

SGC21412\_TSMC\_16FFC

## APC - ADV POWER CONTROLLER W POR

### Features

- DC-DC PWM BUCK ultra fast response high power
- Seamless auto switching between PWM/VFM
- Available in multiple output versions: fixed and 4-8 bit programmable
- Available with seven output current ranges: from 300 mA to 3.0 A
- Wide input voltage range: 1.8 V to 5.5 V
- Small 1 uH inductor
- Soft start and overcurrent protection
- Power good comparator and flag

### Applications

### Applications Diagram

### General Description

**POR Power on Reset:** The SGC21412\_TSMC\_16FFC is an Advanced Power Controller for integration in SoC. It is a configurable core, delivering all the necessary auxiliary supply, monitoring, protection and POR functions. The APC is the backbone for a Power Management Unit (PMU). It offers high power rejection (PSRR), start-up sequencing and independent voltage reference decoupling without the need for extra package pins. All generated references include digital trimming for increased performance or yield improvement. The SGC21412\_TSMC\_FFC does not require any external decoupling capacitor. It is specified from  $T_j = -40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$  and is designed to achieve 1% overall voltage reference accuracy (over Load/Line/Temp/Process).

### Quick Reference

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