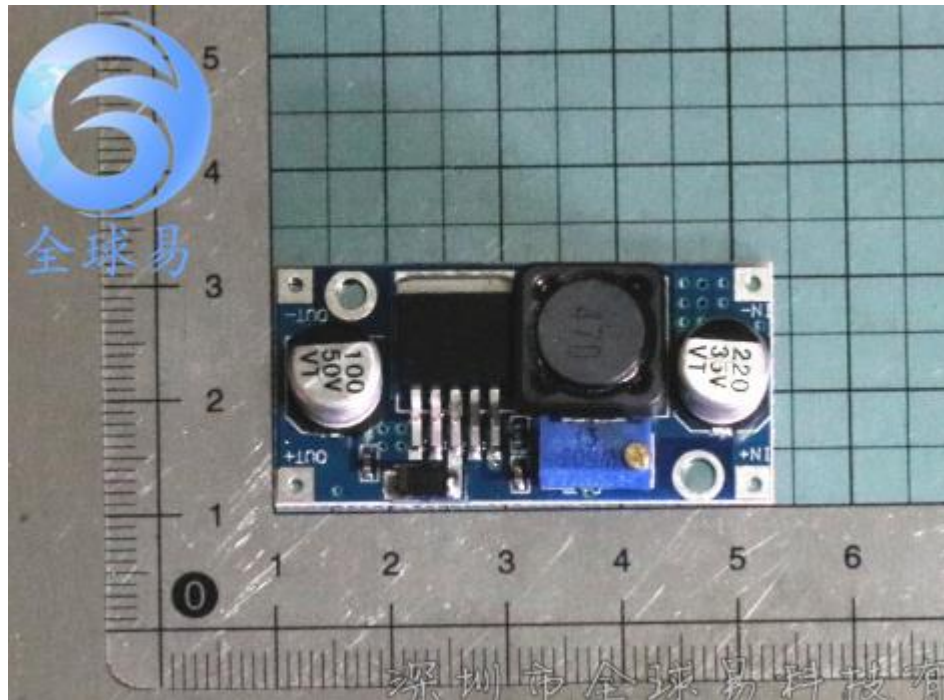


[https://detail.1688.com/offer/538795195723.html?spm=a2615.7691456.co\\_0\\_0\\_wa\\_ngpu\\_score\\_0\\_0\\_0\\_0\\_1\\_0\\_0000\\_0.0](https://detail.1688.com/offer/538795195723.html?spm=a2615.7691456.co_0_0_wa_ngpu_score_0_0_0_0_1_0_0000_0.0)



The XL6009/XL6019 is a high performance BOOST (BOOST) module with 4A switching current. The module uses XL6009E1/XL6019E1 of the second generation of high-frequency switching technology as the core chip, and the performance is far superior to that of LM2577 of the generation technology. The XL6009/XL6019 booster module has lower cost and better performance, and the LM2577 module is about to be phased out.

- Ultra-wide input voltage 3V~32V, the best working voltage range is 5~32V;  
Ultra-wide output voltage 5V~35V;
- Built-in 4AMOSFET switch tube, making the efficiency up to 94%; (Current of LM2577 is only 3A)
- Switching frequency 400KHz, can use small capacity of filter capacitance that can be very good effect, ripple smaller, smaller volume. (LM2577 frequency is only 50KHz)

### Technical parameters:

Model Specifications	XL6009 / <b>XL6019</b> boost module
Module properties	Non-isolated boost ( BOOST )
Mode of rectification	Non-Synchronous Rectification
Input range	3V~32V
Output range	5V~35V
Input current	4A (large), no-load 18mA (5V input, 8V output, no-load less than 18mA. The higher the voltage, the greater the no-load current.
Transfer efficiency	<94% ( The higher the pressure difference, the lower the efficiency )
Switching frequency	400KHz
Output ripple	50mV ( The higher the voltage, the higher the current and the larger the ripple )
Load regulation	±0.5%
Voltage regulation factor	±0.5%
Working temperature	-40°C ~ +85°C
Dimensions	43mm * 21mm * 14mm ( Length * width * height )

IN+ input positive IN- input negative!

OUT+ output positive OUT- output negative

Test comparison sample reference:

Input 5V Output 12V 0.8A 9.6W

Input 7.4V Output 12V 1.18W

Input 12V output 15V 2A 30W

Input 12V output 16V 2A 32W

Input 12V Output 18V 1.6A 28.8W

Input 12V output 19V 1.28.5 W

Input 12V Output 24V 1 A 24W

Input 3V Output 12V 0.4A 4.8W

$V_{in} * I_{in} * \text{Efficiency} = V_{out} * I_{out}$

Vin: Input voltage

Iin: indicates the input current

Vout: output voltage

Iout: indicates the output current

For example:

Enter 5V, 1A

Output 10V, 0.4

Efficiency 90%

$$5 * 1 * 90\% = 10 * 0.4$$