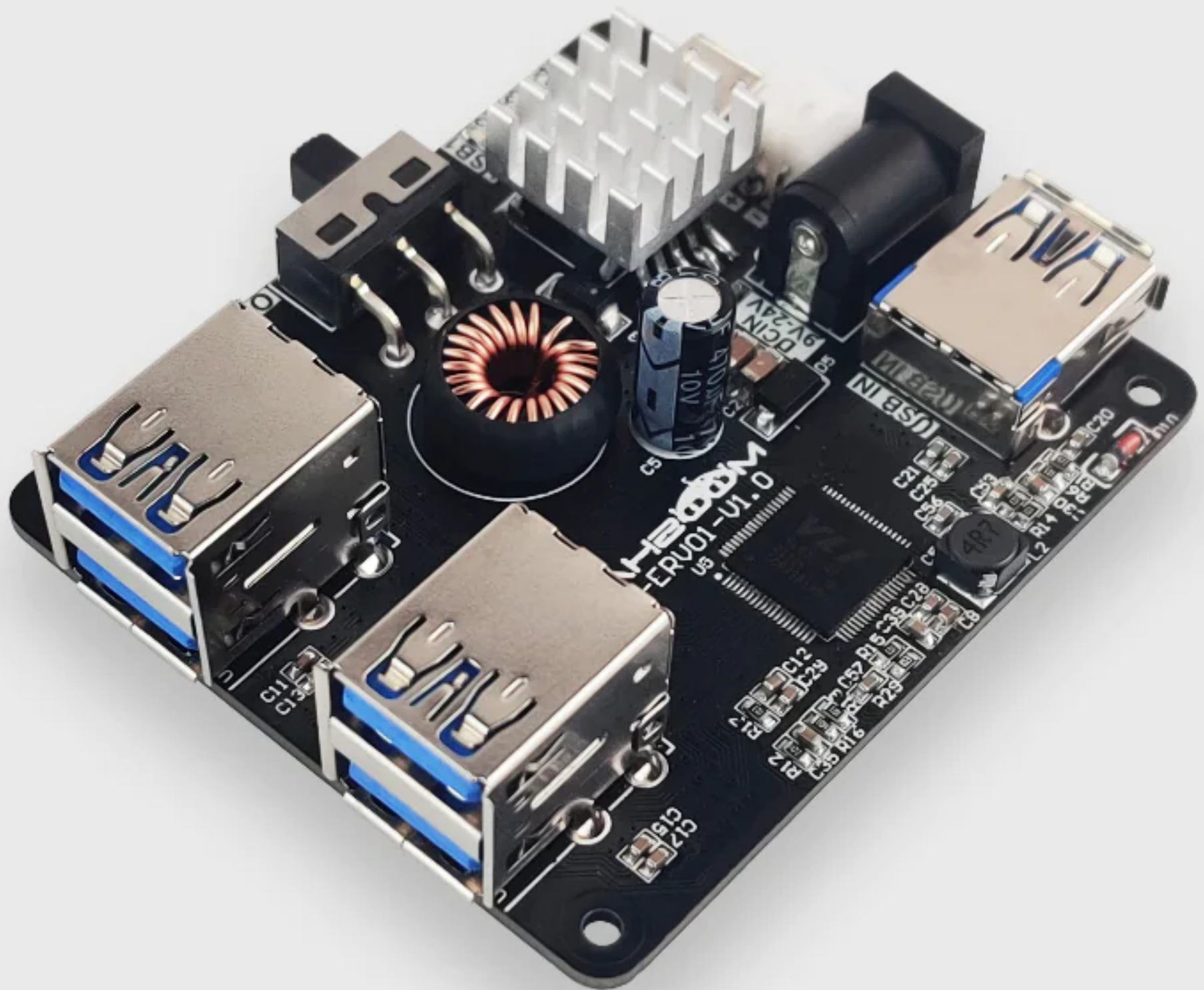


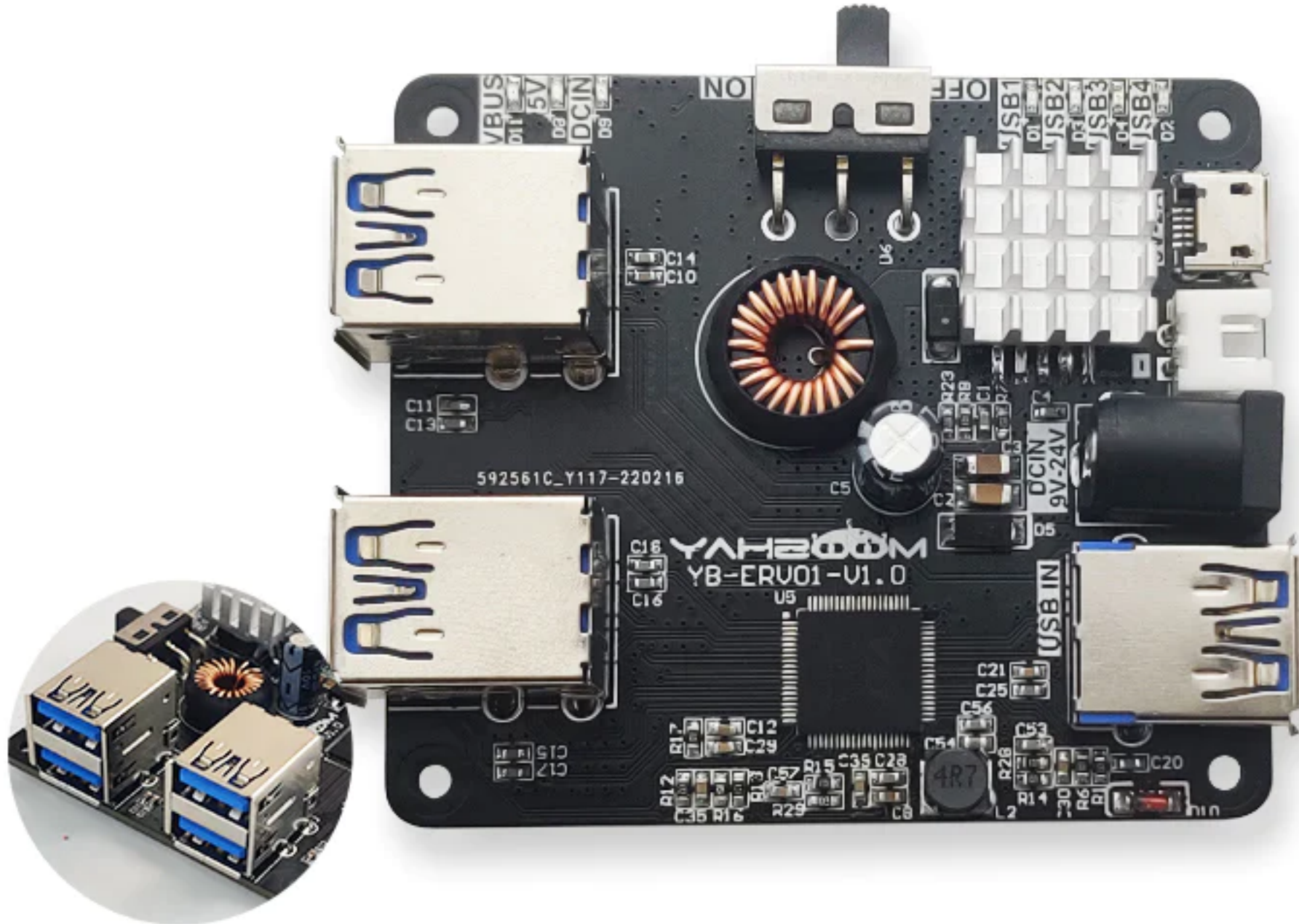
USB3.0 HUB expansion board

Applicable to ROS robot/car, Raspberry Pi/ RDK-X3/JETSON series board

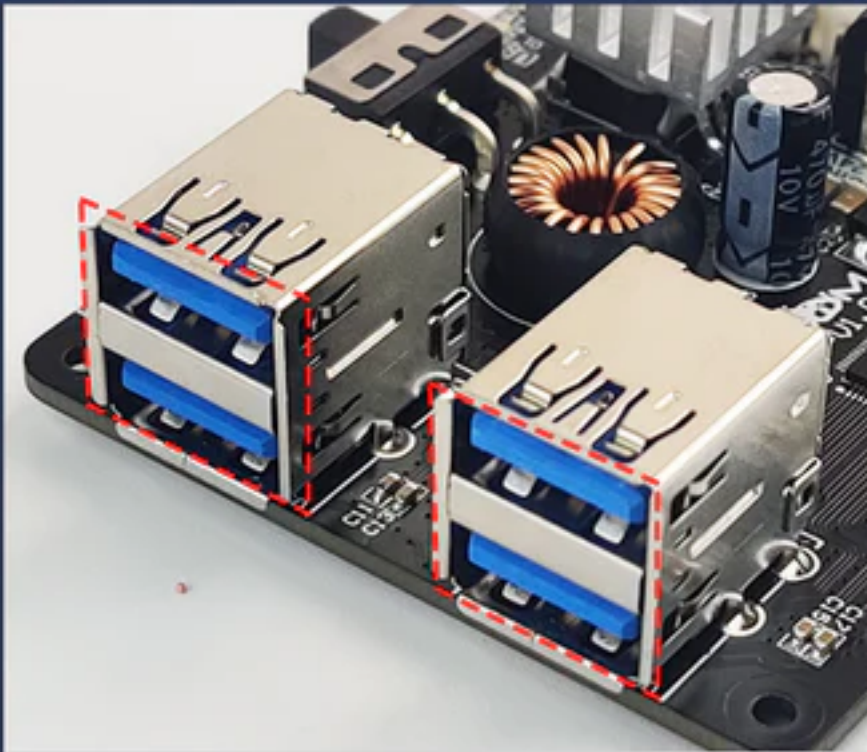


Product introduction

USB3.0 HUB expansion board aims to solve the problems of insufficient USB interface on the main board and insufficient power supply caused by the increase of USB peripherals. It uses USB3.0 communication interface and HUB chip expand 4 USB interfaces to ensure high-speed data transmission of the interface. In addition to USB-A interface power supply, it also supports 5V (micro USB) and 9 ~ 24V(DC interface / XH2.54 socket) wide voltage external power supply to ensure normal power supply of USB peripherals. Support ROS robot/car, Raspberry Pi/ RDK-X3 /Jetson series board, PC and other host devices, compatible with win7 / 8 / 10, Linux, Ubuntu, MacOS systems, no need drive file, plug and play.

