
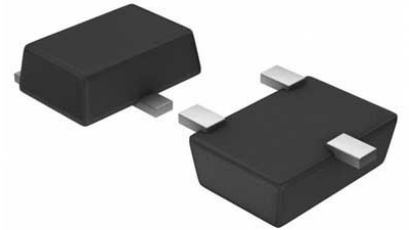


## OR Controller P-channel Single Automotive 6-Pin TSOT-23 T/R

<b>Manufacturer:</b>	<a href="#">Analog Devices, Inc</a>
<b>Package/Case:</b>	SOT23-6
<b>Product Type:</b>	Power Management ICs
<b>RoHS:</b>	RoHS Compliant/Lead free 
<b>Lifecycle:</b>	Active



Images are for reference only

[Inquiry](#)

### General Description

The LTC4412HV controls an external P-channel MOSFET to create a near ideal diode function for power switchover or load sharing. This permits highly efficient OR'ing of multiple power sources for extended battery life and low selfheating. When conducting, the voltage drop across the MOSFET is typically 20mV. For applications with a wall adapter or other auxiliary power source, the load is automatically disconnected from the battery when the auxiliary source is connected. Two or more LTC4412HVs may be interconnected to allow load sharing between multiple batteries or charging of multiple batteries from a single charger. The LTC4412HV is an extended supply and temperature range version of the LTC4412.

The wide supply operating range supports operation from one to eight Li-Ion cells in series. The low quiescent current (11 $\mu$ A typical) is independent of the load current. The gate driver includes an internal voltage clamp for MOSFET protection.

The STAT pin can be used to enable an auxiliary P-channel MOSFET power switch when an auxiliary supply is detected. This pin may also be used to indicate to a microcontroller that an auxiliary supply is connected. The control (CTL) input enables the user to force the primary MOSFET off and the STAT pin low.

The LTC4412HV is available in a low profile (1mm) SOT-23 package.

Supply RangeLTC44122.5V - 28V (36V max)LTC4412HV2.5V - 36V (40V max)

## Key Features

Very Low Loss Replacement for Power Supply OR'ing Diodes

3V to 36V AC/DC Adapter Voltage Range

Minimal External Components

Automatic Switching Between DC Sources

Simplifies Load Sharing with Multiple Batteries

Low Quiescent Current: 11 $\mu$ A

2.5V to 36V Battery Voltage Range

Reverse Battery Protection

Drives Almost Any Size MOSFET for Wide Range of Current Requirements

MOSFET Gate Protection Clamp

Manual Control Input

Low Profile (1mm) SOT-23 (ThinSOT™) Package

## Application

Industrial and Automotive Applications

Notebook and Handheld Computers

USB-Powered Peripherals

Uninterruptible Power Supplies

Logic Controlled Power Switch

## Recommended For You

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### LTC4412ES6

Analog Devices, Inc  
SOT23-6

### LTC4259ACGW-1

Analog Devices, Inc  
SSOP36

### LTC4259ACGW

Analog Devices, Inc  
SSOP36

### LTC1530IS8

Analog Devices, Inc  
SOP8

### LTC4252-2IMS

Analog Devices, Inc  
MSOP10

### LTC4412ES6#PBF

Analog Devices, Inc  
SOT23-6

### LTC4412ES6#TRPBF

Analog Devices, Inc  
SOT23-6

### LTC2942CDCB#TRMPBF

Analog Devices, Inc  
DFN-6

### LT1054IN8

Analog Devices, Inc  
DIP-8

### LTC4416EMS#PBF

Analog Devices, Inc  
MSOP10

### LTC4357IMS8

Analog Devices, Inc  
MSOP8

### LTC4414IMS8#PBF

Analog Devices, Inc  
MSOP8

### LTC4413EDD

Analog Devices, Inc  
DFN10

### LT3469EIS8#TRMPBF

Analog Devices, Inc  
SOT23-8

### LTC4412HVIS6

Analog Devices, Inc  
SOT23-6