

## LDO WITH ULP LUDICROUS MODE

### Features

- Low-Dropout Regulator (LDO) with enable
- *Ludicrous Low Power Mode*
- Power good detector
- Fast transient response
- Output current up to 100mA
- Soft start and over current protection
- Large input voltage range, from 1.80V to 5.50V
- Programmable output voltage range, from 1.0V to 2.0V

### Applications

- SoC
- IoT

### Applications Diagram

### General Description

*SGC77100\_01\_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\_01\_GF\_22FDSOI* provides an innovative *Ludicrous Ultra Low Power Mode* that guarantees a quiescent reduction 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	1.0	1.80	2.0	V
$V_O$	ULP Vout	1.0	—	2.0	V
$I_O$	Out Current	0	—	100	mA