

# LTM4642EY#PBF

Data Sheet

Conv DC-DC 2.375V to 20V Step Down Dual-Out 0.6V to 5.5V 4A/4A uModule 56Pin BGA Tray

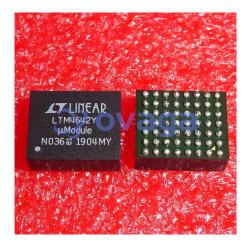
Manufacturers <u>Analog Devices, Inc</u>

Package/Case BGA

Product Type Power Management ICs

RoHS Green

Lifecycle



Images are for reference only

Please submit RFQ for LTM4642EY#PBF or <a href="mailto-us:sales@ovaga.com"><u>Emailto-us:sales@ovaga.com</u></a> We will contact you in 12 hours.

**RFO** 

#### **General Description**

The LTM4642 is a complete dual 4A or single 8A step-down DC/DC  $\mu$ Module<sup>®</sup> (micromodule) regulator. Included in the package are the switching controller, power FETs, inductor, and all support components. Operating over input voltage ranges of 4.5V to 20V, (2.375V min with external CPWR bias), the LTM4642 supports two outputs with voltage ranges of 0.6V to 5.5V, set by a single external resistor. Its high efficiency design delivers 4A continuous current (5A peak) for each output.

High switching frequency and a valley current mode architecture enable a very fast transient response to line and load changes without sacrificing stability. The two outputs are interleaved with  $180^{\circ}$  phase to minimize the ripple noise and reduce the I/O capacitors.

The power module is offered in a 9mm × 11.25mm × 4.92mm BGA package. The LTM4642 is RoHS compliant with Pb-free finish.

Applications

### **Features**

Small Form Factor Dual 4A Power Supply

Wide Input Voltage Range: 4.5V to 20V (2.375V Min with CPWR Bias)

Dual 180° Out-of-Phase Outputs with 4A DC

Dual Outputs with 0.6V to 5.5V Range

Output Voltage Tracking

Up to 95% Maximum Efficiency

Phase-Lockable Fixed Frequency 600kHz to 1.4MHz

Constant On-Time, Valley Current Mode Architecture

Selectable Burst Mode

Output Overvoltage and Overcurrent Protection

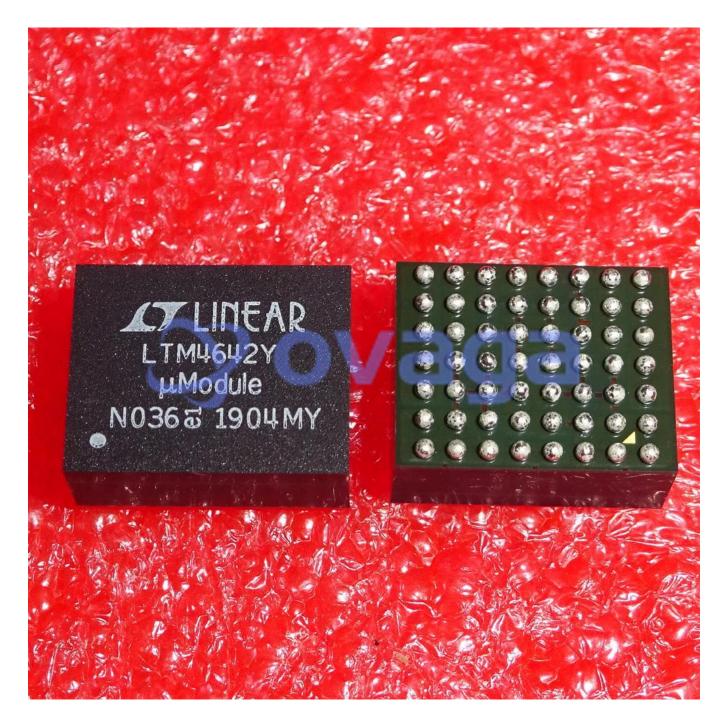
 $9\text{mm} \times 11.25\text{mm} \times 4.92\text{mm}$  BGA Package

## **Application**

Telecom and Networking Equipment

Servers

FPGA Power



#### **Related Products**



LT3763EFE
Analog Devices, Inc
TSSOP28



LTC4417IUF

Analog Devices, Inc

QFN-24



LT1038CK
Analog Devices, Inc
TO-3



LTC3440EMS
Analog Devices, Inc
MSOP10



LTC1966CMS8#PBF
Analog Devices, Inc
MSOP-8P



Analog Devices, Inc 10MSOP

LTC2990IMS#PBF



LTM8045EY#PBF
Analog Devices, Inc
BGA40



LT4295IUFD#PBF
Analog Devices, Inc
28-WFQFN