

1.5A/1.5MHz, Synchronous Step-Down Converter with Soft Start

General Description

The TP3312 is a synchronous current mode step-down dc-dc converter, capable of driving 1.5A load current with excellent line and load regulation. Operating with an input voltage range between 2.7V and 5.5V, the device is ideal for portable applications powered by a single Li-Ion battery cell or by 3-cell NiMH/NiCd batteries. The TP3312 operates at a fixed switching frequency of 1.5MHz and PWM operation provides very low output ripple voltage for noise sensitive applications. The internal integrated synchronous switch increases efficiency while eliminates the need for an external Schottky diode. The TP3312 is available in the 10-pin MSOP and 10-pin TDFN package.

Ordering Information

TP3312 -
 F : Pb Free
 Package Type
 J0 : TDFN-10
 M0 : MSOP-10

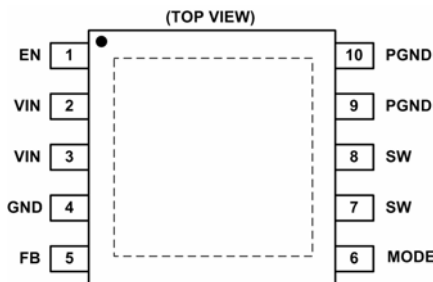
Features

- High Efficiency up to 96%
- 1.5A Available Load Current
- 300µA Typical Quiescent Current
- 1.5MHz Constant Switching Frequency
- 2.7V to 5.5V Input Voltage Range
- Adjustable Output Voltage as Low as 0.7V
- 100% Duty Cycle Low Dropout Operation
- No Schottky Diode Required
- Short Circuit and Thermal Protection
- Excellent Line and Load Transient Response
- < 1µA Shutdown Current
- Soft Start Function
- Available in MSOP-10 and TDFN-10 Package
- RoHS Compliant and 100% Lead(Pb)-Free

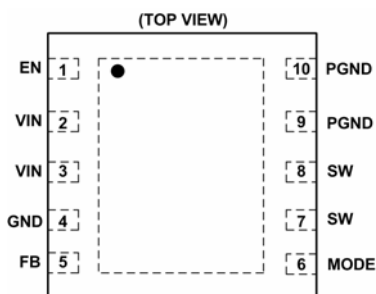
Applications

- Cellular and Smart Phones
- Portable Media Players/ MP3 Players
- Digital Still and Video Cameras
- Portable Instruments
- WLAN PC Cards

Pin Configurations



MSOP-10



TDFN-10

Marking Information

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