



LC1458

REV1.0-Revised DEC 2007

500mA High PSRR, Fast Response Linear Regulator

DESCRIPTION

LC1458 series is a group of positive voltage output, low power consumption, low dropout voltage regulator.

LC1458 can provide output value in the range of 1.2V~4.5V every 0.1V step. It also can be customized on command.

LC1458 includes high accuracy voltage reference, error amplifier, current limit circuit and output driver module with discharge capability.

LC1458 has excellent load and line transient response and good temperature characteristics, which can assure the stability of chip and power system. And it uses trimming technique to guarantee output voltage accuracy within $\pm 2\%$.

LC1458 is available in SOT23-3,SOT23-5,SOT89-3,TO92 packages which is lead free. It also can be available in these packages with lead.

ORDERING INFORMATION

LC1458 [1](#) [2](#) [3](#) [4](#) [5](#)

Code	Description
1	Temperature&Rohs: C:-40~85°C ,Pb Free Rohs Std.
2	Package type: B3:SOT-23-3 B5:SOT-23-5 C3:SOT-89-3 H:TO-92
3	Packing type: TR:Tape&Reel (Standard) BG:Bag(TO-92)
4	Output voltage: e.g. 12=1.2V 18=1.8V 45=4.5V
5	Voltage accuracy: Blank(default)= $\pm 2\%$

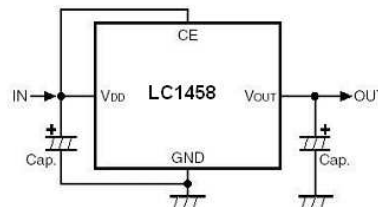
FEATURES

- Low Power Consumption: 75uA (Typ.)
- Low Output Noise (47uVRMS)
- Standby Mode: 0.1uA
- Low Dropout Voltage: 0.46V@500mA (Typ.)
- High Ripple Rejection: 66dB@100Hz (Typ.)
- Low Temperature Coefficient: $\pm 100\text{ppm}/^\circ\text{C}$
- Excellent Line Regulation: 0.05%/V
- Build-in Chip Enable and Discharge Circuit
- Output Voltage Range: 1.2V~4.5V (Customized on command every 0.1V step)
- Highly Accurate: $\pm 2\%$ ($\pm 1\%$ customized)
- Output Current Limit

APPLICATIONS

- Power Source for cellular phones and various kind of PCSs
- Battery Powered equipment
- Power Management of MP3, PDA, DSC, Mouse, PS2 Games

TYPICAL APPLICATION



NOTE: Input capacitor ($C_{in}=1\mu\text{F}$) and Output capacitor ($C_{out}=1\mu\text{F}/2.2\mu\text{F}$) are recommended in all application circuit.

PIN CONFIGURATION

