

SGC77100\_GF\_22FDSOI

## LDO WITH ULP LUDICROUS MODE

### Features

- Low-Dropout Regulator (LDO) with enable
- Ludicrous Low Power Mode
- Power good detector
- Fast transient response
- Soft start and over current protection
- Input voltage range from 1.80V to 5.50V
- Programmable output voltage range from 0.56V to 0.90V
- Output current up to 100mA

### Applications

- SoC
- IoT

### Applications Diagram

### General Description

*SGC77100\_GF\_22FDSOI* is a low-dropout, high current, fast response linear regulator for integration on SoC. Presenting high stability and robust regulation, while maintaining low dropout and ultra low quiescent, it is the ideal solution for IoT applications. Offering good PSRR, soft start and over current protection, the *SGC77100\_GF\_22FDSOI* provides an innovative *Ludicrous Ultra Low Power Mode* that guarantees a quiescent reduction, with the load down, to virtually "0" quiescent. Being specified from  $T_J = -40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ , it is designed to achieve 3% overall accuracy (over Load / Line / Temp).

### Quick Reference

| SYMBOL     | DESCRIPTION  | MIN  | TYP  | MAX  | UNIT |
|------------|--------------|------|------|------|------|
| $V_{IN}$   | Input Sup.   | 1.80 | —    | 5.50 | V    |
| $V_{DVDD}$ | Digital Sup. | 0.50 | —    | 1.20 | V    |
| $V_O$      | Normal Vout  | 0.56 | 0.80 | 0.90 | V    |
| $V_O$      | ULP Vout     | 0.50 | —    | 0.90 | V    |
| $I_O$      | Out Current  | 0    | —    | 100  | mA   |