

Digital Isolator CMOS 2-CH 150Mbps 8-Pin SOIC N T/R

Manufacturers	<u>Analog Devices, Inc</u>
Package/Case	SOIC-8
Product Type	Interface ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for ADUM120N0BRZ-RL7 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADuM120N/ADuM121N1 are dual-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 3 ns at 5 V operation. Channel matching is tight at 3.0 ns maximum.

The ADuM120N/ADuM121N data channels are independent and are available in a variety of configurations with a withstand voltage rating of 3 kV rms (see the Ordering Guide). The devices operate with the supply voltage on either side ranging from 1.8 V to 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 in which the outputs transition to a predetermined state when the input power supply is not applied or the inputs are disabled.

The ADuM120N0 is pin-compatible with the ADuM1285, and the ADuM120N1 is pin-compatible with the ADuM1280 and the ADuM1200. The ADuM121N0 is pin-compatible with ADuM1286, and the ADuM121N1 is pin-compatible with the ADuM1281 and the ADuM1201.

Features

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

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 minimum 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

Backward compatibility

ADuM120N0 pin-compatible with ADuM1285

ADuM120N1 pin-compatible with ADuM1280 and ADuM1200

ADuM121N0 pin-compatible with ADuM1286

ADuM121N1 pin-compatible with ADuM1281 and ADuM1201

Low dynamic power consumption

1.8 V to 5 V level translation

High temperature operation: 125°C

Failsafe high or low options

8-lead, RoHS-compliant, SOIC package

Qualified for automotive applications

Application

General-purpose multichannel isolation

Industrial field bus isolation



COUNTRY OF ASSEMBLY: TAIWAN
COUNTRY OF DIFFUSION: TAIWAN

(Q) QTY: ~~1000~~ 919



(9D) DATE CODE: 1919



(1T) LOT NUMBER: AR87506.10



(1P) MFG NO: ADUM120N0BRZ-RL7



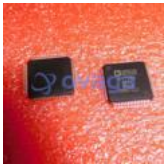
iCoupler[®]



MSL 3
PPBT = 260°C
e3 BOX 5 OF 9



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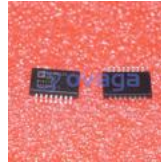
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