## 300 mA , 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 batterypowered 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
- 2.5 V to 6 V Input Voltage Range
- $50 \mu \mathrm{~V}(\mathrm{rms})$ Output Noise
- 250 mV Dropout @ 300mA
- 75 dB PSRR at 1 kHz
- Low $70 \mu \mathrm{~A}$ Ground Current
- Up to 300 mA Output Current
- Stability with $1 \mu \mathrm{~F}$ Ceramic Output Capacitors
- Excellent Load/Line Transient
- Thermal Shutdown and Current Limit Protection
- Available in $1.2 \mathrm{~V}, 1.3 \mathrm{~V}, 1.5 \mathrm{~V}, 1.8 \mathrm{~V}, 1.85 \mathrm{~V}$, $2.5 \mathrm{~V}, 2.8 \mathrm{~V}, 2.85 \mathrm{~V}, 2.9 \mathrm{~V}, 3.0 \mathrm{~V}, 3.3 \mathrm{~V}, 3.5 \mathrm{~V}, 4.8 \mathrm{~V}$ 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.

