

SGC76050_IP007706_GF_22FDX

LDO – DIFFERENTIAL FEEDBACK REGULATOR

Features

- Differential Feedback Capless Linear Regulator (LDO)
- External capacitor option
- Power good detector
- Fast transient response
- Output current up to 50mA
- Soft start and over current protection
- Large input voltage range, from 1.20V to 1.98V
- Programmable output voltage range, from 0.60V to 0.84V

General Description

SGC76050_IP007706_GF_22FDX is a low-dropout, fast response, differential feedback linear regulator for integration on SoC. Offering low quiescent, it presents high power supply rejection (PSR), high stability, excellent transient response and robust regulation. Additionally, the differential feedback allows compensation of ground offsets. The SGC76050_IP007706_GF_22FDX is stable without the need for any external capacitor but it also has the option to be used with one. Being specified from $T_J = -40^{\circ}\text{C}$ to $+125^{\circ}\text{C}$, it is designed to achieve 4% overall accuracy (over Load / Line / Temp / Process).

Applications

- SoC
- Automotive

Quick Reference

SYMBOL	DESCRIPTION	MIN	TYP	MAX	UNIT
V_{IN}	Input Voltage	1.20	-	1.98	V
V_{DVDD}	Digital Voltage	0.60	-	0.90	V
V_O	Out Voltage	0.60	0.80	0.84	V
I_O	Output Current	0	-	50	mA
V_{FBGND}	Feedback Ground	-100	-	100	mV

Application Diagram