



2A Ultra Low-Dropout Linear Regulator

DESCRIPTION

The EUP7962 is a 2A low-dropout linear regulator that provides a low voltage, high current output with a minimum of external components. It offers high precision, ultra-low dropout, and low ground current.

The EUP7962 operates from an input of 2.5V to 5.5V. This regulator uses small, 2.2 μ F ceramic input capacitors and 10 μ F ceramic output capacitors to deliver 2A output current. High bandwidth provides excellent transient response. It is designed to drive digital circuits requiring low voltage at high currents (i.e., PLDs, DSPs, microcontrollers, etc.).

Other features include thermal and current limit protection, a logic-control shutdown mode and an error flag output that goes low when the output voltage drops 10% below nominal value.

It is available in fixed output voltages of 1.5V, 1.8V, 2.5V, 3.3V and as an adjustable device with a 0.8V reference voltage. The adjustable output voltage can be set from 0.8V to 4.5V.

FEATURES

- 2A Guaranteed Output Current
- 600mV Dropout Voltage at 2A Output
- Stable with Ceramic Capacitors
- $\pm 1.8\%$ Output Voltage Accuracy
- 1mA Low-Ground Pin Current
- 0.1 μ A Quiescent Current in Shutdown Mode
- Excellent Line and Load Regulation
- Thermal Shutdown and Current Limit Protection
- Error Flag Indication
- Available in To-263, To-220 and SOP-8 (FD) Packages
- RoHS Compliant and 100% Lead (Pb)-Free

APPLICATIONS

- LDO Linear Regulator for Low-Voltage Digital IC
- PC Add-In Cards
- High Efficiency Linear Power Supplies
- Post Regulator

Typical Application Circuit

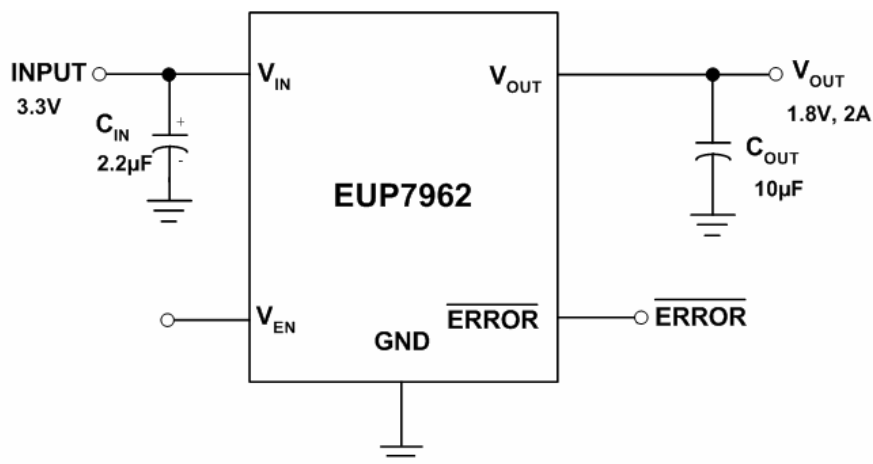


Figure1.