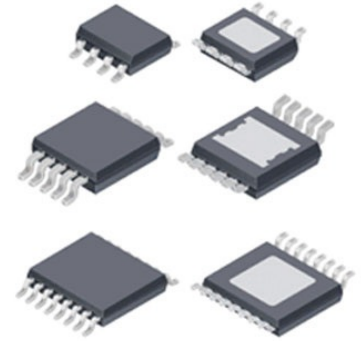


Hot Swap Controller 1CH 80V N-Channel Positive Voltage Automotive 10Pin MSOP

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	MSOP
Product Type	Power Supplies
RoHS	Green
Lifecycle	



Images are for reference only

Please submit RFQ for LTC4380HMS-2#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The LTC4380 low quiescent current surge stopper protects loads from high voltage transients. Overvoltage protection is provided by clamping the gate voltage of an external N-channel MOSFET to limit the output voltage to a safe value during overvoltage events such as load dump in automobiles. Fixed gate clamp voltages are selectable for 12V and 24V/28V systems. For systems of any voltage up to 72V, use the adjustable gate clamp versions. Overcurrent protection is also provided.

An internal multiplier generates a TMR pin current proportional to VDS and ID, so that operating time in both overcurrent and overvoltage conditions is limited in accordance with MOSFET stress.

The GATE pin can drive back-to-back MOSFETs for reverse input protection, eliminating the voltage drop and dissipation of a Schottky diode solution. A low 8 $\mu$ A operating current permits use in always-on and battery powered applications. An accurate ON pin comparator monitors the input supply for undervoltage (UV) conditions and also serves as a shutdown input, reducing the quiescent current to 6 $\mu$ A.

## Features

Low Quiescent Current: 8 $\mu$ A Operating

Withstands Surge Voltage Up to the MOSFET Limit

Wide Operating Voltage Range: 4V to 72V

Overcurrent Protection

Selectable Internal 31.5V/50V or Adjustable Gate Clamp Voltage

Reverse Input Protection to -60V

Adjustable Turn-On Threshold

Adjustable Fault Timer with MOSFET Stress Acceleration

Controls N-Channel MOSFET

Latchoff and Retry Options

Low Retry Duty Cycle During Faults

10-Pin DFN (3mm  $\times$  3mm) and MSOP Packages

AEC-Q100 Qualified for Automotive Applications

## Application

Automotive/Avionic/Industrial Surge Protection

Hot Swap, Live Insertion

High Side Switch for Battery Powered Systems

Automotive Load Dump Protection

## Related Products



### [LTC1966CMS8](#)

Analog Devices, Inc  
MSOP-8



### [LT1054ISW](#)

Analog Devices, Inc  
SOP-16



### [LT1931ES5](#)

Analog Devices, Inc  
SOT-23



### [LTC1446CS8](#)

Analog Devices, Inc  
SOP-8



### [LTC2600IGN](#)

Analog Devices, Inc  
SSOP-16



### [LTC2208CUP](#)

Analog Devices, Inc  
QFN64



### [LTC1606IG](#)

Analog Devices, Inc  
SSOP-28



### [LT3463EDD](#)

Analog Devices, Inc  
QFN10