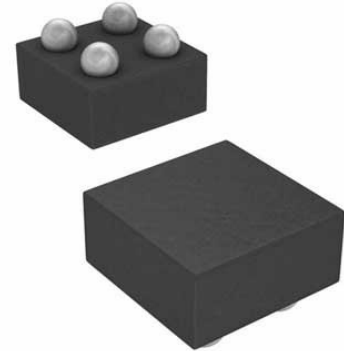


Ultrathin, Triple Output, Step-Down  $\mu$ Module Regulator for DDR-QDR4 Memory

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	25-Lead BGA (6.25mm x 6.25mm x 2.42mm)
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LTM4632IY or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com). We will contact you in 12 hours.

[RFQ](#)

## General Description

The LTM4632 is an ultrathin triple output step-down  $\mu$ Module<sup>®</sup> (power module) regulator to provide complete power solution for DDR-QDR4 SRAM. Operating from a 3.6V to 15V input voltage, the LTM4632 supports two  $\pm 3$ A output rails, both sink and source capable, for VDDQ and VTT, plus a 10mA low noise reference VTTR output. Both VTT and VTTR track and are equal to VDDQ/2. Housed in a 6.25mm  $\times$  6.25mm  $\times$  1.82mm LGA and 6.25mm  $\times$  6.25mm  $\times$  2.42mm BGA packages, the LTM4632 includes the switching controller, power FETs, inductors and support components. Alternatively, the power module can also be configured as a two phase single  $\pm 6$ A output VTT. Only a few ceramic input and output capacitors are needed to complete the design.

The LTM4632 supports selectable Burst Mode operation (CH1 only) 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 input, overcurrent and overtemperature protection.

The LTM4632 is RoHS compliant with Pb-free finish.

## Features

Complete DDR-QDR4 SRAM Power Solution Including VDDQ, VTT, VTTR (or VREF)

Solution in 0.5cm<sup>2</sup> (Dual-Sided PCB)

Wide Input Voltage Range: 3.6V to 15V

3.3V Input Compatible with VIN Tied to INTVCC

0.6V to 2.5V Output Voltage Range

Dual ±3A DC Output Current with Sink and Source Capability

3A VDDQ + 3A VTT or Dual Phase Single 6A VTT

Current Mode Control, Fast Transient Response

External Frequency Synchronization

Multiphase Parallelable with Current Sharing

Selectable Burst Mode® Operation

Overvoltage Input and Overtemperature Protection

Power Good Indicator

Ultrathin 6.25mm × 6.25mm × 1.82mm LGA and 6.25mm × 6.25mm × 2.42mm BGA Packages

## Application

DDR Memory Power Supply

General Purpose Point of Load Conversion

Telecom, Networking and Industrial Equipment

## Related Products



### [LT3763EFE](#)

Analog Devices, Inc  
TSSOP28



### [LT1038CK](#)

Analog Devices, Inc  
TO-3



### [LTC4417IUF](#)

Analog Devices, Inc  
QFN-24



### [LTC3440EMS](#)

Analog Devices, Inc  
MSOP10



### [LTC1966CMS8#PBF](#)

Analog Devices, Inc  
MSOP-8P



### [LTC2990IMS#PBF](#)

Analog Devices, Inc  
10MSOP



### [LTM8045EY#PBF](#)

Analog Devices, Inc  
BGA40



### [LT4295IUFD#PBF](#)

Analog Devices, Inc  
28-WFQFN