

1MHz, All-Ceramic, 3.2A PWM Buck DC/DC Converter

Features

- Ceramic Input and Output Capacitors
- Efficiency Up to 94%
- Operate from 2.5V to 6V supply
- Adjustable Output from 0.8V to V_{IN}
- Internal Soft-Start
- Short-Circuit and Thermal-Overload Protection
- Input Over Voltage Protection
- RoHS Compliant

Applications

- ASIC/DSP/ μ P/FPGA Core and I/O Voltages
- Set-Top Boxes
- Cellular Base Stations
- Networking and Telecommunications

General Description

The AT1530 high-efficiency, DC/DC buck converter delivers up to 3.2A of output current. The device operates from an input voltage of 2.5V to 6V and provides an output voltage from 0.8V to V_{IN} , making the AT1530 ideal for on-board post-regulation applications.

The AT1530 operate at a fixed frequency of 1MHz with an efficiency of up to 94%. The high operating frequency minimizes the size of external components. Internal soft-start control circuitry reduces inrush current. Output under-voltage lockout, short-circuit and over-temperature protections improve design reliability.

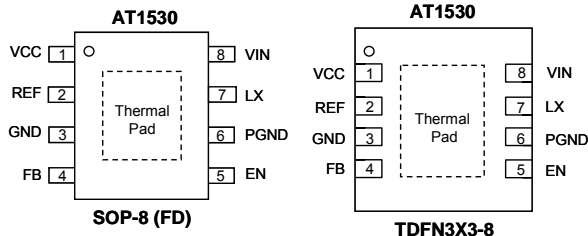
The AT1530 are available in a space-saving SOP-8 and TDFN3X3-8 package.

Ordering Information

ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Green)
AT1530F11U	A1530	-40°C to +85°C	SOP-8 (FD)
AT1530RD1U	A1530	-40°C to +85°C	TDFN3X3-8

Note: F1: SOP-8 (FD) RD: TDFN3X3-8
 1: Bonding Code
 U: Tape & Reel

Pin Configuration



Note: Recommend connecting the Thermal Pad to the Ground for excellent power dissipation.

Typical Application Circuit

