

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