

1.5MHz, 650mA Synchronous Step-Down Converter

General Description

The TP3307 is a constant frequency, current mode, PWM step-down converter. The device integrates a main switch and a synchronous rectifier for high efficiency. The 2.0V to 6.5V input voltage range makes the TP3307 ideal for powering portable equipment that runs from a single cell Lithium-Ion (Li+) battery or 3-cell NiMH/ NiCd batteries. The output voltage can be regulated as low as 0.6V. The TP3307 supports up to 650mA load current and can also run at 100% duty cycle for low dropout applications, extending battery life in portable systems.

Switching frequency is internally set at 1.5MHz, allowing the use of small surface mount inductor and capacitors. The internal synchronous switch increases efficiency while eliminate the need for an external Schottky diode. The TP3307 is available in a low profile 5 lead SOT23-5 package.

Ordering Information

TP3307-

- F : Pb Free
- Package Type
B : SOT-23-5
- Output Voltage
Default :Adjustable
12 : 1.2V
15 : 1.5V
18 : 1.8V
25 : 2.5V
28 : 2.8V
33 : 3.3V

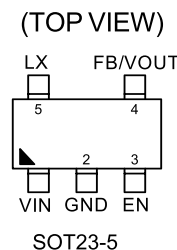
Features

- High Efficiency : 96%
- 1.5MHz Constant Switching Frequency
- 650mA Available Load Current, 1.1A Peak Current
- 120µA Typical Quiescent Current
- 2.0V to 6.5V Input Voltage Range
- Adjustable Output Voltage as Low as 0.6V
- 100% Duty Cycle Low Dropout Operation
- No Schottky Diode Required
- Short Circuit and Thermal Protection
- Over Voltage Protection
- < 1µA Shutdown Current
- Available in SOT23-5 Package
- RoHS Compliant and 100% Lead(Pb)-Free

Applications

- Portable Media Players/ MP3 Players
- Digital Still and Video Cameras
- Portable Instruments
- Bluetooth Equipment

Pin Configurations



Marking Information

For marking information, contact our sales representative directly or through a TPmicro distributor located in your area.