

Hot Swap Controller, Distributed Power Systems, Office Switching, -48 V Input, MSOP-10

Manufacturers	Analog Devices, Inc
Package/Case	MSOP-1
Product Type	PMIC - Hot Swap
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LTC4252-2IMS#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LTC4252 negative voltage Hot Swap™ controller allows a board to be safely inserted and removed from a live backplane. Output current is controlled by three stages of current limiting: a timed circuit breaker, active current limiting and a fast feedforward path that limits peak current under worst-case catastrophic fault conditions.

Adjustable undervoltage and overvoltage detectors disconnect the load whenever the input supply exceeds the desired operating range. The LTC4252's supply input is shunt regulated, allowing safe operation with very high supply voltages. A multifunction timer delays initial startup and controls the circuit breaker's response time. The circuit breaker's response time is accelerated by sensing excessive MOSFET drain voltage, keeping the MOSFET within its safe operating area (SOA). An adjustable softstart circuit controls MOSFET inrush current at start-up.

The LTC4252-1/LTC4252A-1 latch off after a circuit breaker fault times out. The LTC4252-2/LTC4252A-2 provide automatic retry after a fault. The LTC4252A-1/LTC4252A-2 feature tight $\pm 1\%$ undervoltage/overvoltage threshold accuracy. The LTC4252 is available in either an 8-pin or 10-pin MSOP, while the LTC4252A is available in the 10-pin MSOP.

Applications

Features

Allows Safe Board Insertion and Removal from a Live –48V Backplane

Floating Topology Permits Very High Voltage Operation

Current Limit With Circuit Breaker Timer

Fast Response Time Limits Peak Fault Current

Programmable Soft-Start Current Limit

Programmable Timer with Drain Voltage Accelerated Response

Adjustable Undervoltage/Overvoltage Protection

LTC4252-1/LTC4252A-1: Latch Off After Fault

LTC4252-2/LTC4252A-2: Automatic Retry After Fault

Available in 8-Pin and 10-Pin MSOP Packages

Application

Hot Board Insertion

Electronic Circuit Breaker

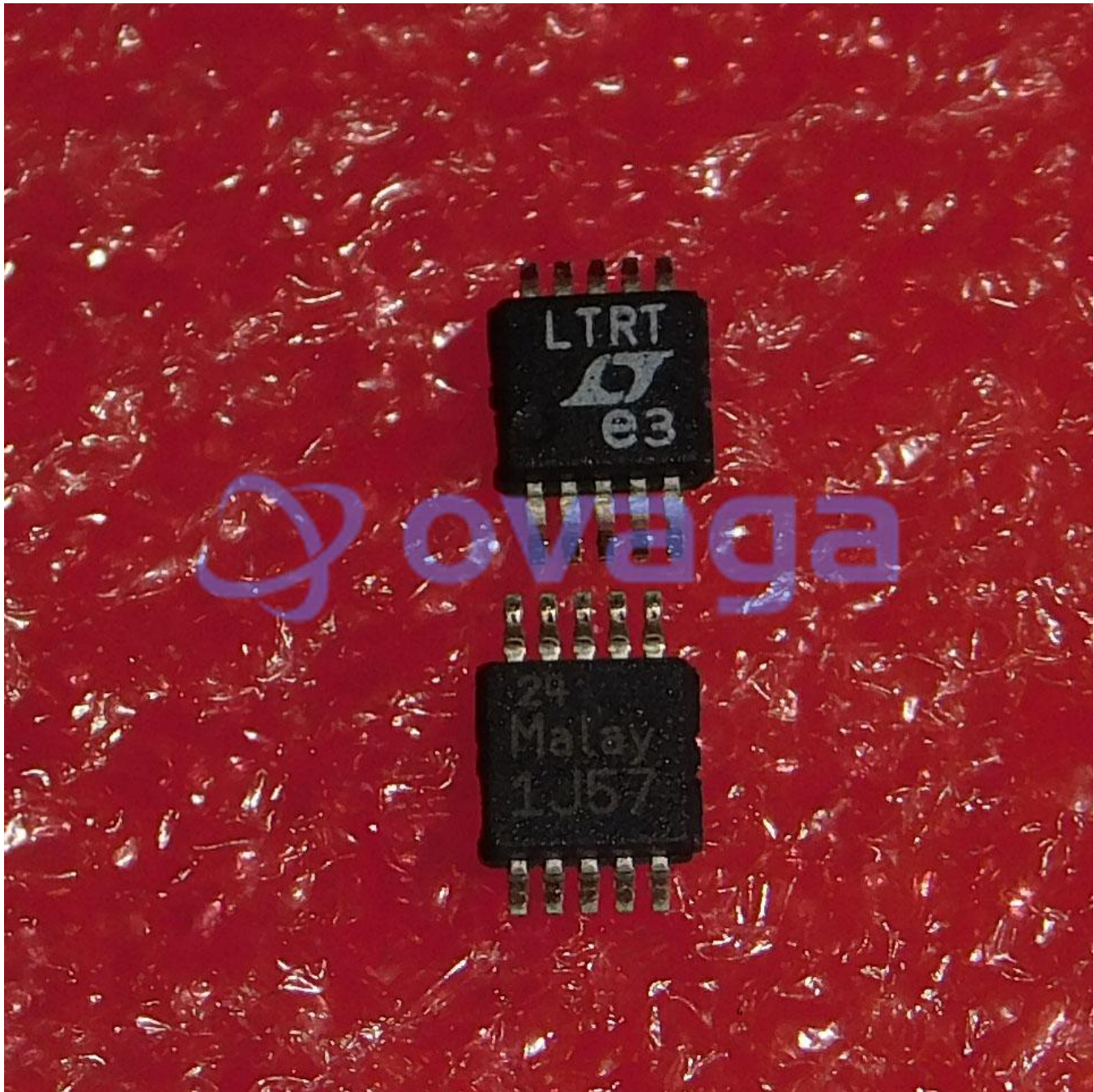
Negative Power Supply Control

Central Office Switching

High Availability Servers

ATCA





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](#)

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