

# 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<sub>IN</sub>
- Internal Soft-Start
- Short-Circuit and Thermal-Overload Protection
- Input Over Voltage Protection
- RoHS Compliant

#### **Applications**

- ASIC/DSP/µP/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  $V_{\rm IN}$ , 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

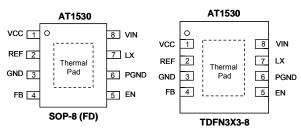
1: Bonding Code U: Tape & Reel

### **Pin Configuration**

Ver: 1.1

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## **Typical Application Circuit**



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

