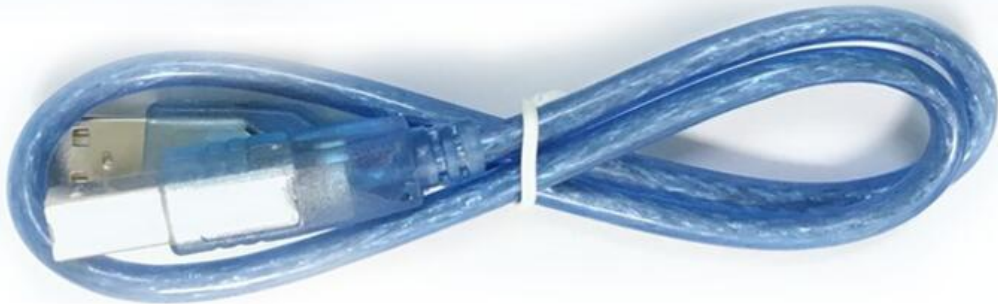
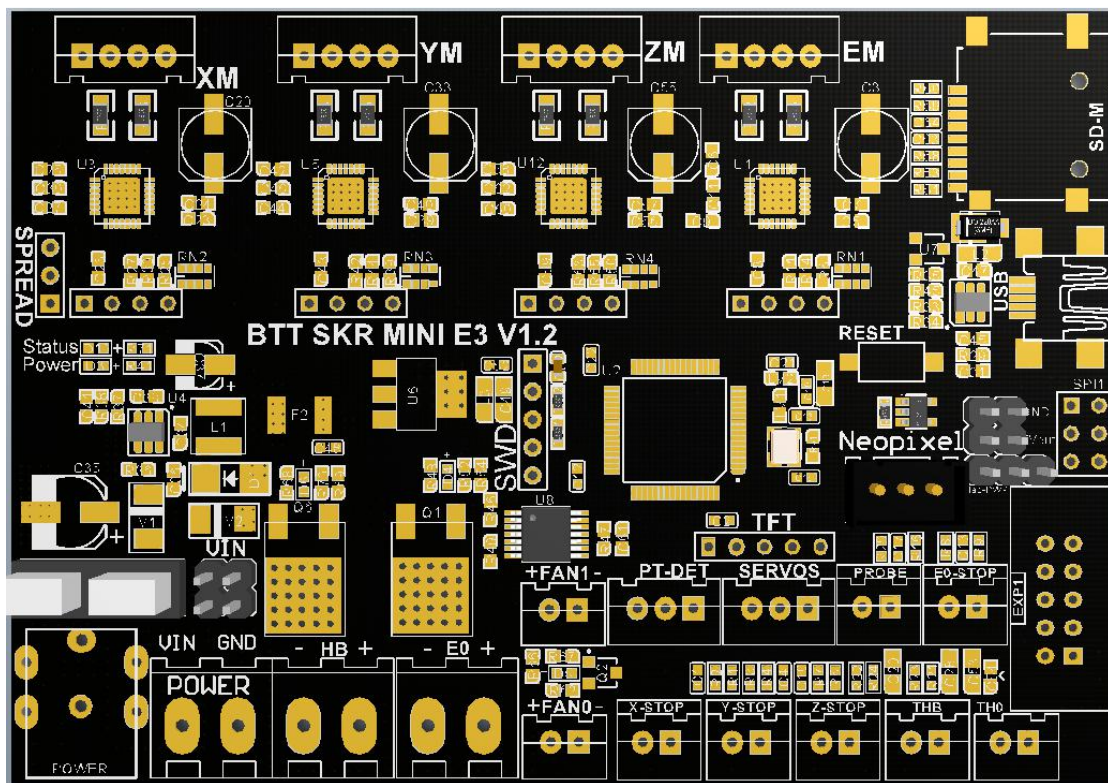


# BIGTREETECH

## SKR MINI E3 V1.2

### User's notes



Shenzhen BIGTREE technology co., LTD.  
**BIG TREE TECH**

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1、 BTT SKR MINI E3 V1.2 firmware

