

# LT3501EFE#PBF

Data Sheet

**RFO** 

Linear Technology, LT3501EFE#PBF Step-Down Switching Regulator Dual 3A Adjustable 20-Pin, TSSOP

Manufacturers	Analog Devices, Inc	
Package/Case	20TSS	
Product Type	Power Management ICs	
RoHS	Pb-free Halide free	a 9 9
Lifecycle		Images are for reference only

Please submit RFQ for LT3501EFE#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

**General Description** 

The LT3501 is a dual current mode PWM step-down DC/DC converter with two internal 3.5A switches. Independent input voltage, feedback, soft-start and power good pins for each channel simplify complex power supply tracking/sequencing requirements.

Both converters are synchronized to either a common external clock input or a resistor programmable fixed 250kHz to 1.5MHz internal oscillator. At all frequencies, a 180° phase relationship between channels is maintained, reducing voltage ripple and component size. Programmable frequency allows for optimization between efficiency and external component size.

Minimum input-to-output voltage ratios are improved by allowing the switch to stay on through multiple clock cycles, only switching off when the boost capacitor needs recharging, resulting in ~95% maximum duty cycle.

Each output can be independently disabled using its own soft-start pin, or by using the SHDN pin the entire part can be placed in a low quiescent current shutdown mode.

The LT3501 is available in a 20-lead TSSOP package with exposed leadframe for low thermal resistance.

#### Features

- Wide Input Range: 3.1V to 25V
- Two Switching Regulators with 3A Output Capability
- Independent Supply to Each Regulator
- Adjustable/Synchronizable Fixed Frequency Operation from 250kHz to 1.5MHz
- Antiphase Switching
- Outputs Can be Paralleled
- Independent, Sequential, Ratiometric or Absolute Tracking Between Outputs
- Independent Soft-Start and Power Good Pins
- Enhanced Short-Circuit Protection
- Low Dropout: 95% Maximum Duty Cycle
- Low Shutdown Current: <10µA
- 20-Lead TSSOP Package with Exposed Leadframe

#### **Related Products**



LT3763EFE Analog Devices, Inc

TSSOP28



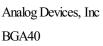
LTC4417IUF Analog Devices, Inc QFN-24



LTC1966CMS8#PBF
Analog Devices, Inc



MSOP-8P LTM8045EY#PBF



### Application

- DSP Power Supplies
- Disc Drives
- DSL/Cable Modems
- Wall Transformer Regulation
- Distributed Power Regulation



## <u>LT1038CK</u>

Analog Devices, Inc TO-3

#### LTC3440EMS Analog Devices, Inc MSOP10



LTC2990IMS#PBF Analog Devices, Inc 10MSOP

### LT4295IUFD#PBF

Analog Devices, Inc 28-WFQFN