

ADUM3150BRSZ

Data Sheet

Digital Isolator, 6 Channel, 14 ns, 3 V, 5.5 V, SSOP, 20 Pins

Manufacturers Analog Devices, Inc

Package/Case SSOP-20

Product Type Interface ICs

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for ADUM3150BRSZ or Email to us; sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The ADuM3150 is a 6-channel SPIsolator™ digital isolator optimized for isolated serial peripheral interfaces (SPIs). Basedon the Analog Devices, Inc., iCoupler® chip scale transformertechnology, the low propagation delay in the CLK, MO/SI,MI/SO, and SS SPI bus signals supports SPI clock rates of up to 17 MHz. These channels operate with 14 ns propagation delayand 1 ns jitter to optimize timing for SPI.

The ADuM3150 isolator also provides two additional independentlow data rate isolation channels, one channel in each direction. Data in the slow channels is sampled and serialized for a 250 kbps data rate with 2.5 µs of jitter.

The ADuM3150 supports a delay clock output on the master side of the device. This output can be used with an additional clocked port on the master to support 40 MHz clock performance. See the Delay Clock section for more information.

Features

Supports up to 40 MHz SPI clock speed in delay clock mode

Supports up to 17 MHz SPI clock speed in 4-wire mode

4 high speed, low propagation delay, SPI signal isolation channels

2 data channels at 250 kbps

Delayed compensation clock line

20-lead SSOP with 5.1 mm creepage

High temperature operation: 125°C

High common-mode transient immunity: $>25 \text{ kV/}\mu\text{s}$

Safety and regulatory approvals

UL recognition per UL 1577

3750 V rms for 1 minute

CSA Component Acceptance Notice 5A

VDE certificate of conformity

DIN V VDE V 0884-10 (VDE V>

Application

Industrial programmable logic controllers (PLC)

Sensor isolation



Related Products



ADV7181CBSTZ

Analog Devices, Inc
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