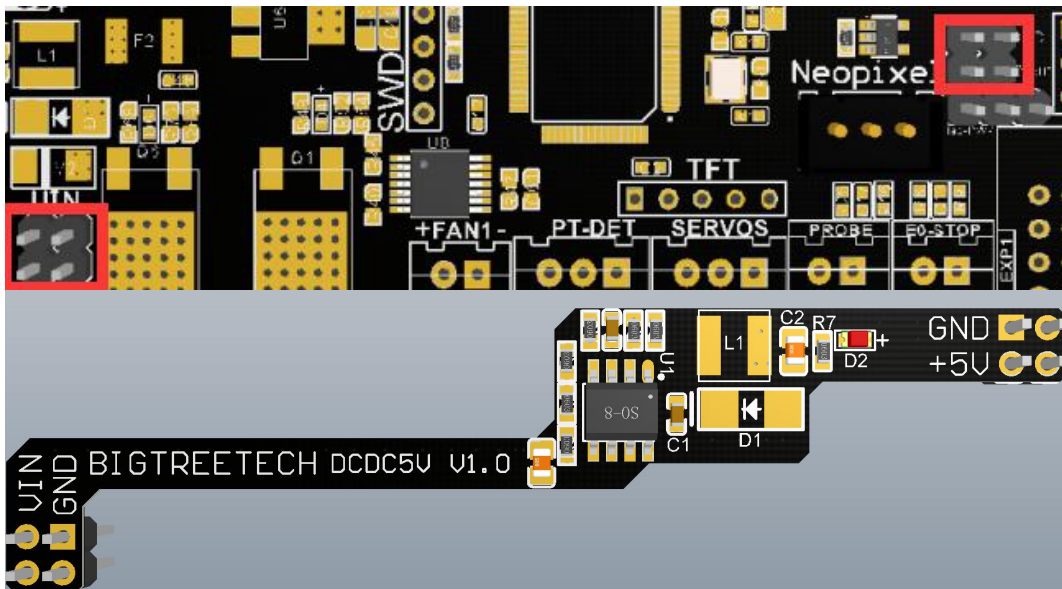
<https://github.com/bigtreetech/BIGTREETECH-SKR-mini-E3/blob/master/firmware/Marlin-2.0.x-SKR-Mini-E3-v1.2.zip>

BTT SKR MINI E3 V1.2 hardware files

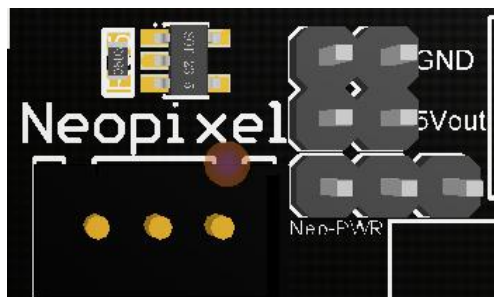
<https://github.com/bigtreetech/BIGTREETECH-SKR-mini-E3/tree/master/%E7%A1%AC%E4%BB%B6/BTT%20SKR%20MINI%20E3%20V1.2>

Note: If flash BIGTREETECH-SKR-MINI-E3 V1.0 firmware to BTT SKR MINI E3 V1.2 motherboard, all drivers on the BTT SKR MINI E3 V1.2 motherboard will not work!!!

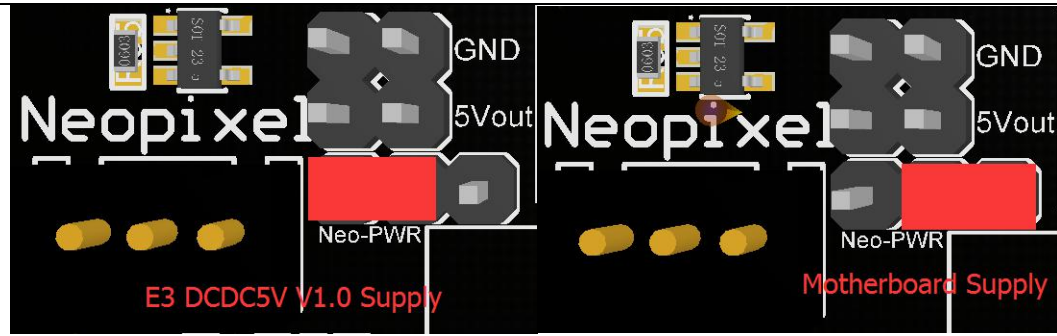
2、 Added a port for DCDC5V V1.0 power module, it is only used for RGB LED strip.



