

SGC75002_01_TSMC_CM018MG

LDO – CAPLESS FAST RESPONSE REGULATOR

Features

- *Low-Dropout* (LDO) capless regulator with enable
- Power good detector
- Fast transient response
- Soft start and over current protection
- Large input voltage range, from 2.4V to 5.5V
- Programmable output voltage range from 1.8V to 3.3V
- Output current: 2mA

Applications

- SoC
- IoT

Applications Diagram

General Description

SGC75002_01_TSMC_CM018MG is a low-dropout (LDO), fast response and low quiescent capless regulator for integration on SoC. It presents excellent transient response while offering high stability, robust regulation, excellent PSRR, soft start and over current protection. The *SGC75002_01_TSMC_CM018MG* can be found as an isolated IP or integrated in PMUs (as for example in *SGCPMU_01_TSMC_CM018MG*), being specified from $T_J = -40^{\circ}\text{C}$ to $+125^{\circ}\text{C}$ and designed to achieve 3% overall accuracy (over Load / Line / Temp).

Quick Reference

SYMBOL	DESCRIPTION	MIN	TYP	MAX	UNIT
V_{IN}	Input Sup.	2.4	—	5.5	V
V_{AVDD}	Analog Sup.	1.3	—	2.0	V
V_{DVDD}	Digital Sup.	1.4	—	2.0	V
V_O	Out Voltage	1.8	—	3.3	V
I_O	Out Current	0	—	2	mA