

## LTM4646IY#PBF

Data Sheet

Switching Voltage Regulators Dual 10A or Single 20A DC/DC Module Regulator

Manufacturers

Analog Devices, Inc

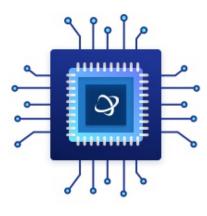
Package/Case

Product Type

Power Management ICs

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for LTM4646IY#PBF or Fmail to us; sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

The LTM4646 is a complete dual 10A output switching mode DC/DC power supply. Included in the package are the switching controller, power FETs, inductors, and all supporting components. Operating from an input voltage range of 4.5V to 20V, the LTM4646 supports two outputs each with an output voltage range of 0.6V to 5.5V, set by external resistors. Its high efficiency design delivers up to 10A continuous current for each output. Only a few input and output capacitors are needed.

The device supports frequency synchronization, multiphase operation, high efficiency light load operation and output voltage tracking for supply rail sequencing and has an on-board temperature diode per channel for device temperature monitoring. High switching frequency and a current mode architecture enable a very fast transient response to line and load changes without sacrificing stability.

Fault protection features include overvoltage and overcurrent protection. The power module is offered in a small footprint 11.25mm  $\times$  15mm  $\times$  5.01mm BGA package. The LTM4646 is available with SnPb or RoHS compliant terminal finish.

**Features** 

Dual 10A or Single 20A Output

Wide Input Voltage Range: 4.5V to 20V

2.375VMIN with CPWR Bias

Output Voltage Range: 0.6V to 5.5V

Multiphase Current Sharing

Differential Remote Sense Amplifier, Each Channel

Current Mode Control/Fast Transient Response

Up to 96% Efficiency

Adjustable Switching Frequency (250kHz to 1.3MHz)

Frequency Synchronization

Overcurrent Foldback Protection

Output Overvoltage Protection

Internal or External Compensation

Built-In Temperature Monitoring Diode

SnPb or RoHS Compliant Finish

11.25mm × 15mm × 5.01mm BGA Package

## **Application**

Point-of-Load Power Supplies

Telecom and Networking Equipment

Industrial Equipment

Medical Equipment

## **Related Products**



LT3763EFE
Analog Devices, Inc
TSSOP28



LTC4417IUF

Analog Devices, Inc

QFN-24



LTC1966CMS8#PBF

Analog Devices, Inc

MSOP-8P



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