

Power Management IC for Mobile Phone

BD6024FV

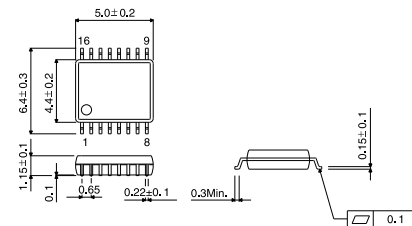
Description

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.
 $VON = -1.6 \times REG3IN$
 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

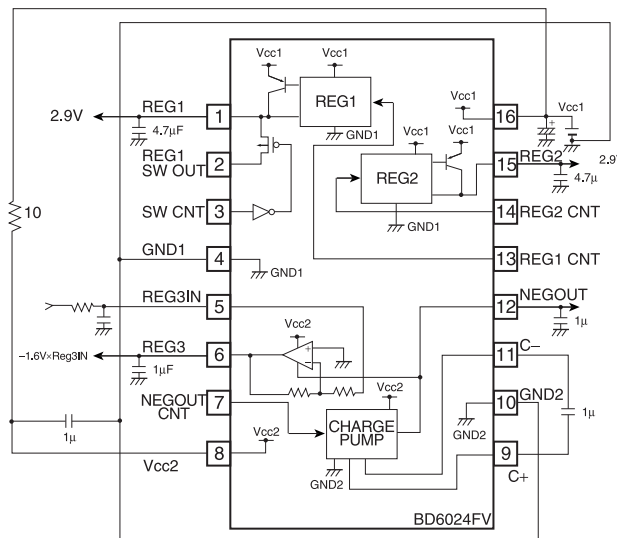
Electrical characteristics

(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 $VON = -1.6 \times REG3IN$

Application Circuit



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