

# 1MHz, All-Ceramic, 2A PWM Buck DC/DC Converter

#### **Features**

- Ceramic Input and Output Capacitors
- Efficiency Up to 94%
- Guaranteed 2A Output Current
- 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 AT1528 high-efficiency, DC/DC buck converter delivers up to 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 AT1528 ideal for on-board post-regulation applications.

The AT1528 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. Short-circuit and thermal-overload protections improve design reliability.

The AT1528 are available in a space-saving 8-pin SOP and MSOP package.

### **Ordering Information**

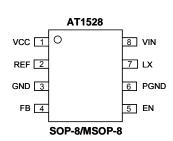
ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Green)
AT1528P11U	A1528	-40°C to +85°C	SOP-8
AT1528P81U	A1528	-40°C to +85°C	MSOP-8

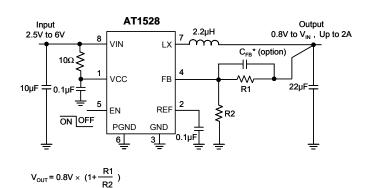
Note: P1:SOP-8 P8: MSOP-8

1: Bonding Code U: Tape & Reel

## **Pin Configuration**

## **Typical Application Circuit**





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# 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 AT1529 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 AT1529 ideal for on-board post-regulation applications.

The AT1529 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. Short-circuit and thermal-overload protections improve design reliability.

The AT1529 are available in a space-saving SOP-8 and TDFN3X3-8 package.

### **Ordering Information**

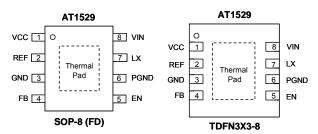
ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Green)
AT1529F11U	A1529	-40°C to +85°C	SOP-8 (FD)
AT1529RD1U	A1529	-40°C to +85°C	TDFN3X3-8

Note: F1:SOP-8 (FD) RD: TDFN3X3-8

1: Bonding Code U: Tape & Reel

## **Pin Configuration**

## **Typical Application Circuit**



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

