



High voltage step-down Synchronous Converter (DC-DC)

1 Main features:

- ◆ The conversion efficiency can reach 96%
- ◆ Reference voltage 0.8V
- ◆ 2A current output
- ◆ 500KHz fixed frequency
- ◆ Good current control mode
- ◆ 4.5V-16V input voltage
- ◆ Integrated internal compensation
- ◆ Short circuit protection
- ◆ Internal failure protection
- ◆ Pulse current limit and soft start
- ◆ SOT23-6 package

2 Typical application

- ◆ Broadband communication system
- ◆ Distributed power system
- ◆ Flat panel TV and monitor
- ◆ Wireless and DSL modems
- ◆ Laptop

3 Product description

The HL1470 is an integrated, efficient 2A synchronous rectifier buck converter. The HL1470 has high efficiency over a wide range of load currents.

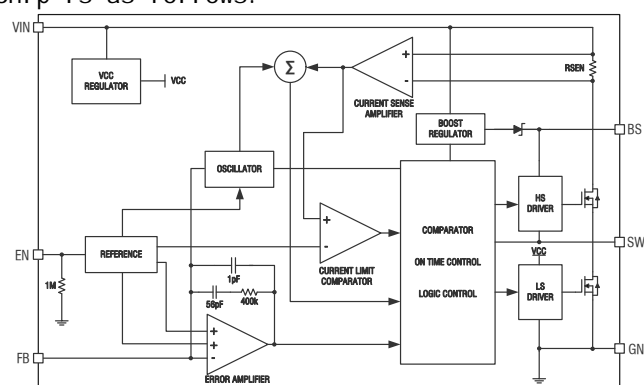
5 Compared with similar foreign products

	Input voltage range	Maximum output current	Static current	Turn-off current	Soft-start capacitance	Switching tube impedance	Encapsulation form
MP1470	4.5V~16V	2A	830uA	1uA	Need	163mΩ/86mΩ	SOT23-6
HL1470	4.5V~21V	2A	600uA	1uA	No	90mΩ/70mΩ	SOT23-6

The device offers two operating modes, PWM and PFM mode switching control, which enables high efficiency over a wide load range.

The HL1470 requires minimal external components and is packaged in a 6-pin SOT23 RoHS package. Ensures good output linearity over a wide frequency range.

The internal structure block diagram of the chip is as follows:



4 Product highlights

- ◆ The output 2A current can be achieved with fewer external components.
- ◆ Built-in compensation circuit.
- ◆ With complete overcurrent short circuit protection function.
- ◆ Excellent soft start function.