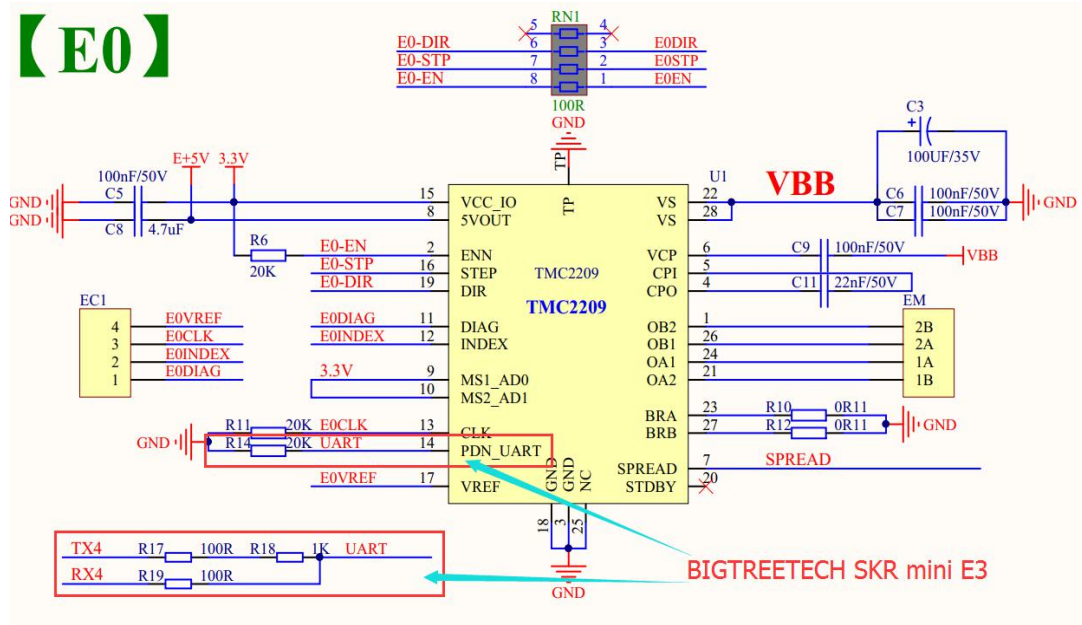
3、 Changed the RGB port in V1.0 to the Neopixel RGB port.



RGB power supply selection: the the left two pins are powered by DCDC5V V1.0 power module (less than 30 LEDs are recommended to be connected), and the right two pins are powered by board 5V supply. (less than 8 LEDs are recommended to be connected)

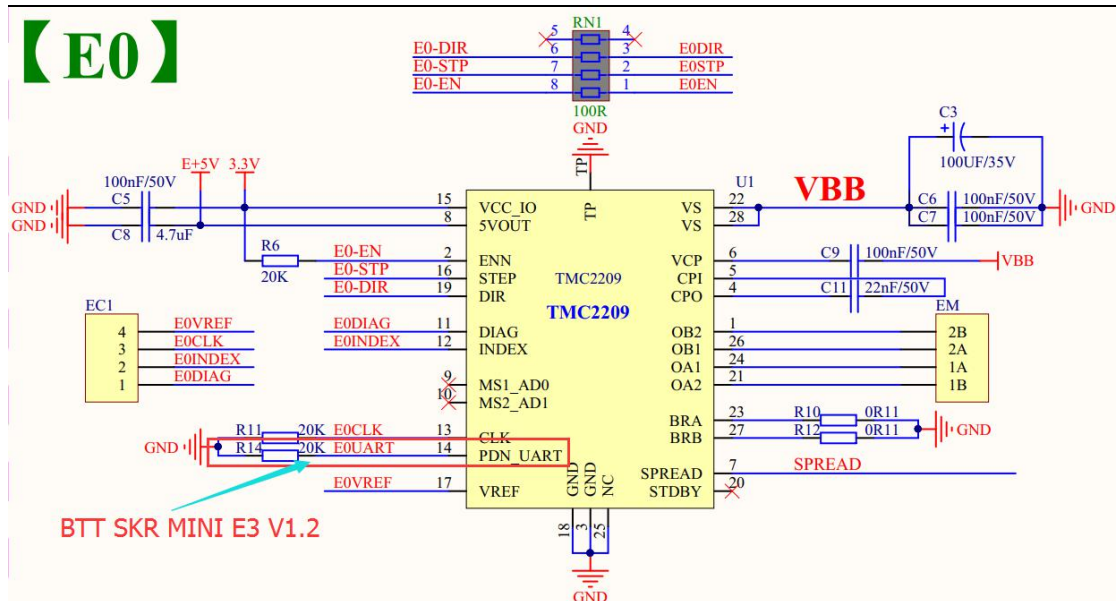


- 4、 The connection mode of TMC2209 stepper motor drive was changed



BIGTREETECH SKR MINI E3 V1.0 uses a hardware UART to control four TMC2209 drivers and a logical combination of MS1 and MS2 to distinguish X,Y,Z, and E0. BTT SKR MINI E3 V1.2 selects the TMC2208 universal connection mode (can be directly replaced with the TMC2208 driver). X,Y,Z,E0 each use an I/O port to simulate the UART to control TMC2209 driver.





5、The copper thickness in PCB was changed from 10Z to 20Z. Meanwhile, the heat dissipation area of bare copper is increased on the back of the power IC, and the heating source circuit is kept away from the power IC, reduce heat transfer and enhance heat dissipation capacity.

