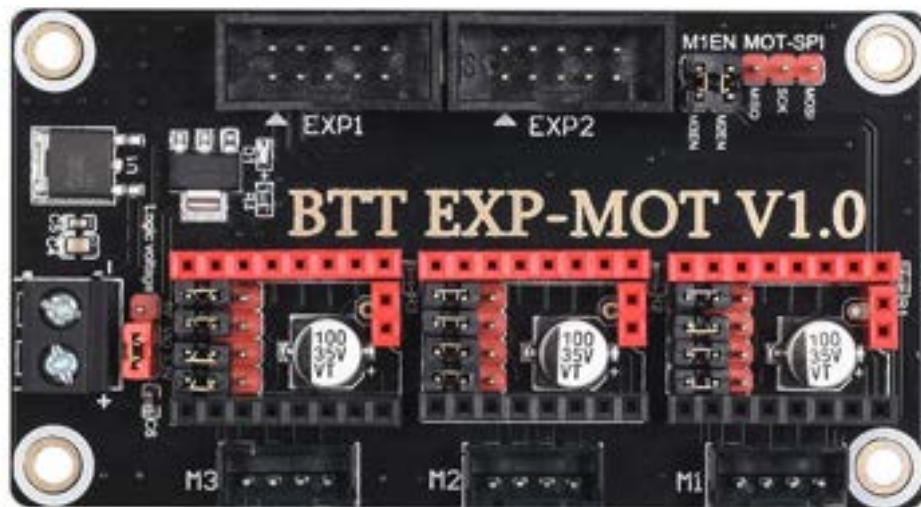


# BIGTREETECH

## EXP-MOT V1.0

Motherboard instruction manual



## **I.Module introduction**

**BTT EXP-MOT V1.0** is a driver expansion module launched by 3D printing team of Shenzhen biqu Technology Co., Ltd., which can be used on the motherboard with EXP interface, so as to expand three available drivers.

### **1.Module parameters :**

- 1) The mode of driving on the module is optional: STEP/DIR、UART、SPI;
- 2) Number of drivers for module expansion: 3;
- 3) Logic voltage supported: DC3.3V or DC5V;
- 4) Input power: DC12V or DC24V;
- 5) External dimension: 84.3mm\*46mm;
- 6) Installation dimensions: 76.3mm\*38mm

### **2.Application scope of module:**

Any motherboard with EXP1 + EXP2 reserved can be plugged in and used, such as: BIGTREETECH SKR V1.3、BIGTREETECH SKR V1.4、BIGTREETECH SKR V1.4 Turbo and so on;

