

SGC47020_01_TSMC_CV018MH

BUCK-BOOST MULTIPLE OUTPUT CHARGE PUMP

Features

- Fully integrated charge pump without external components
- No external clock required
- 6 independent outputs (from $1/3 \cdot V_I$ up to $2 \cdot V_I$)
- Soft start and over current protection
- Output current up to 4mA (per output)
- Power good flag

General Description

SGC47020_01_TSMC_CV018MH is a multiple output buck-boost charge pump capable of providing 6 different voltage output conversion ratios. Making use of advanced control techniques, the IP maximizes efficiency, for a wide range of loads, while presenting a voltage drop lower than 5% for all outputs. The IP can operate without requiring external components or clock. The *SGC47020_01_TSMC_CV018MH* is specified from $T_J = -40^\circ\text{C}$ to $+125^\circ\text{C}$.

Applications

- SoC
- Portable applications

Quick Reference

SYMBOL	DESCRIPTION	MIN	TYP	MAX	UNIT
V_{IN}	Input Sup.	4.50	—	4.70	V
V_{DVDD}	Digital Sup.	1.62	—	1.98	V
I_O	I per Output	—	—	4.0	mA

Applications Diagram