ADN4624BRNZ

Data Sheet

5.7 kV RMS/1.5 kV RMS, Quad-Channel LVDS 2.5 Gigabit Isolator (0 Reverse Channels)

Manufacturers	Analog Devices, Inc
Package/Case	28-Lead SOIC (Wide, Finer Pitch)
Product Type	Interface ICs
RoHS	
Lifecycle	

Images are for reference only

Please submit RFQ for ADN4624BRNZ or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

The ADN4622/ADN4624 are quad-channel, signal isolated, low-voltage differential signaling (LVDS) buffers that operate at up to 2.5 Gbps with very low jitter. The devices integrate Analog Devices, Inc., *i*Coupler® technology, enhanced for high-speed operation to provide drop-in galvanic isolation of LVDS signal chains. AC coupling and/or level shifting to the LVDS receivers and from the LVDS drivers allows isolation of other high-speed signals such as current-mode logic (CML).

The ADN4622/ADN4624 include a refresh mechanism to monitor the input and output states and ensure they remain the same in the absence of data transitions. For lower power consumption and high-speed operation with low jitter, the LVDS and isolator circuits rely on 1.8 V supplies. The ADN4622/ADN4624 are fully specified over a wide industrial temperature range and are available in a 28-lead, wide-body, finer pitch SOIC_W_FP package with 8.3 mm creepage and clearance (for 5.7 kV rms or 8 kV_{PEAK} surge and impulse voltages and reinforced insulation at AC mains voltages) or 6 mm × 6 mm LFCSP package with 1.27 mm creepage and clearance (for basic/functional isolation).

APPLICATIONS

Features

5.7 kV rms and 1.5 kV rms LVDS isolators

Complies with TIA/EIA-644-A LVDS signal levels

Quad-channel configuration (ADN4622: 2 + 2, ADN4624: 4 + 0)

Any data rate up to 2.5 Gbps switching with low jitter

10 Gbps total bandwidth across four channels

2.15 ns typical propagation delay

Typical jitter: 0.82 ps rms random, 40 ps total peak

Application

Isolated video and imaging data

Analog front-end isolation

Data plane isolation

Isolated high speed clock and data links

Multi-gigabit SERDES

Board-to-board optical replacement (for example, short reach fiber)

Lower power 1.8 V supplies

High common-mode transient immunity: 100 kV/µs typical

10 Gbps total bandwidth across four channels

2.15 ns typical propagation delay

Typical jitter: 0.82 ps rms random, 40 ps total peak

Safety and regulatory approvals (28-lead SOIC_W_FP package)

UL (pending): 5700 V rms for 1 minute per UL 1577

CSA Component Acceptance Notice 5A (pending)

VDE certificate of conformity (pending)

DIN V VDE V 0884-11 (VDE V 0884-11):2017-01

PEAK

Enable or disable refresh (low-speed output correctness check)

Operating temperature range: −40°C to +125°C

28-lead, wide-body, finer pitch SOIC_W_FP package with 8.3 mm creepage and clearance or 6 mm × 6 mm LFCSP package with 1.27 mm creepage and clearance

UL (pending): 5700 V rms for 1 minute per UL 1577

CSA Component Acceptance Notice 5A (pending)

VDE certificate of conformity (pending)

DIN V VDE V 0884-11 (VDE V 0884-11):2017-01

PEAK

DIN V VDE V 0884-11 (VDE V 0884-11):2017-01

PEAK

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

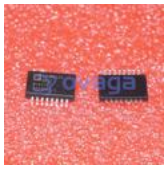
Analog Devices, Inc

QFN32

ADV7341BSTZ

Analog Devices, Inc

LQFP-64



ADUM4160BRIZ

Analog Devices, Inc

SOIC-16