AT7151

1.5MHz, 800mA Synchronous Step-Down Converter

Immense Advance Tech.

FEATURES

- High Efficiency: Up to 96%
- 800mA Output Current
- 2.5V to 5.5V Input Voltage Range
- 1.5MHz Constant Frequency Operation
- No Schottky Diode Required
- Low Dropout Operation: 100% Duty Cycle
- 0.6V Reference Allows Low Output Voltages
- Shutdown Mode Draws ≤ 1uA Supply Current
- Current Mode Operation for Excellent Line and Load Transient Response
- Thermal Fault Protection
- Short Circuit Protection

DESCRIPTION

The AT7151 is a 1.5MHz, constant frequency, slope compensated current mode PWM step down converter. The device integrates a main switch and a synchronous rectifier for high efficiency without an external Schottky diode. It is ideal for powering portable equipment that runs from a single cell lithium-Ion (Li+) battery.

The AT7151 can supply 800mA of load current from a 2.5V to 5.5V input voltage. The output voltage can be regulated as low as 0.6V. The AT7151 can also run at 100% duty cycle for low dropout operation, extending battery life in portable system. Idle mode operation at light loads provides very low output ripple voltage for noise sensitive applications.

APPLICATION

- Cellular Telephones
- Wireless and DSL Modems
- Digital Still Cameras
- MP3 Players
- Portable Instruments
- Microprocessors and DSP Core Supplies

ORDER INFORMATION

AT 7151- A KE R

- IAT
- Circuit Type
- Output Voltage:
  A: ADJ, 1.2: 1.2V
  1.5: 1.5V, 1.8: 1.8V
  2.5: 2.5V, 3.3: 3.3V
- KE: SOT-25
  KES: TSOT-25
  DBS6: TDFN 2x2-6L
  QCS16: TQFN 3x3-16L
- Shipping:
  R: Tape & Reel

PIN CONFIGURATIONS (TOP VIEW)