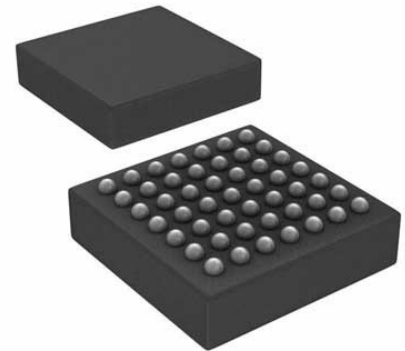


20VIN, 15A Step-Down DC/DC  $\mu$ Module Regulator

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	49-Lead BGA (6.25mm x 6.25mm x 5.02mm)
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LTM4638IY#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The LTM4638 is a complete 15A step-down switching mode  $\mu$ Module (power module) regulator in a tiny 6.25mm  $\times$  6.25mm  $\times$  5.02mm BGA package. Included in the package are the switching controller, power FETs, inductor and support components. Operating over an input voltage range of 3.1V to 20V, the LTM4638 supports an output voltage range of 0.6V to 5.5V, set by a single external resistor. Its high efficiency design delivers up to 15A continuous output current. Only bulk input and output capacitors are needed.

The LTM4638 supports selectable discontinuous mode operation and output voltage tracking for supply rail sequencing. Its high switching frequency and current mode control enable a very fast transient response to line and load changes without sacrificing stability.

Fault protection features include overvoltage, overcurrent and overtemperature protection.

The LTM4638 is available with SnPb or RoHS compliant terminal finish.

## Features

Complete Solution in <1cm<sup>2</sup> (Single-Sided PCB) or 0.5cm<sup>2</sup> (Dual-Sided PCB)

6.25mm × 6.25mm × 5.02mm BGA Package

Wide Input Voltage Range: 3.1V to 20V

0.6V to 5.5V Output Voltage

15A DC Output Current

Differential Remote Sensing Amp

Current Mode Control, Fast Transient Response

External Frequency Synchronization

Multiphase Parallel Current Sharing with Multiple LTM4638s

Output Voltage Tracking

Selectable Discontinuous Mode

Power Good Indicator

Overvoltage, Overcurrent and Overtemperature Protection

## Application

Telecom, Datacom, Networking and Industrial Equipment

Medical Diagnostic Equipment

Data Storage Rack Units and Cards

Test and Debug Systems

## Related Products



### [LT3763EFE](#)

Analog Devices, Inc  
TSSOP28



### [LTC4417IUF](#)

Analog Devices, Inc  
QFN-24



### [LTC1966CMS8#PBF](#)

Analog Devices, Inc  
MSOP-8P



### [LTM8045EX#PBF](#)

Analog Devices, Inc  
BGA40



### [LT1038CK](#)

Analog Devices, Inc  
TO-3



### [LTC3440EMS](#)

Analog Devices, Inc  
MSOP10



### [LTC2990IMS#PBF](#)

Analog Devices, Inc  
10MSOP



### [LT4295IUFD#PBF](#)

Analog Devices, Inc  
28-WFQFN