

## Low-Noise, High-PSRR, 600mA LDO with PGOOD Indication

### DESCRIPTION

The EUP7908 is an efficient CMOS low dropout (LDO) voltage regulator optimized for ultra-low-noise applications. It offers high output accuracy, low dropout voltage and fast start-up time. The EUP7908 provides a very low noise output without a bypass capacitor, ideal for RF applications where a clean supply voltage source is required. Specifically designed for handheld and battery-powered devices, the EUP7908 provides a TTL-logic-compatible enable pin. When the EUP7908 is disabled, power consumption drops nearly to zero. Key features include current limit, thermal shutdown and faster transient response. The EUP7908 generates an open-drain PGOOD signal to monitor the output regulation.

The EUP7908 works with low-ESR ceramic capacitors. Available in 2mm × 2mm TDFN-6 package which reduces the amount of board space for power applications. The EUP7908 offers wide fixed output voltage versions.

### FEATURES

- 2.5V to 5.5V Input Voltage Range
- 30 $\mu$ V(rms) Output Noise
- 360mV Dropout @ 600mA
- 68dB PSRR at 1kHz No Bypass Capacitor
- Guaranteed 600mA Output Current
- Stable with a 2.2 $\mu$ F Ceramic Output Capacitor
- Excellent Load/Line Transient
- Power-Good Window Comparator
- Thermal Shutdown and Current Limit Protection
- Adjustable Output Voltage : 0.8V to 5V
- Auto-Discharge when Shutdown
- Available in 2mm × 2mm TDFN-6 Package
- RoHS Compliant and 100% Lead (Pb)-Free Halogen-Free

### APPLICATIONS

- Cellular Phones
- Camera Modules
- PDA and Palmtop Computers
- Consumer/Personal Electronics

### Typical Application Circuit

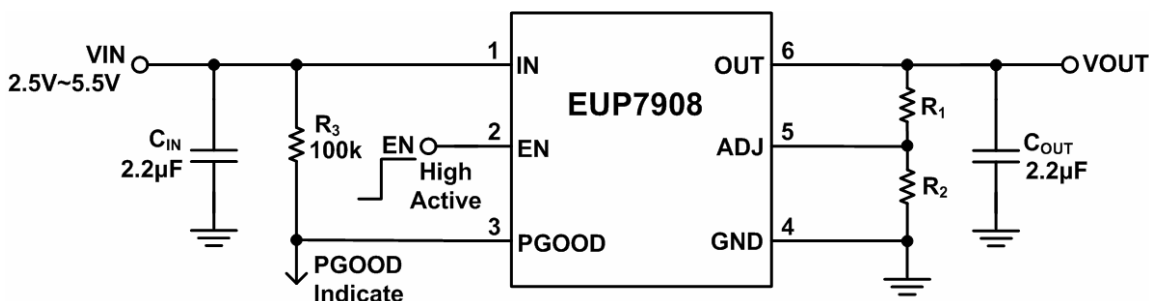


Figure 1.