

# LTM4657IY#PBF

Data Sheet

20VIN, 8A Step-Down DC/DC µModule Regulator

Manufacturers <u>Analog Devices, Inc</u>

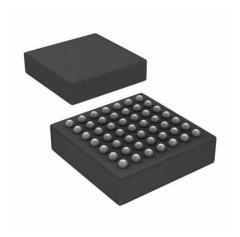
Package/Case 49-Lead BGA (6.25mm × 6.25mm × 3.87mm)

Product Type Power Management ICs

**RoHS** 

Lifecycle

Please submit RFQ for LTM4657IY#PBF or Fmail to us; sales@ovaga.com We will contact you in 12 hours.



Images are for reference only

**RFO** 

### **General Description**

The LTM4657 is a complete 8A step-down switching mode  $\mu$ Module (micromodule) regulator in a tiny 6.25mm  $\times$  6.25mm  $\times$  3.87mm 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 LTM4657 supports an output voltage range of 0.5V to 5.5V, set by a single external resistor. Its high efficiency design delivers up to 8A continuous output current. Only bulk input and output capacitors are needed.

The LTM4657 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 LTM4657 is available with SnPb or RoHS compliant terminal finish.

#### APPLICATIONS

#### **Features**

Complete Solution in < 1 cm

2

2

6.25mm × 6.25mm × 3.87mm BGA Package

Wide Input Voltage Range: 3.1V to 20V

0.5V to 5.5V Output Voltage

8A DC Output Current

Differential Remote Sensing Amp

Current Mode Control, Fast Transient Response

External Frequency Synchronization

Multiphase Parallel Current Sharing with Multiple LTM4657s

Output Voltage Tracking

Selectable Discontinuous Mode

Power Good Indicator

Overvoltage, Overcurrent and Overtemperature Protection

Pin Compatible with LTM4626(12A) and LTM4638(15A)

## **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



Analog Devices, Inc MSOP-8P

LTC1966CMS8#PBF



LT1038CK
Analog Devices, Inc
TO-3



LTC3440EMS
Analog Devices, Inc
MSOP10



LTC2990IMS#PBF
Analog Devices, Inc
10MSOP



LTM8045EY#PBF
Analog Devices, Inc
BGA40



LT4295IUFD#PBF
Analog Devices, Inc
28-WFQFN