ADUM160N0BRZ

Data Sheet

Robust 3.0 kV rms Six Channel Digital Isolators w/ Fail-Safe & 0 Reverse Channels

Manufacturers	Analog Devices, Inc
Package/Case	16-Lead SOIC
Product Type	Interface ICs
RoHS	
Lifecycle	

Images are for reference only

Please submit RFQ for ADUM160N0BRZ or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

The ADuM160N/ADuM161N/ADuM162N/ADuM163N are 6-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 ADuM160N/ADuM161N/ADuM162N/ADuM163N data channels are independent and are available in a variety of configurations with a withstand voltage rating of 3.0 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/µs

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: 3000 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, narrow-body SOIC 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

AD8170AR

Analog Devices, Inc

SOP8

AD724JR

Analog Devices, Inc

SOIC-16

ADV7393BCPZ

Analog Devices, Inc

LFCSP-VQ-40

ADV7391WBCPZ

Analog Devices, Inc

LFSCP-3

ADV7390BCPZ

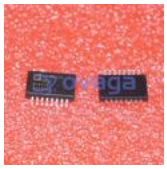
Analog Devices, Inc

QFN32

ADV7341BSTZ

Analog Devices, Inc

LQFP-64



ADUM4160BRIZ

Analog Devices, Inc

SOIC-16