

# 300mA, High PSRR Low-Noise LDO

### DESCRIPTION

The EUP7917 is an efficient, CMOS voltage regulator optimized for ultra-low-noise applications. It offers high output accuracy, extremely low dropout voltage low ground current and fast start-up time. The EUP7917 provides a very low noise output, ideal for RF applications where a clean voltage source is required. A noise bypass pin is also available for further reduction of output noise.

Designed specifically for handheld and battery-powered devices, the EUP7917 provides a TTL-logic-compatible enable pin. When disabled, power consumption drops nearly to zero.

The EUP7917 also works with low-ESR ceramic capacitors, reducing the amount of board space necessary for power applications, critical in handheld wireless devices.

Available in the SC-70 and SOT23-5 package, the EUP7917 offers a wide range of output voltages. Key features include current limit, thermal shutdown and faster transient response.

### **FEATURES**

- Space-Saving 5-pin SC-70 Package
- 2.5V to 6V Input Voltage Range
- 50μV(rms) Output Noise
- 250mV Dropout @ 300mA
- 75dB PSRR at 1kHz
- Low 70μA Ground Current
- Up to 300mA Output Current
- Stability with 1µF Ceramic Output Capacitors
- Excellent Load/Line Transient
- Thermal Shutdown and Current Limit Protection
- Available in 1.2V,1.3V,1.5V,1.8V,1.85V,
  2.5V,2.8V,2.85V, 2.9V,3.0V,3.3V,3.5V,4.8V
  and Adjustable Voltages
- RoHS Compliant and 100% Lead (Pb)-Free

### **APPLICATIONS**

- Cellular Phones
- Bluetooth Portable Radios and Accessories
- PDA and Palmtop Computers
- Consumer/Personal Electronics

## **Block Diagram**

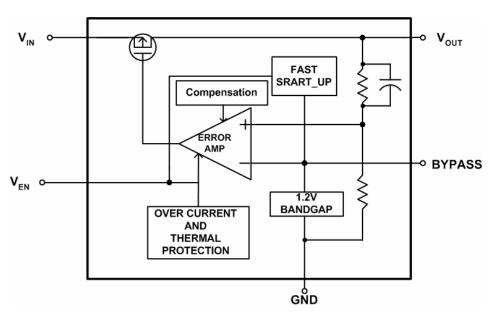


Figure 1.

