

# LTM4647IY#PBF

Data Sheet

#### 30A DC/DC Step-Down µModule Regulator

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

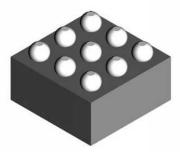
Package/Case 77-Lead BGA (15mm x 9mm x 5.01mm)

Product Type Power Management ICs

**RoHS** 

Lifecycle

Please submit RFQ for LTM4647IY#PBF or Fmail to us; sales@ovaga.com We will contact you in 12 hours.



Images are for reference only

**RFO** 

### **General Description**

The LTM4647 is a complete 30A output switching mode step-down DC/DC  $\mu$ Module® (power module) regulator. Included in the package are the switching controller, power FETs, inductor and all supporting components. Operating over an input voltage range of 4.7V to 15V, the LTM4647 supports an output voltage range of 0.6V to 1.8V, set by a single external resistor. Only a few input and output capacitors are needed.

Its high efficiency design delivers 87% efficiency from 12V input to 1.0V output with 30A continuous load current. High switching frequency and a current-mode architecture enable a very fast transient response to line and load changes without sacrificing stability. The device supports frequency synchronization, programmable multiphase operation, N+1 phase redundancy, and output voltage tracking for supply rail sequencing.

Fault protection features include overvoltage and overcurrent protection. The power module is offered in a space saving  $9\text{mm} \times 15\text{mm} \times 5.01\text{mm}$  BGA package. The LTM4647 is available with SnPb (BGA) or RoHS compliant terminal finish.

**Features** 

4.7V to 15V Input Voltage Range

0.6V to 1.8V Output Voltage Range

30A DC Output Current

High Reliability N + 1 Phase Redundancy Supported

Internal or External Control Loop Compensation

Differential Remote Sense Amplifier for Precision Regulation

Current Mode Control/Fast Transient Response

Multiphase Current Sharing Up to 180A

Built-In Temperature Monitoring

Selectable Pulse-Skipping, Burst Mode® Operation

Soft-Start/Voltage Tracking

Frequency Synchronization

Output Overvoltage Protection

Output Overcurrent Foldback Protection

9mm × 15mm × 5.01mm BGA Package

## **Application**

Telecom, Networking and Industrial Equipment

Point of Load Regulation

#### **Related Products**



LT3763EFE
Analog Devices, Inc
TSSOP28



LTC4417IUF

Analog Devices, Inc

QFN-24



LTC1966CMS8#PBF
Analog Devices, Inc
MSOP-8P



LTM8045EY#PBF
Analog Devices, Inc
BGA40



LT1038CK
Analog Devices, Inc
TO-3



LTC3440EMS
Analog Devices, Inc
MSOP10



Analog Devices, Inc 10MSOP

LTC2990IMS#PBF



LT4295IUFD#PBF
Analog Devices, Inc
28-WFQFN