ or Email to us: sales@ovaga.com We will contact you in 12 hours.			<u>RFO</u>

General Description

The ADuM2400/ADuM2401/ADuM2402 are 4-channel digital isolators based on Analog Devices, Inc., iCoupler® technology. Combining high speed CMOS and monolithic air core transformer technology, these isolation components provide outstanding performance characteristics that are superior to alternatives, such as optocoupler devices.

By avoiding the use of LEDs and photodiodes, iCoupler devices remove the design difficulties commonly associated with opto-couplers. 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. Furthermore, iCoupler devices run at one-tenth to one-sixth the power of optocouplers at comparable signal data rates.

The ADuM2400/ADuM2401/ADuM2402 isolators provide four independent isolation channels in a variety of channel configurations and data rates (see the Ordering Guide). The ADuM2400/ADuM2401/ADuM2402 models operate with the supply voltage of 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 ADuM2400/ADuM2401/ADuM2402 provide low pulse width distortion (<2 ns for CRWZ grade) and tight channel-to-channel matching (<2 ns for CRWZ grade). The ADuM2400/ADuM2401/ADuM2401/ADuM2402 isolators have a patented refresh feature that ensures dc correctness in the absence of input logic transitions and during power-up/power-down conditions.

Features

Low power operation5 V operation (see data sheet)3 V operation (see data sheet)

Bidirectional communication

3 V/5 V level translation

High temperature operation: 105°C

High data rate: dc to 90 Mbps (NRZ)

Precise timing characteristics2 ns maximum pulse width distortion2 ns maximum channel-tochannel matching

See data sheet for additional features

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



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AD8170AR

Analog Devices, Inc SOP8

ADV7393BCPZ

Analog Devices, Inc LFCSP-VQ-40

ADV7390BCPZ



Analog Devices, Inc QFN32



ADUM4160BRIZ

Analog Devices, Inc SOIC-16

Application

General-purpose, high voltage, multichannel isolation

Medical equipment

Motor drives

Power supplies