

General Description

The G6530 is a high performance positive voltage regulator designed for use in applications requiring very low Input voltage and very low dropout voltage at up to 3 amps. It operates with a V_{IN} as low as 1.6V and VPP voltage 5V with output voltage programmable as low as 0.8V. The G6530 features ultra low dropout, ideal for applications where V_{OUT} is very close to V_{IN} . Additionally, the G6530 has an enable pin to further reduce power dissipation while shutdown. The G6530 provides excellent regulation over variations in line, load and temperature. The G6530 provides a power OK signal to indicate if the voltage level of V_O reaches 92% of its rating value.

The G6530 is available in the power SOP-8PP package. It is available with 1.2V, 1.5V, 1.8V and 2.5V internally preset outputs that are also adjustable using external resistors.

Features

- Adjustable Output Low to 0.8V
- Input Voltage as Low as 1.6V and VPP Voltage 5V
- 240mV Dropout @ 3A
- Over Current and Over Temperature Protection
- Enable Pin
- Low Reverse Leakage (Output to Input)
- Power SOP8 –PP Packages with Thermal Pad
- $\pm 2\%$ Output Voltage
- V_O Power OK Signal
- 1.2V, 1.5V, 1.8V, 2.5V Options and Adjustable
- Externally Using Resistors
- V_O Pull Low Resistance when Disable

Applications

- Motherboards
- Peripheral Cards
- Network Cards
- Set Top Boxes
- Notebook Computers

Typical Application Circuit

