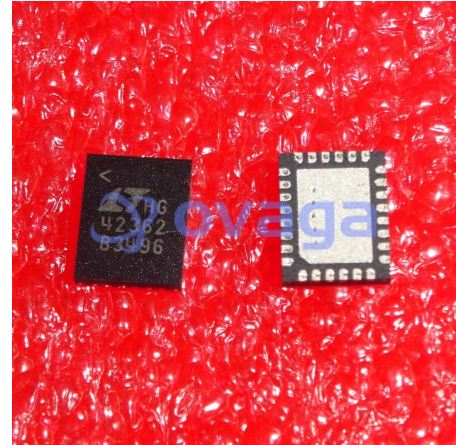


2x Ideal Diode-OR & 1x Hot Swap Cntr w/

Manufacturers	Analog Devices, Inc
Package/Case	QFN-28
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LTC4236IUFD-2#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LTC4236 offers ideal diode-OR and Hot Swap functions for two power rails by controlling external N-channel MOSFETs. MOSFETs acting as ideal diodes replace two high power Schottky diodes and the associated heat sinks, saving power and board area. A Hot Swap control MOSFET allows a board to be safely inserted and removed from a live backplane by limiting inrush current. The supply output is also protected against short-circuit faults with a fast acting foldback current limit and electronic circuit breaker.

The LTC4236 regulates the forward voltage drop across the ideal diode MOSFETs to ensure smooth current transfer from one supply to the other without oscillation. The ideal diode MOSFETs turn on quickly to reduce the load voltage droop during supply switchover. If the input supply fails or is shorted, a fast turn-off minimizes reverse current transients.

A current sense amplifier translates the voltage across the sense resistor to a ground referenced signal. The LTC4236 provides adjustable start-up delay, turn-on/-off control, and reports fault and power good status for the supply.

Features

Ideal Diode-OR and Inrush Current Control for Redundant Supplies

Low Loss Replacement for Power Schottky Diodes

Enables Safe Board Insertion into a Live Backplane

2.9V to 18V Operating Range

Current Monitor Output

Controls N-Channel MOSFETs

Limits Peak Fault Current in $\leq 1\mu\text{s}$

Adjustable Current Limit with Foldback

Adjustable Start-Up and Current Limit Fault Delay

0.5 μs Ideal Diode Turn-On and Turn-Off Time

Smooth Switchover without Oscillation

Fault, Power Good and Diode Status Outputs

LTC4236-1: Latch Off After Fault

LTC4236-2: Automatic Retry After Fault

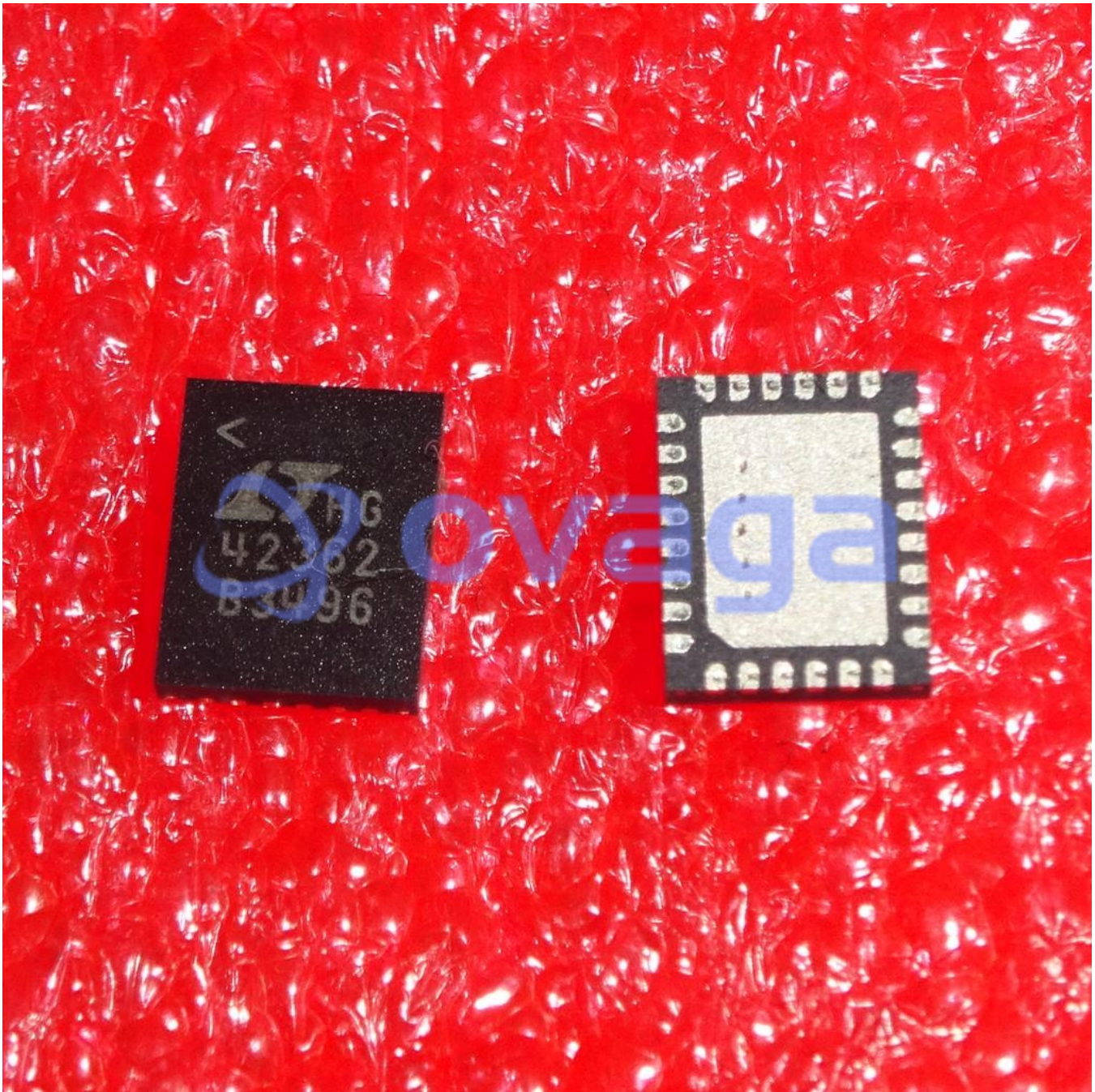
28-Pin 4mm x 5mm QFN Package

Application

Redundant Power Supplies

High Availability Systems and Servers

Telecom and Network Infrastructure



Related Products



[LT3763EFE](#)

Analog Devices, Inc
TSSOP28



[LT1038CK](#)

Analog Devices, Inc
TO-3



[LTC4417IUF](#)

Analog Devices, Inc
QFN-24



[LTC3440EMS](#)

Analog Devices, Inc
MSOP10



[LTC1966CMS8#PBF](#)

Analog Devices, Inc
MSOP-8P



[LTC2990IMS#PBF](#)

Analog Devices, Inc
10MSOP



[LTM8045EY#PBF](#)

Analog Devices, Inc
BGA40



[LT4295IUFD#PBF](#)

Analog Devices, Inc
28-WFQFN