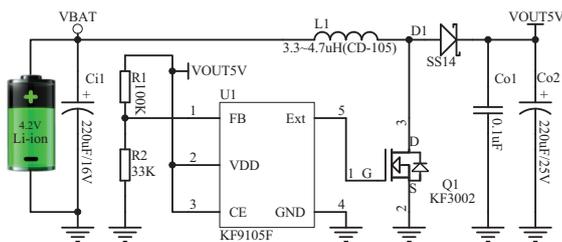


Ultra-small package PWM / PFM switching control step-up controller

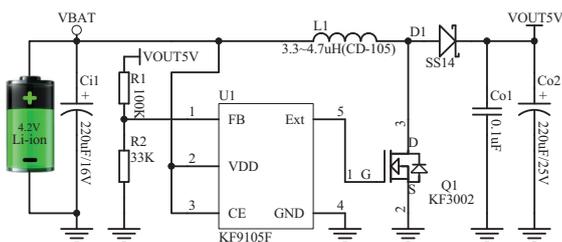
Description

The KF9105 series is a CMOS step-up switching regulator which mainly consists of a reference voltage source, an oscillation circuit, an error amplifier, a phase compensation circuit, a PWM/PFM switching control circuit. With an external low-ON-resistance Nch Power MOS, this product is applicable to applications requiring high efficiency and high output current. The KF9105 series switches its operation to the PFM control circuit whose duty ratio is 15 % with to the PWM/PFM switching control circuit under a light load and to prevent decline in the efficiency by IC operation current.

Typical Application Circuit



For FB and external 1



For FB and external 2

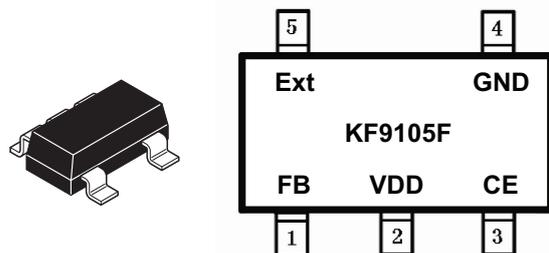
Feature

- Low voltage operation: Start-up is guaranteed from 0.9 V ($I_{OUT} = 1 \text{ mA}$)
- Efficiency: 90%
- Duty ratio: Built-in PWM/PFM switching control circuit 15 to 78 % .
- oscillator frequency: 1.0MHz
- External parts: coil, diode, capacitor, and transistor
- Output voltage range: 1.5V ~6.5 V
- Output voltage accuracy: $\pm 2\%$
- Soft start function: 2 mS.
- PACKAGE: SOT23-5

Typical Application

- Iphone, IPAD, mobile back-up power
- MP3 players, digital audio players
- Digital cameras, GPS, wireless transceiver
- Portable devices

Pin information:



KF9105F :

Pin Number	Pin Name	Function
1	FB	Feed Back voltage pin
2	VDD	IC power supply pin
3	CE	Shutdown pin
4	GND	GND pin
5	EXT	External transistor connection pin