

## Features

- LDO general purpose Low-Dropout regulator
- Large input range, from 1.35 V to 4.6 V
- Large output range, from 0.6 V to 4.0 V
- Available with eight output current ranges from 50 mA to 500 mA
- Power good detector
- Fast transient response
- Soft start and over current protection

## General Description

LDO: The SGC77 is a low-dropout, high current, fast response, low quiescent linear regulator IP solution for integration on SoC offers high stability and robust regulation, making it ideal for both analog and digital loads. Additionally it also offers good power supply rejection (PSRR), soft start, and over current protection with fold-back power dissipation protection. The IP uses advanced control techniques to achieve excellent transient response and still maintain low dropout and low quiescent. The SGC77 family is stable with a 1  $\mu\text{F}$  to 3.3  $\mu\text{F}$  ceramic output capacitors but the robust architecture allows lower capacitor values at customer request. It is specified from  $T_J = -40\text{ }^\circ\text{C}$  to  $+125\text{ }^\circ\text{C}$  and is designed to achieve 3 % overall accuracy (over Load/Line/Temp)

## Applications

## Quick Reference

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