

# LT3506IDHD#PBF

Data Sheet

Conv DC-DC 3.6V to 25V Step Down Dual-Out 0.8V to 23.25V 1.6A/1.6A Automotive 16-Pin DFN EP Tube

Manufacturers	Analog Devices, Inc	
Package/Case	16-WFDFN	un and a second
Product Type	Power Management ICs	22222
RoHS	Pb-free Halide free	
Lifecycle		Images are for reference only
Please submit RFQ for LT3506IDHD#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.		

## **General Description**

The LT3506 is a dual current mode PWM step-down DC/DC converter with internal 2A power switches. Both converters are synchronized to a single oscillator and run with opposite phases, reducing input ripple current. The output voltages are set with external resistor dividers, and each regulator has independent shutdown and soft-start circuits. Each regulator generates a power-good signal when its output is in regulation, easing power supply sequencing and interfacing with microcontrollers and DSPs.

The LT3506 switching frequency is 575kHz and the LT3506A is 1.1MHz. These high switching frequencies allow the use of tiny inductors and capacitors, resulting in a very small dual 1.6A output solution. Constant frequency and ceramic capacitors combine to produce low, predictable output ripple voltage. With its wide input range of 3.6V to 25V, the LT3506 regulates a wide variety of power sources, from 4-cell batteries and 5V logic rails to unregulated wall transformers, lead acid batteries and distributed-power supplies. Current mode PWM architecture provides fast transient response with simple compensation components and cycle-by-cycle current limiting. Frequency foldback and thermal shutdown provide additional protection.

## Features

Wide Input Voltage Range, 3.6V to 25V

Two 1.6A Output Switching Regulators with Internal Power Switches

Constant Switching Frequency

LT3506: 575kHz

LT3506A: 1.1MHz

Anti-Phase Switching Reduces Ripple

Accurate 0.8V Reference,  $\pm 1\%$ 

Independent Shutdown/Soft-Start Pins

Independent Power Good Indicators Ease Supply Sequencing

Uses Small Inductors and Ceramic Capacitors

Small 16-Lead Thermally Enhanced 5mm × 4mm DFN and TSSOP Surface Mount Packages

# **Application**

Disk Drives

DSP Power Supplies

Wall Transformer Regulation

Distributed Power Regulation

DSL Modems

Cable Modems

#### **Related Products**



**LT3763EFE** 

Analog Devices, Inc TSSOP28



LTC4417IUF Analog Devices, Inc QFN-24







MSOP-8P

LTM8045EY#PBF Analog Devices, Inc BGA40



### LT1038CK

Analog Devices, Inc TO-3

LTC3440EMS

Analog Devices, Inc MSOP10

#### LTC2990IMS#PBF

Analog Devices, Inc 10MSOP

LT4295IUFD#PBF

Analog Devices, Inc 28-WFQFN

