

General Description

The AS5428 is a high efficiency synchronous buck DC-DC converter. Its input voltage range is from 3.6V to 5.5V and provides an adjustable regulated output voltage from 0.8V to V_{IN} while delivering up to 3A of output current.

The external programmable frequency and compensation network of the AS5428 enable system designers to make trade off according to different requirements such as board space, output transient response and efficiency. Internal soft-start control circuitry reduces inrush current. Short circuit and thermal overload protection improves design reliability.

The AS5428 is available in the DFN3X3-10 and SOP8 package.

Features

- ◆ Up to 95% efficiency
- ◆ Input voltage: 3.6V to 5.5V
- ◆ Maximum Output Current: 3A
- ◆ Output Voltage: 0.8V to V_{IN}
- ◆ Up to 3MHz Switching Frequency.
- ◆ 100% Duty Operation
- ◆ Low Noise PWM Control
- ◆ Programmable Frequency and Compensation Network
- ◆ Logic Control Shutdown: <1uA
- ◆ Thermal Shutdown and UVLO

Applications

- ◆ LCD Monitor and LCD TV
- ◆ LED Driver
- ◆ Networking and Telecommunications
- ◆ 3G and Smart Phone
- ◆ USB Supplied Devices in NB

Typical Application

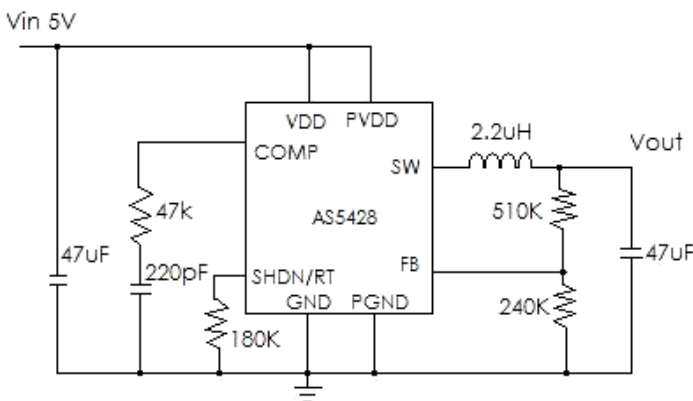


Fig.1

