



High Voltage Boost Converter (DC-DC)

1 Main features:

- ◆ 85% efficiency
- ◆ Internal integration 0.5Ω power MOS
- ◆ Static current 40uA
- ◆ 1.2MHz fixed frequency
- ◆ 2.5V-5.5V input voltage
- ◆ The output voltage is adjustable
- ◆ Internal 1.5A current limit
- ◆ Internal compensation
- ◆ FB voltage is 1.2V/1.23V/1.25V
- ◆ Package: SOT23-5

2 Typical application

- ◆ OLED bias
- ◆ LCD bias
- ◆ White LED driver
- ◆ PDAS

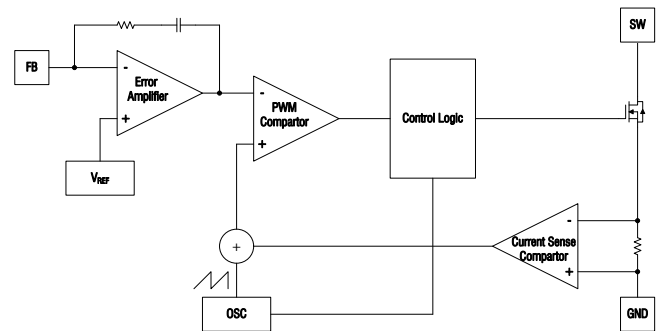
3 产品描述

The HL3540 is a fixed frequency, internal soft start with a small pulse current to extend battery life. The HL3540 has a minimum input voltage of 2.5V and can be boosted to 28V at an input voltage of 5V 100mA.

5 Compared with similar foreign products

	Input voltage range	Maximum input peak current	Static current	Turn-off current	Maximum output voltage	Switching tube impedance	Encapsulation form
MP1540	2.5V~6V	1.9A	635uA	0.1uA	18	650mΩ	SOT23-5
HL3540	2.2V~5.5V	1.5A	40uA	0.1uA	28	500mΩ	SOT23-5

The HL3540 automatically switches to pulse frequency modulation mode under light load. The HL3540 has undervoltage locking, current limiting and thermal overload protection. The internal structure block diagram of the chip is as follows:



4 Product highlights

- ◆ Less external components can reach the input peak current 1.5A
- ◆ Built-in compensation circuit
- ◆ With complete overtemperature protection function
- ◆ With excellent soft start function