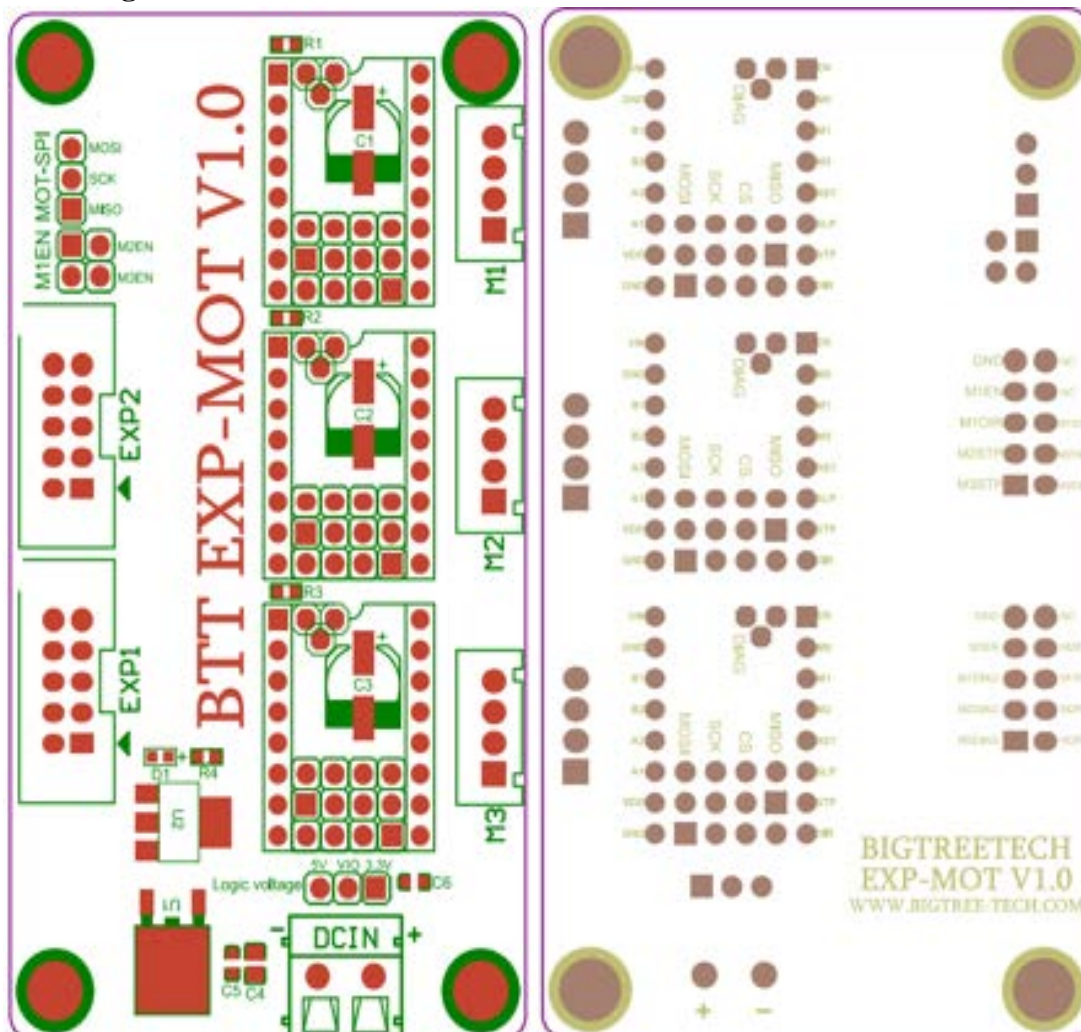
## **II.Module indicator description**

After the module is powered on:

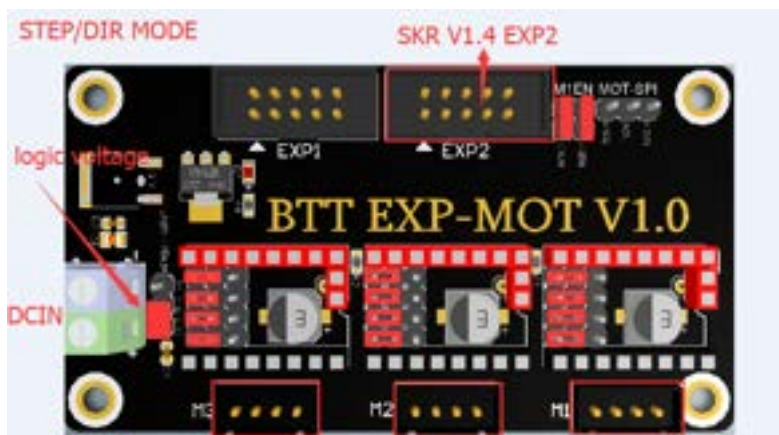
D1 red light is the power indicator:The red light is on, indicating that the power supply is normal.

