

## 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 50mA
- Soft start and over current protection
- Large input voltage range, from 1.80V to 5.50V
- Programmable output voltage range, from 1.50V to 2.00V

### General Description

SGC77050\_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 SGC77050\_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).

### Applications

- SoC
- IoT

### 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 $V_{OUT}$	1.50	1.80	2.00	V
$V_O$	ULP $V_{OUT}$	1.00	-	2.00	V
$I_O$	Out Current	0	-	50	mA