



**AA103**

**Used Chip XL6009 DC-DC Booster**

**Step-Up Module**

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# Preface

## Our Company

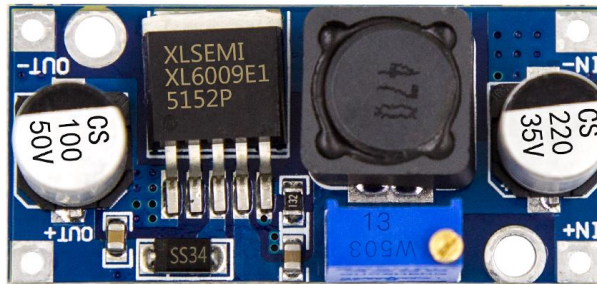
KUONGSHUN Electronic Company is a supplier and manufacturer of electronic components, it is committed to board and starter kit for Arduino, Raspberry PI, Smart Robot Car, 3D printer. It is also a collection of scientific research, design, production, maintenance and sales of high-tech enterprises, in the field of automation with professional standards and mature technology, we rapid rise in the field of foreign trade.

Relying on technology and development, continuing to provide users with high-tech products, is our constant pursuit. Fully introduction of foreign advanced technology to enhance the value of our products.

Company gains users' praise for supplying first-class quality product and superb technical services, has now become the first choice of domestic and international procurement company.

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## AA103 Used Chip XL6009 DC-DC Booster Step-Up Module



### Product Description

This is a high performance BOOST module with 4A switching current. The module utilizes the XL6009E1, a second generation high-frequency switching technology, as the core chip for excellent performance. The module features ultra-wide input voltage, ultra-wide output voltage, and also has a built-in 4A high efficiency MOSFET switching tube, which makes the efficiency up to 94%. At the same time, the module's switching frequency of 400KHz, you can use a small capacity filter capacitor that can achieve very good results, smaller ripple, smaller volume.

### Product Parameters

Module nature: non-isolated boost (BOOST)

Rectification method: non-synchronous rectification

Input range: DC 3V~32V (the best working voltage range is DC 5-32V)

Output range: DC 5V~45V

Input Current: 4A(Max), No-load 18mA(5V input, 8V output, no-load less than 18mA. The higher the voltage, the higher the no-load current)

Output current: 4A(max)

Conversion efficiency: <94% (The higher the differential voltage, the lower the efficiency)

Switching frequency: 400KHz

Output ripple: 50mV (the higher the voltage, the higher the current, the higher the ripple)

Load adjustment rate:  $\pm 0.5\%$

Voltage Adjustment Rate:  $\pm 0.5\%$

Operating temperature:  $-40^{\circ}\text{C}\sim+85^{\circ}\text{C}$  (ambient temperature over  $40^{\circ}\text{C}$ , please reduce the power to use, or strengthen the heat dissipation)

Overall Dimension: 43mm\*21mm\*14mm(L\*W\*H)

### Usage

1, IN+ Input positive pole IN- Input negative pole

2, OUT+ Output positive pole OUT- Output negative pole

3, The module is an adjustable boost module, you can adjust the module above the adjustable potentiometer to change the output voltage. The maximum output voltage is DC 45V, clockwise turn buck, counterclockwise turn boost.