

Driver 2A 1-OUT High Side/Low Side HalfBrdg Inv/Non-Inv 8-Pin SOIC W Tube

Manufacturers	Analog Devices, Inc
Package/Case	SOIC-8
Product Type	Gate and Power Driver
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for ADUM4121ARIZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADuM4121/ADuM4121-1 are 2 A isolated, single-channel drivers that employ Analog Devices, Inc.'s iCoupler® technology to provide precision isolation. The ADuM4121/ADuM4121-1 provide 5 kV rms isolation in the wide-body, 8-lead SOIC package. Combining high speed CMOS and monolithic transformer technology, these isolation components provide outstanding performance characteristics superior to alternatives such as the combination of pulse transformers and gate drivers.

The ADuM4121/ADuM4121-1 operate with an input supply ranging from 2.5 V to 6.5 V, providing compatibility with lower voltage systems. In comparison to gate drivers that employ high voltage level translation methodologies, the ADuM4121/ADuM4121-1 offer the benefit of true, galvanic isolation between the input and the output.

The ADuM4121/ADuM4121-1 include an internal Miller clamp that activates at 2 V on the falling edge of the gate drive output, supplying the driven gate with a lower impedance path to reduce the chance of Miller capacitance induced turn on.

Options exist to allow the thermal shutdown to be enabled or disabled. As a result, the ADuM4121/ADuM4121-1 provide reliable control over the switching characteristics of insulated gate bipolar transistor (IGBT)/metal oxide semiconductor field, effect transistor (MOSFET) configurations over a wide range of switching voltages.

Features

2 A peak output current ($<2 \Omega$ RDSON)

2.5 V to 6.5 V input

4.5 V to 35 V output

Undervoltage lockout (UVLO) at 2.5 V VDD1

Multiple UVLO options on VDD2

Grade A: 4.4 V (typical) UVLO on VDD2

Grade B: 7.3 V (typical) UVLO on VDD2

Grade C: 11.3 V (typical) UVLO on VDD2

Precise timing characteristics

53 ns maximum isolator and driver propagation delay

CMOS input logic levels

High common-mode transient immunity: >150 kV/ μ s

High junction temperature operation: 125°C

Default low output

Internal Miller clamp

Safety and regulatory approvals (pending)

UL recognition per UL 1577

5 kV rms for 1 minute SOIC long package

CSA Component Acceptance Notice 5A

VDE certificate of conformity (pending)

DIN V VDE V 0884-10 (VDE V 0884-10):>

Wide body, 8-lead SOIC

Related Products



[ADP3336ARMZ-REEL7](#)

Analog Devices, Inc
MSOP-8



[AD737JRZ](#)

Analog Devices, Inc
SOP-8

Application

Switching power supplies

Isolated IGBT/MOSFET gate drives

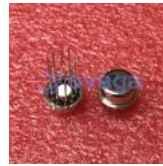
Industrial inverters

Gallium nitride (GaN)/silicon carbide (SiC) power devices



[ADP3367ARZ](#)

Analog Devices, Inc
SOIC-8



[AD636JH](#)

Analog Devices, Inc
TO-100-10



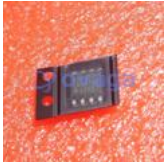
[ADP3330ARTZ3.3-RL7](#)

Analog Devices, Inc
SOT-23-6



[ADR434BRZ](#)

Analog Devices, Inc
SOIC-8



[ADR421ARZ](#)

Analog Devices, Inc
SOP-8



[ADR3412ARJZ-R7](#)

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