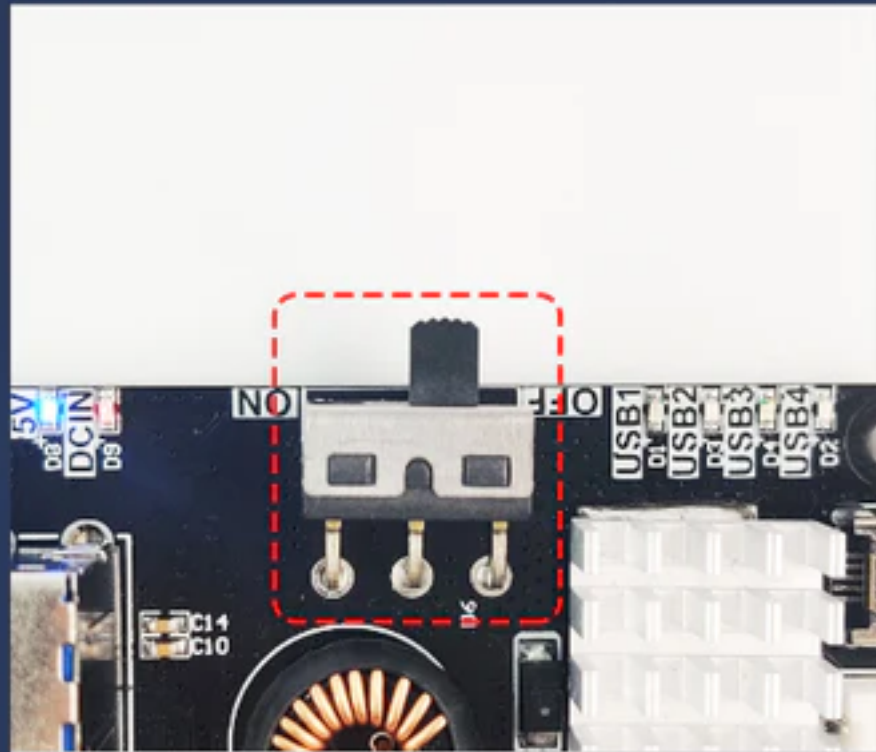


Top hardware configuration



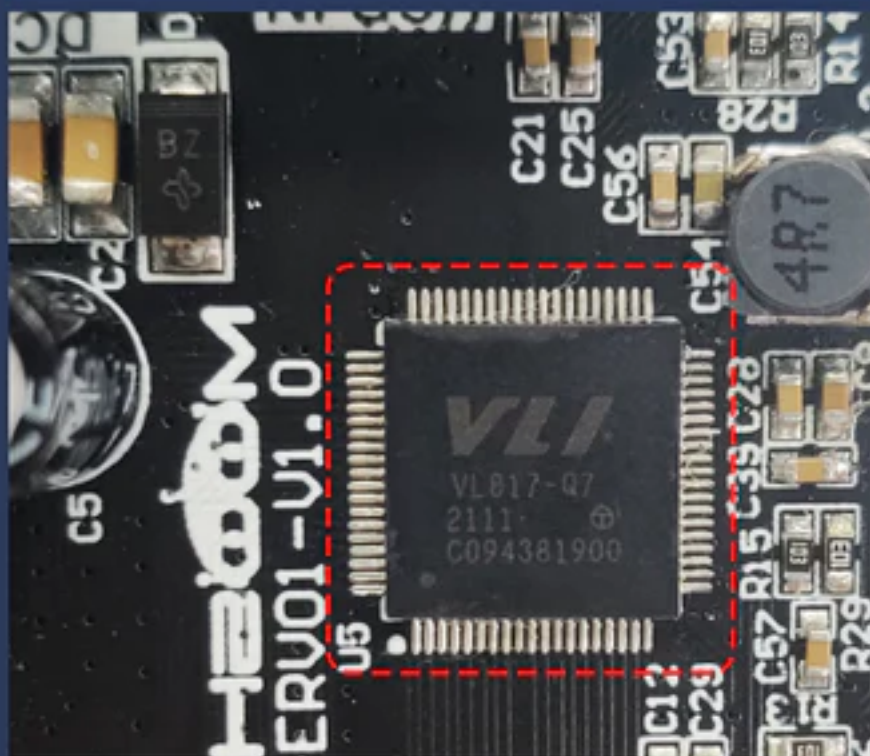
① Support 5A high current power supply

The total output current of four USB channels can reach 5A, and the output current of single USB channel can reach 1.5A.



