

Quad-Channel Isolators with Integrated DC-to-DC Converter (3:1 directionality)

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 ADUM6421ABRNZ5 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADuM6420A/ADuM6421A/ADuM6422A/ADuM6423A/ADuM6424A¹ are quad-channel digital isolators with an isoPower[®], integrated, isolated dc-to-dc converter. Based on the Analog Devices, Inc., iCoupler[®] technology, the dc-to-dc converter provides regulated, isolated power that meets CISPR 32/EN 55032 Class B limits at a full load on a 2-layer printed circuit board (PCB) with ferrites. Popular voltage combinations and the associated output current levels are listed in Table 1 in the data sheet.

The ADuM6420A/ADuM6421A/ADuM6422A/ADuM6423A/ADuM6424A eliminate the need for a separate, isolated dc-to-dc converter in 500 mW, isolated designs. The iCoupler chip scale transformer technology is used for isolated logic signals and for the magnetic components of the dc-to-dc converter. The result is a small form factor, total isolation solution.

The ADuM6420A/ADuM6421A/ADuM6422A/ADuM6423A/ADuM6424A isolators provide four independent isolation channels. See the Pin Configurations and Function Descriptions in the data sheet for additional information.

APPLICATIONS

Features

iso

Power integrated, isolated dc-to-dc converter

100 mA output supply

AEC-Q100 qualified for automotive applications ADuM6421AW (ADuM6423AW pending)

Meets CISPR 32/EN55032 Class B emission limits up to 5 Mbps at a full load on a 2-layer PCB

Quad dc to 100 Mbps signal isolation channels

28-lead, fine pitch, SOIC with 8.3 mm minimum creepage

High temperature operation: 125°C maximum

High common-mode transient immunity: 100 kV/μs

Safety and regulatory approvals (pending)

UL recognition (pending)

5000 V rms for 1 minute per UL 1577

CSA Component Acceptance Notice 5A (pending)

VDE V 0884-11 certificate of conformity (pending)

CQC certification per GB4943.1-2011 (pending)

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5000 V rms for 1 minute per UL 1577

CSA Component Acceptance Notice 5A (pending)

VDE V 0884-11 certificate of conformity (pending)

CQC certification per GB4943.1-2011 (pending)

5000 V rms for 1 minute per UL 1577

Application

RS-232 transceivers

Power supply start-up bias and gate drives

Isolated sensor interfaces

Automotive on-board charger (OBC) and dc to dc

Industrial programmable logic controllers (PLCs)

Related Products



[ADV7181CBSTZ](#)

Analog Devices, Inc
LQFP-64



[AD8170AR](#)

Analog Devices, Inc
SOP8



[AD724JR](#)

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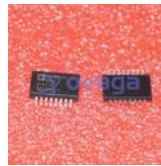
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