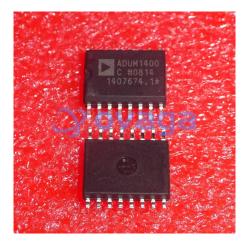


ADUM1400CRW-RL

Data Sheet

Quad-Channel Digital Isolator (4/0 Channel Directionality); Package: SOIC - Wide; No of Pins: 16; Temperature Range: Industrial

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



Images are for reference only

Please submit RFQ for ADUM1400CRW-RL or Email to us: sales@ovaga.com We will contact you in 12 hours.

<u>RFQ</u>

General Description

The ADuM1400 is a quad-channel digital isolator with 4/0 channel directionality, based on Analog Devices, Inc., iCoupler® technology. Combining high speed CMOS and monolithic air core transformer technology, these isolation components provide outstanding performance characteristics superior to alternatives, such as optocoupler devices.

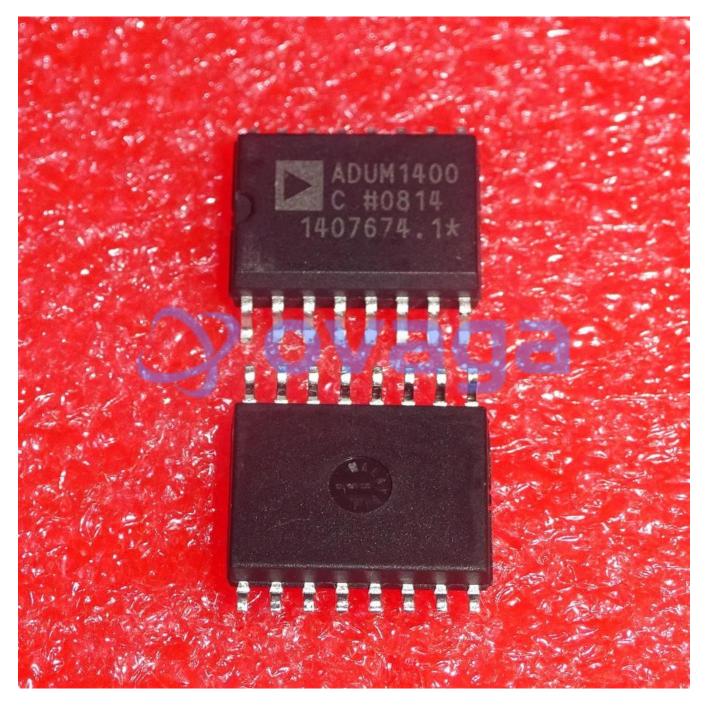
By avoiding the use of LEDs and photodiodes, iCouplerdevices remove the design difficulties commonly associated with opto-couplers. The typical optocoupler concerns regarding uncertain current transfer ratios, nonlinear transfer functions, and temperature and lifetime effects are eliminated with the simple iCoupler digital interfaces and stable performance characteristics.

The need for external drivers and other discrete components is eliminated with these iCoupler products. Furthermore, iCoupler devices consume one-tenth to one-sixth of the power of optocouplers at comparable signal data rates.

The ADuM1400/ADuM1401/ADuM1402 isolators provide four independent isolation channels in a variety of channel configurations and data rates (see the Ordering Guide in the data sheet). All models operate with the supply voltage on 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 ADuM1400/ADuM1401/ADuM1402 provide low pulse width distortion (<2 ns for CRW grade) and tight channel-to-channel matching (<2 ns for CRW grade). Unlike other optocoupler alternatives, the ADuM1400/ADuM1401/ADuM1402 isolators have a patented refresh feature that ensures dc correctness in the absence of input logic transitions and when power is not applied to one of the supplies.

Features

- Qualified for automotive applications
- Low power operation
- Bidirectional communication
- 3 V/5 V level translation
- High temperature operation: 125°C
- High data rate: dc to 90 Mbps (NRZ)
- Precise timing characteristics
- High common-mode transient immunity:>25 kV/ μ s
- See data sheet for additional features



Related Products



Analog Devices, Inc LQFP-64

ADV7181CBSTZ



LQFP-64 AD724JR

Analog Devices, Inc SOIC-16





AD8170AR

Analog Devices, Inc SOP8

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