



High Voltage Boost Converter (DC-DC)

1 Main feature

- ◆ 93% efficiency
- ◆ Internal integration 80mΩ power MOS
- ◆ 1.2MHz fixed frequency
- ◆ 2V-24V input voltage
- ◆ The output voltage is adjustable
- ◆ Internal 4A traffic limit
- ◆ Internal compensation
- ◆ Maximum output voltage 28V

2 Typical application

- ◆ Battery equipment
- ◆ LCD bias
- ◆ Set-top box
- ◆ Router
- ◆ PCI card driver and PCI slot

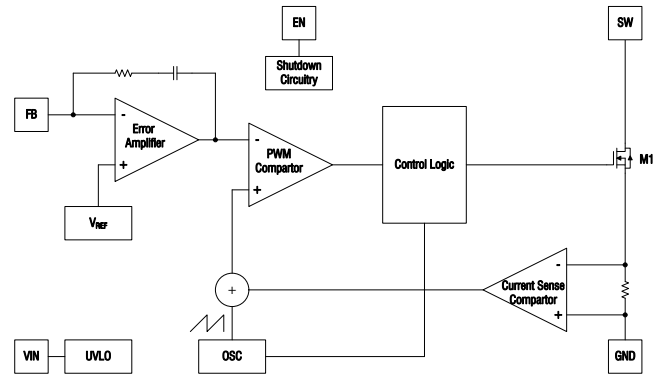
3 Product description

The HL3608 is a fixed frequency, internal soft start with a small pulse current to extend battery life. The HL3608 1.2MHz conversion frequency allows for the use of small and low-cost capacitors, inductance height can be less than 2mm,

5 Compared with similar foreign products

| | Input voltage range | Maximum input peak current | Static current | Turn-off current | Soft-start capacitance | Switching tube impedance | Encapsulation form |
|------------------|---------------------|----------------------------|----------------|------------------|------------------------|--------------------------|--------------------|
| SY7208 (Silergy) | 3V~25V | 2.6A | 100uA | 1uA | No | 200mΩ | SOT23-6 |
| HL3608 | 2V~24V | 4A | 100uA | 0.1uA | No | 80mΩ | SOT23-6 |

and the HL3608 automatically switches to pulse frequency modulation mode at light loads. The HL3608 has undervoltage lock, current limiting and thermal overload protection. The internal structure block diagram of the chip is as follows:



4 Product highlights

- ◆ Fewer external components can reach the input peak current 4A.
- ◆ Built-in compensation circuit.
- ◆ It has complete overtemperature protection function.
- ◆ With excellent soft start function.