DC-DC Step-Up Converter Output 5V-35V



What is a DC-DC Step-Up Converter?

A DC-DC boost converter step-up power module with high-precision potentiometer, and it uses XL6009E1 with the second generation of high-frequency switching technology as core chip, so that its performance is much higher than the first-generation technology LM2577. With high switching frequency of 400KHz, even small-capacity filter capacitors can bring with very nice results, while the ripple is less and the is smaller.

Specifications

- •Wide input voltage 3V ~ 32V
- (optimum operating voltage range is $5 \sim 32V$)
- •Wide output voltage 5V ~ 35V
- •Built in 4A efficient MOSFET switch, so that the efficiency up to 94% (LM2577 current is only 3A)
- •Ultra-high switching frequency 400KHz, you can use a small-capacity filter capacitors that can achieve very good results, the ripple is smaller and smaller. (LM2577 frequency only 50KHz)

Features

- •Model: XL6009 boost module
- •Module Properties: non-isolated step-up (BOOST)
- •Rectification: Non-Synchronous Rectification
- •Input range: 3V ~ 32V
- •Output range: 5V ~ 35V
- •Input Current: 4A (max), empty load current 18mA (5V input, 8V output, empty load current 18mA, the higher the voltage, the greater the empty load current.)
- •Conversion efficiency: <94% (the greater the pressure, the lower the efficiency)
- •Switching Frequency: 400KHz
- •Output ripple: 50mV (the higher the voltage, the greater the current, the greater the ripple)
- •Load regulation: ± 0.5%
- •Voltage regulation: ± 0.5%
- •Working temperature: -40 ~ +85
- •Dimensions: 43mm * 21mm * 14mm (L * W * H)

