

Isolator Interface IC 4A Dual-Ch Gate Drvr 4.1V Nominal UVLO

Manufacturers	Analog Devices, Inc
Package/Case	SOIC-8
Product Type	Power Supplies
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for ADUM3220ARZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADuM3220/ADuM3221 are isolated, 4 A dual-channel gate drivers based on the Analog Devices, Inc., iCoupler® technology. Combining high speed CMOS and monolithic transformer technology, these isolation components provide outstanding performance characteristics superior to the alternatives, such as the combination of pulse transformers and gate drivers.

The ADuM3220/ADuM3221 provide digital isolation in two independent isolation channels. They have a maximum propagation delay of 60 ns and 5 ns channel-to-channel matching. In comparison to gate drivers that employ high voltage level translation methodologies, the ADuM3220/ADuM3221 offer the benefit of true, galvanic isolation between the input and each output, enabling voltage translation across the isolation barrier. The ADuM3220 has shoot-through protection logic, which prevents both outputs from being on at the same time, whereas the ADuM3221 allows both outputs to be on at the same time. Both parts offer a default output low characteristic as required for gate drive applications.

The ADuM3220/ADuM3221 operate with an input supply voltage ranging from 3.0 V to 5.5 V, providing compatibility with lower voltage systems. The outputs of the ADuM3220A/ADuM3221A can be operated at supply voltages from 4.5 V to 18 V. The outputs of the ADuM3220B/ADuM3221B can be operated at supply voltages from 7.6 V to 18 V.

The junction temperature of the ADuM3220/ADuM3221 is specified from -40°C to +125°C.

Features

4 A peak output current

Precise timing characteristics

60 ns maximum isolator and driver propagation delay

5 ns maximum channel to channel matching

High junction temperature operation: 125°C

3.3 V to 5 V input logic

7.6 V to 18 V output drive

Undervoltage lockout (UVLO) at 7.0 V VDD2

Thermal shutdown protection at >150°C

Default low output

High frequency operation: dc to 1 MHz

CMOS input logic levels

High common-mode transient immunity: 25 kV/μs

Automotive versions qualified per AEC-Q100

See data sheet for additional features

Application

Isolated synchronous dc-to-dc converters

MOSFET/IGBT gate drivers

Related Products



[ADV7123KST140](#)

Analog Devices, Inc
QFP-48



[ADUM3223CRZ](#)

Analog Devices, Inc
SOIC-16



[ADV7171KSU](#)

Analog Devices, Inc
TQFP44



[ADUM7223ACCZ](#)

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[AD6645ASQZ-80](#)

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[AD6645ASQZ-105](#)

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SOP-28