

## ■ GENERAL DESCRIPTION

The AS5410 is a high efficiency step-down DC-DC converter. It features with extreme low quiescent current with no load which is the best fit for extending battery life during the standby mode.

The device operates from 2.5V to 5.5V input voltage and up to 1A output current capability. High 1.5MHz internal frequency makes small surface mount inductors and capacitors possible and reduces overall PCB board space. It build-in synchronous switch makes external schottky diode is no longer needed and efficiency is improved. AS5410 is designed base on pulse width modulation(PWM) for low output voltage ripple and fixed frequency noise, while pulse frequency modulation(PFM) is used to improve light load efficiency, and low dropout mode provides 100% duty cycle operation. Low reference voltage is designed for achieving regulated output down to 0.6V.

## ■ FEATURES

- ◆ Up to 97% efficiency
- ◆ Input voltage: 2.5V to 5.5V
- ◆ Output Current up to 1A
- ◆ Reference voltage 0.6V
- ◆ Quiescent current 15uA with no load
- ◆ Internal switching frequency 1.5MHz
- ◆ No schottky diode needed
- ◆ Low Dropout Operation: 100% duty cycle
- ◆ Shutdown current <1uA
- ◆ Over-temperature protection

## ■ APPLICATION

- ◆ Blue-tooth devices
- ◆ Cellular and smart phone
- ◆ PMP and Digital Still Cameras
- ◆ Wireless networking
- ◆ Portable application

## ■ TYPICAL APPLICATION

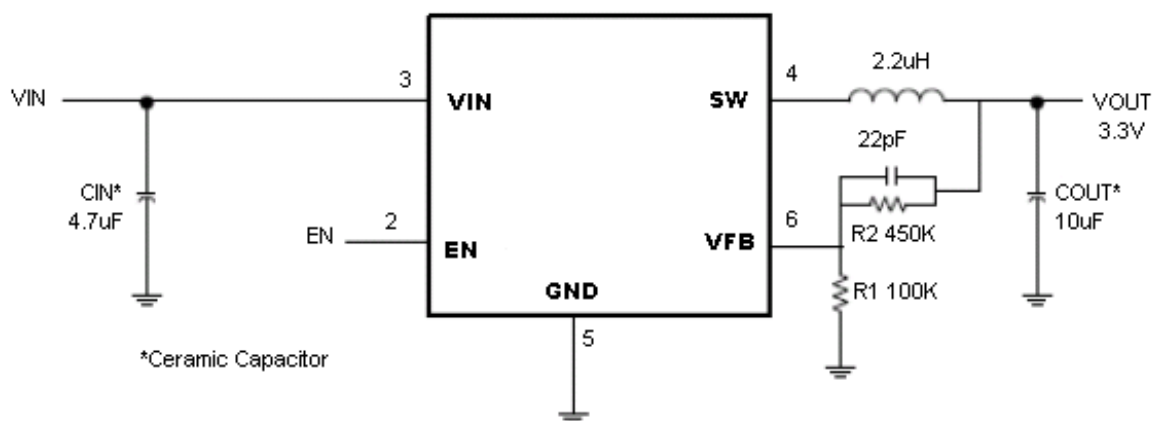


Fig.1