

iCoupler Digital Isolater; Package: SOIC; No of Pins: 8; Temperature Range: Industrial



Images are for reference only

Manufacturers	Analog Devices, Inc
Package/Case	SOP-8
Product Type	Interface ICs
RoHS	Pb-free Halide free
Lifecycle	

Please submit RFQ for ADUM1100ARZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADuM1100 is a digital isolator based on Analog Devices Inc., iCoupler® technology. Combining high speed CMOS and monolithic air core transformer technology, this isolation component provides outstanding performance characteristics superior to alternatives, such as optocoupler devices.

Configured as a pin-compatible replacement for existing high speed optocouplers, the ADuM1100 supports data rates as high as 25 Mbps and 100 Mbps.

The ADuM1100 operates with a voltage supply ranging from 3.0 V to 5.5 V, boasts a propagation delay of <18 ns and edge asymmetry of <2 ns, and is compatible with temperatures up to 125°C. It operates at very low power, less than 0.9 mA of quiescent current (sum of both sides), and a dynamic current of less than 160 µA per Mbps of data rate. Unlike other optocoupler alternatives, the ADuM1100 provides dc correctness with a patented refresh feature that continuously updates the output signal.

The ADuM1100 is offered in three grades. The ADuM1100AR and ADuM1100BR can operate up to a maximum temperature of 105°C and support data rates up to 25 Mbps and 100 Mbps, respectively. The ADuM1100UR can operate up to a maximum temperature of 125°C and supports data rates up to 100 Mbps.

Features

High data rate: dc to 100 Mbps (NRZ)

Compatible with 3.3 V and 5.0 V operation/level translation

125°C maximum operating temperature

Low Power Operation

5 V operation 1.0 mA maximum @ 1 Mbps 4.5 mA maximum @ 25 Mbps 16.8 mA maximum @ 100 Mbps

3.3 V operation 0.4 mA maximum @ 1 Mbps 3.5 mA maximum @ 25 Mbps 7.1 mA maximum @ 50 Mbps

8-lead SOIC_N package (RoHS compliant version available)

High common-mode transient immunity: >25 kV/μs

Safety and Regulatory Information

UL recognized

2500 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>

Application

Digital field bus isolation

Opto-isolator replacement

Computer-peripheral interface

Microprocessor system interface

General instrumentation and data acquisition applications





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