### III. Module operation instructions

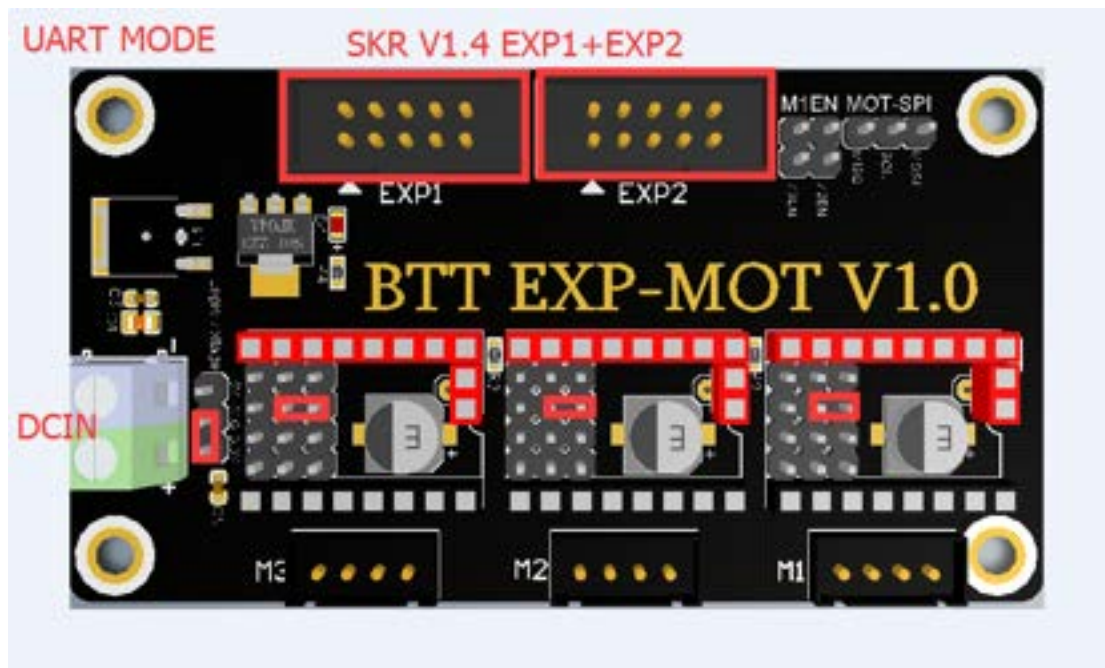
#### 1.Pin diagram



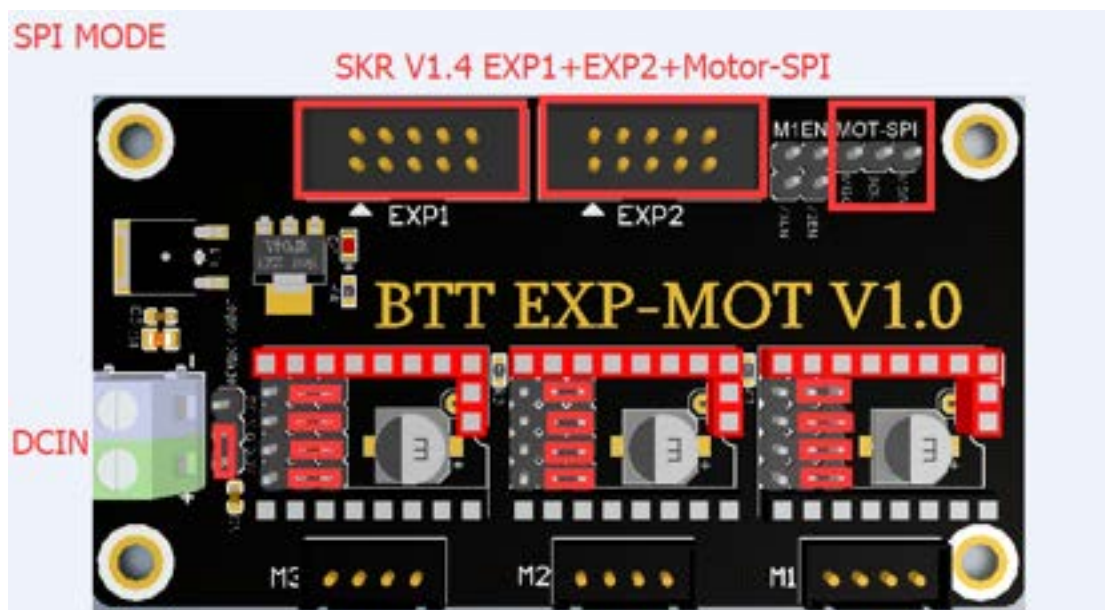
#### 2.STEP/DIR Mode(Such as SKR V1.4)



### 3.UART Mode(Such as SKR V1.4)



### 4.SPI Mode



## IV. Notes

1. STEP/DIR mode can only connect EXP2, but it needs to plug the short-circuit cap on M2EN and M3EN, so that the three drivers can share one signal line; the other two special modes must be connected with EXP1+EXP2, and M2EN and M3EN are not needed;
2. The right voltage must be selected at the logic voltage. There are 5V and 3.3V options. The 32-bit motherboard is generally 3.3V, and the 8-bit motherboard is 5V;

3. The correct jumper cap can be used normally only when the correct jumper cap is selected;
4. It must be connected to dcin to work. Dcin can be DC12V or DC24V;
5. Before use, the motherboard firmware needs to adjust the three new driver pins in order to work normally.

If you encounter other problems, please contact us. We will definitely answer your questions patiently. If you have any good suggestions on our products, please give us feedback. We will consider them seriously.

Thank you for choosing BIGTREETECH products!