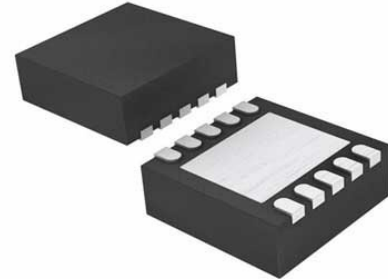


IC OR CTRLR SRC SELECT 10DFN

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	QFN-10
Product Type	PMIC - OR Controllers
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LTC4413EDD#TRPBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The LTC4413 contains two monolithic ideal diodes, each capable of supplying up to 2.6A from input voltages between 2.5V and 5.5V. Each ideal diode uses a 100mΩ P-channel MOSFET that independently connects INA to OUTA and INB to OUTB. During normal forward operation the voltage drop across each of these diodes is regulated to as low as 28mV. Quiescent current is less than 40μA for diode currents up to 1A. If either of the output voltages exceeds its respective input voltages, that MOSFET is turned off and less than 1μA of reverse current will flow from OUT to IN. Maximum forward current in each MOSFET is limited to a constant 2.6A and internal thermal limiting circuits protect the part during fault conditions. Two active-high control pins independently turn off the two ideal diodes contained within the LTC4413, controlling the operation mode as described by Table 1. When the selected channel is reverse biased, or the LTC4413 is put into low power standby, a status signal indicates this condition with a low voltage. A 9μA open-drain STAT pin is used to indicate conduction status. When terminated to a positive supply through a 470k resistor, the STAT pin can be used to indicate that the selected diode is conducting with a high voltage. This signal can also be used to drive an auxiliary P-channel MOSFET power switch to control a third alternate power source when the LTC4413 is not conducting forward current. The LTC4413 is housed in a 10-lead DFN package.

Features LTC4413 Lower Iq LTC4413-1 Lower Vfwd, Faster Response, Higher Iq LTC4413-2 Lower Vfwd, Faster Response, Higher Iq, 13V (max) OVP

## Features

2-Channel Ideal Diode ORing or Load Sharing

Low Loss Replacement for ORing Diodes

Low Forward On-Resistance (100mΩ Max at 3.6V)

Low Reverse Leakage Current (1μA Max)

Small Regulated Forward Voltage (28mV Typ)

2.5V to 5.5V Operating Range

2.6A Maximum Forward Current

Internal Current Limit and Thermal Protection

Slow Turn-On/Off to Protect Against Inductive Source Impedance-Induced Voltage Spiking

Ultralow Quiescent Current Consumption, Low Power Alternative to the LTC4413-1

Status Output to Indicate if Selected Channel is Conducting

Programmable Channel On/Off

Low Profile (0.75mm) 10-Lead 3mm × 3mm DFN Package

## Application

Battery and Wall Adapter Diode ORing in Handheld Products

Backup Battery Diode ORing

Power Switching

USB Peripherals

Uninterruptable Supplies

## 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