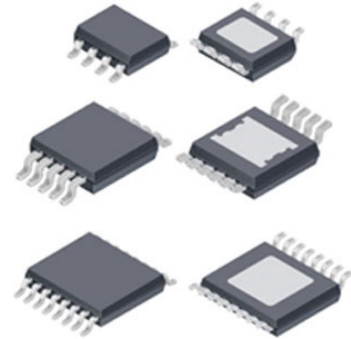


Digital Isolator, 5 Channel, 7.2 ns, 1.7 V, 5.5 V, WSOIC, 16 Pins

Manufacturers	Analog Devices, Inc
Package/Case	SOIC
Product Type	Interface ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for ADUM252N0BRIZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADuM250N/ADuM251N/ADuM252N are 5-channel digital isolators based on Analog Devices, Inc., iCoupler® technology. Combining high speed, complementary metal-oxide semiconductor (CMOS) and monolithic air core transformer technology, these isolation components provide outstanding performance characteristics superior to alternatives such as optocoupler devices and other integrated couplers. The maximum propagation delay is 13 ns with a pulse width distortion of less than 4.5 ns at 5 V operation. Channel to channel matching of propagation delay is tight at 4.0 ns maximum.

The ADuM250N/ADuM251N/ADuM252N data channels are independent and are available in a variety of configurations with a withstand voltage rating of 5.0 kV rms (see the Ordering Guide). The devices operate with the supply voltage on either side ranging from 1.7 V to 5.5 V, providing compatibility with lower voltage systems as well as enabling voltage translation functionality across the isolation barrier.

Unlike other optocoupler alternatives, dc correctness is ensured in the absence of input logic transitions. Two different fail-safe options are available by which the outputs transition to a predetermined state when the input power supply is not applied.

Features

High common-mode transient immunity: 100 kV/ μ s

High robustness to radiated and conducted noise

Low propagation delay

13 ns maximum for 5 V operation

15 ns maximum for 1.8 V operation

150 Mbps maximum guaranteed data rate

Safety and regulatory approvals (pending)

UL recognition: 5000 V rms for 1 minute per UL 1577

CSA Component Acceptance Notice 5A

VDE certificate of conformity

DIN V VDE V 0884-10 (VDE V>

CQC certification per GB4943.1-2011

Low dynamic power consumption

1.8 V to 5 V level translation

High temperature operation: 125°C

Fail-safe high or low options

16-lead, RoHS compliant, wide-body SOIC_IC package

Application

General-purpose multichannel isolation

Serial peripheral interface (SPI)/data converter isolation

Industrial field bus isolation

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



[ADUM4160BRIZ](#)

Analog Devices, Inc

SOIC-16