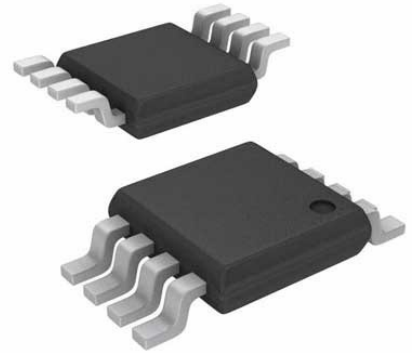


OR Controller P-channel Single Automotive 8-Pin MSOP

Manufacturer:	Analog Devices, Inc
Package/Case:	MSOP8
Product Type:	Power Management ICs
Lifecycle:	Unconfirmed



Images are for reference only

[Inquiry](#)

General Description

The LTC4414 controls an external P-channel MOSFET to create a near ideal diode function for power switchover. This permits highly efficient OR'ing of multiple power sources for extended battery life and low self- heating. 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 LTC4414s may be interconnected to allow switchover between multiple batteries or charging of multiple batteries from a single charger.

The wide supply operating range supports operation from one to eight Li-Ion cells in series. The low quiescent current (30 μ 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 LTC4414 is available in a low profile 8-lead MSOP package.

Key Features

Designed Specifically to Drive Large QG PFETs
Very Low Loss Replacement for Power Supply OR'ing Diodes
3.5V to 36V AC/DC Adapter Voltage Range
Minimal External Components
Automatic Switching Between DC Sources
Low Quiescent Current: 30 μ A
3V to 36V Battery Voltage Range
Limited Reverse Battery Protection
MOSFET Gate Protection Clamp
Manual Control Input
Space Saving 8-Lead MSOP Package

Application

High Current Power Path Switch
Industrial and Automotive Applications
Uninterruptable Power Supplies
Logic Controlled Power Switch
Battery Backup Systems
Emergency Systems with Battery Backups

Recommended For You

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