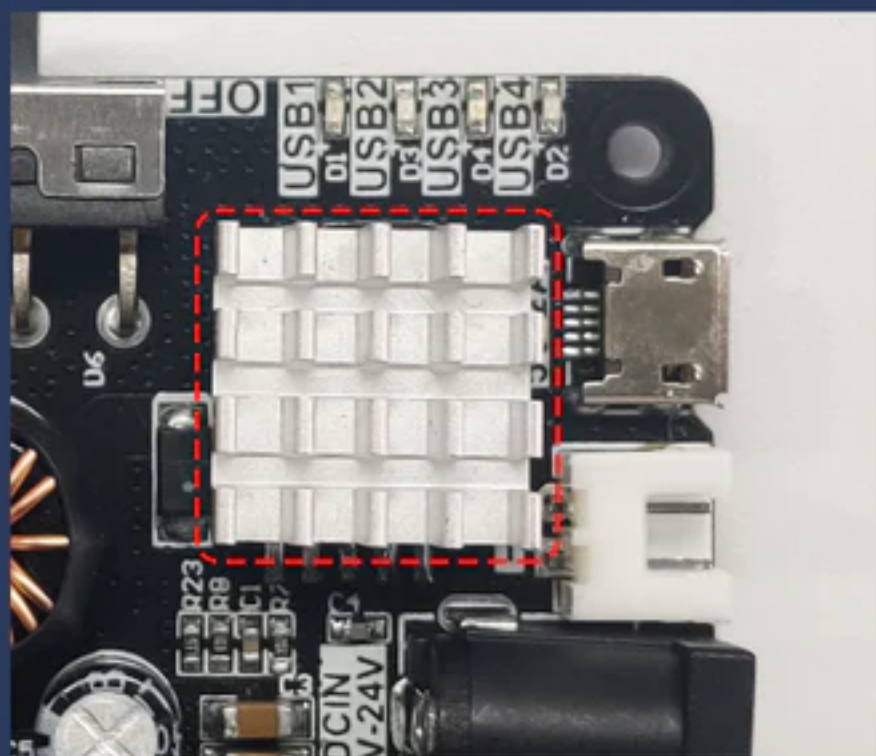
② Independent power switch

If the USB device needs to be restarted, the device can be powered off and restarted through the switching power supply without plugging and damaging the interface.



③ VL 817 main control chip

Equipped with VL817 main control chip scheme, the main control board performance is stable and the transmission is stable and safe.



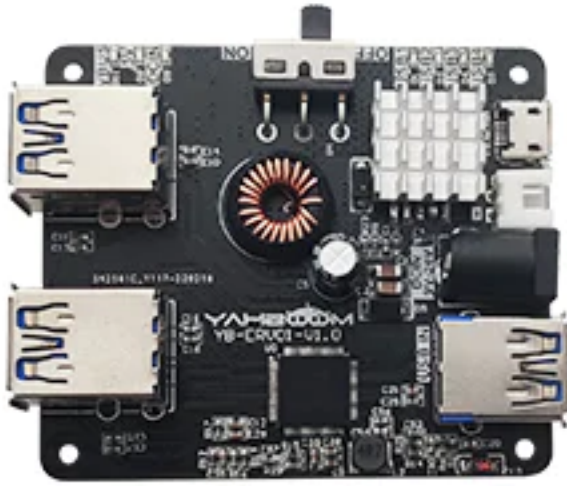
④ Efficient and safe power dissipation

The power management chip adopts large-size heat sink to ensure stable temperature and safe transmission during high-power use.

Product parameters

Chip model	VL817
Transmission speed	5Gbps (theoretically)
Input interface	USB-A
Data line length	30cm
Output interface	4*USB 3.0 Interface
Interface compatibility	USB 3.0 and compatible with USB 2.0 and USB 1.1
Support equipment	ROS robot/car, Raspberry Pi/Jetson series board, PC, industrial computer, RDK-X3
Compatible system	Win7/8/10、Linux、MacOS、Ubuntu
Working voltage	5V
Working current	90mA
Output current	When the external power supply conditions are met, the total output current of four USB channels can reach 5A, and the output current of single USB channel can reach 1.5A
External supply voltage and current	When output 5V/5A, 12V input 2.5A, 24V input 1.35A (data from laboratory)
External power supply interface	Micro USB (5V) 、DC5.5*2.5 (9V~24V) 、XH2.54 Interface (9V~24V)
Protection circuit	Over current protection, short circuit protection, power reverse connection protection
Product size	68*60*18.5mm
Product weight	36.5g

Shipping list



USB3.0 HUB
expansion board *1



M2.5*22+6mm single-
pass copper column *5
M2.5*5mm round head
screw *5
M2.5mm nut *5



USB3.0 data line *1



XH2.54 cable *1