

5A Low Dropout Regulator with Enable

Features

- Adjustable Output Low to 0.8V
- Input Voltage as Low as 1.1V and VPP Voltage 5V
- 200mV Dropout @ 5A, VO 1.2V
- Over Current and Over Temperature Protection
- Enable Pin
- Low Reverse Leakage (Output to Input)
- Power SOP-8 (FD) Packages with Thermal Pad
- ±2% Output Voltage
- VO Power OK Signal
- VO Pull Low Resistance when Disable
- VO Soft Start when Enable

Applications

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

General Description

The G972 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 5 amps. It operates with VPP voltage 5V and output voltage programmable as low as 0.8V. The G972 features ultra low dropout, ideal for applications where V_{OUT} is very close to V_{IN} . Additionally, the G972 has an enable pin to further reduce power dissipation while shutdown. The G972 provides excellent regulation over variations in line, load and temperature. The G972 provides a power OK signal to indicate if the voltage level of VO reaches 92% of its rating value.

The G972 is available in the power SOP-8 (FD) package. It is adjustable using external resistors.

Ordering Information

ORDER	MARKING	TEMP.	PACKAGE
NUMBER		RANGE	(Green)
G972F11U	G972	-40°C~+85°C	SOP-8 (FD)

Note: F1: SOP-8 (FD) 1: Bonding Code U: Tape & Reel

Pin Configuration

VO 4

G972 GND 1 0 8 VEN ADJ 2 Thermal Pad 6 VPP

5 VIN

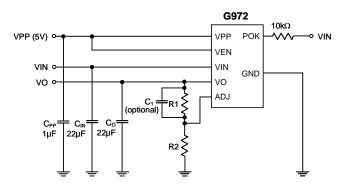
SOP-8 (FD)

* Thermal Pad can be connected to VIN

** Connect Thermal Pad to ground plate will have better thermal performance

Top View

Typical Application Circuit



1. VO = $\frac{0.8 \text{ (R1+R2)}}{\text{R2}}$ Volts, R2<120k Ω is recommended

2. C₁ is not necessary. VO is also stable if C₁ = 22pF~150pF