

## General Description

The AS5430A is a wide input range, high-efficiency, DC-to-DC step-down switching regulator, capable of delivering up to 3A of output current. Current mode PWM control allows the use of small external components, such as ceramic input and output caps, as well as small inductors, while still providing low output ripples. On top of the integrated internal synchronous rectifier that eliminates external Schottky diode, AS5430A also employs a proprietary control scheme that switches the device into a power save mode during light load, thereby extending the range of high efficiency operation.

Therefore, AS5430A is a much superior solution in comparison to other competitions in terms of efficiency and cost. Overall, AS5430A is a highly efficient and robust solution for DC-DC step-down applications that requires wide input ranges.

## Features

- ◆ Wide Input Operating Range from 4.5V to 18V
- ◆ High Efficiency: Up to 90% at Light Load
- ◆ Capable of Delivering 3A
- ◆ No External Schottky Diode Needed
- ◆ 0.923V Reference for Low Output voltages
- ◆ Logic Control Shutdown
- ◆ Current Mode control
- ◆ Thermal shutdown and UVLO
- ◆ Available in ESOP8 Package

## Applications

- ◆ Notebook computers
- ◆ FPGA power supplies
- ◆ LCD TVs
- ◆ LED drivers
- ◆ Set-Top-Box

## Typical Application

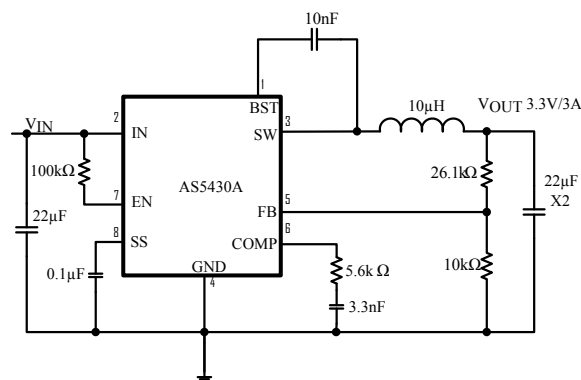


Figure1. Typical Application Circuit