

# LTM4600HVEV#PBF

Data Sheet

10A High Efficiency DC/DC  $\mu Module;$  Package: LGA; No of Pins: 104; Temperature Range: -40°C to +125°C

Manufacturers	Analog Devices, Inc	2000	
Package/Case	LGA104		
Product Type	Power Management ICs		
RoHS			
Lifecycle		Images are for reference only	у
Please submit RFQ fo	or LTM4600HVEV#PBF or <u>Email to us: sales@ovaga.com</u> We will contact you in	12 hours.	<u>RFQ</u>

## **General Description**

The LTM4600HV is a complete 10A, DC/DC step down power supply with up to 28V input operation. Included in the package are the switching controller, power FETs, inductor, and all support components. Operating over an input voltage range of 4.5V to 28V, the LTM4600HV supports an output voltage range of 0.6V to 5V, set by a single resistor. This high efficiency design delivers 10A continuous current (12A peak), needing no heat sinks or airflow to meet power specifications. Only bulk input and output capacitors are needed to finish the design.

The low profile package (2.82mm) enables utilization of unused space on the bottom of PC boards for high density point of load regulation. High switching frequency and an adaptive on-time current mode architecture enables a very fast transient response to line and load changes without sacrificing stability. Fault protection features include integrated overvoltage and short circuit protection with a defeatable shutdown timer. A built-in soft-start timer is adjustable with a small capacitor.

The LTM4600HV is packaged in a compact (15mm × 15mm) and low profile (2.82mm) over-molded Land Grid Array (LGA) package suitable for automated assembly by standard surface mount equipment. The LTM4600HV is RoHS compliant.

### Features

Complete Switch Mode Power Supply

Wide Input Voltage Range: 4.5V to 28V

10A DC, 12A Peak Output Current

Parallel Two µModule™ DC/DC Converters for 20A Output Current

- 0.6V to 5V Output Voltage
- 1.5% Output Voltage Regulation
- Ultrafast Transient Response
- Current Mode Control
- RoHS Compliant Package with Gold Pad Finish (e4)
- Up to 92% Efficiency
- Programmable Soft-Start
- Output Overvoltage Protection
- Optional Short-Circuit Shutdown Timer
- Small Footprint, Low Profile (15mm × 15mm × 2.82mm) LGA Package

### **Related Products**



LT3763EFE Analog Devices, Inc

TSSOP28



LTC4417IUF Analog Devices, Inc QFN-24







LTM8045EY#PBF Analog Devices, Inc BGA40







# Application

Telecom and Networking Equipment

Military and Avionics Systems

Industrial Equipment

Point of Load Regulation

Servers

Analog Devices, Inc TO-3

# LTC3440EMS

**LT1038CK** 

Analog Devices, Inc MSOP10

### LTC2990IMS#PBF

Analog Devices, Inc 10MSOP

### LT4295IUFD#PBF

Analog Devices, Inc 28-WFQFN