

Power Management IC for Mobile Phone

BD6024FV

● Description

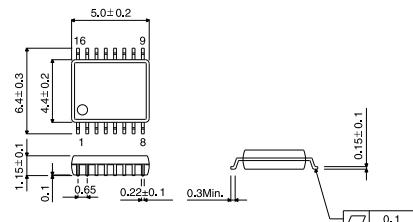
BD6024FV incorporates 1channel of negative output regulator and 2channels of positive output regulators. The output level of this negative output regulator, VON can be adjusted along the following equation.
 $V_{ON} = -1.6 \times REG3IN$

2channels positive output regulators have each own ON/OFF control terminal and can be turn on or off by the signal from outside.

● Features

- 1channel of adjustable negative output regulator.
- 2channels of low drop out positive output regulators.
(with ON/OFF Control terminal.)
- Power supply voltage : 3.1 to 4.5V
- SSOP-B16 package.

● Dimension (Unit : mm)



SSOP-B16

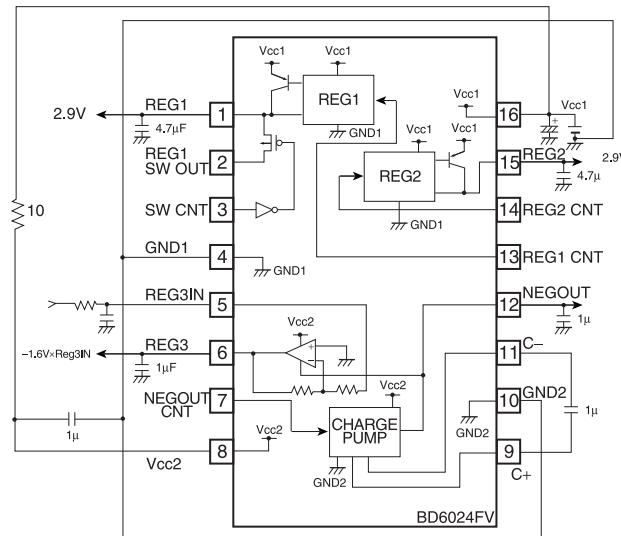
● Electrical characteristics

(Unless otherwise noted; Ta=25°C, Vcc=3.6V, BPF=20 to 20kHz when AC test)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Circuit current 1	IQ1	–	240	480	µA	REG1 ON, No load REG2 ON, No load (REG1_CNT: H, REG2_CNT: H, NEGOT_CNT: L)
Circuit current 2	IQ2	–	0.45	3.0	mA	Negative voltage REG ON, No load (REG1_CNT: L, REG2_CNT: L, NEGOT_CNT: H)
Negative voltage REG block						
Output voltage *	VON	–2.56	–2.50	–2.44	V	REG3IN=1.563V, Io=3mA
Load stability	ΔVOLN	–	5	40	mV	Io=0 to 5mA
Charge-pump						
Oscillator frequency	FOSC	–	120	–	kHz	
REG1 block						
Output voltage	VO1	2.84	2.9	2.96	V	Io=30mA
Load stability	ΔVOL1	–	20	50	mV	Io=1 to 60mA
REG2 block						
Output voltage	VO2	2.84	2.9	2.96	V	Io=55mA
Load stability	ΔVOL2	–	25	50	mV	Io=1 to 100mA

* Output voltage $V_{ON} = -1.6 \times REG3IN$

Application Circuit



Appendix

Notes

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