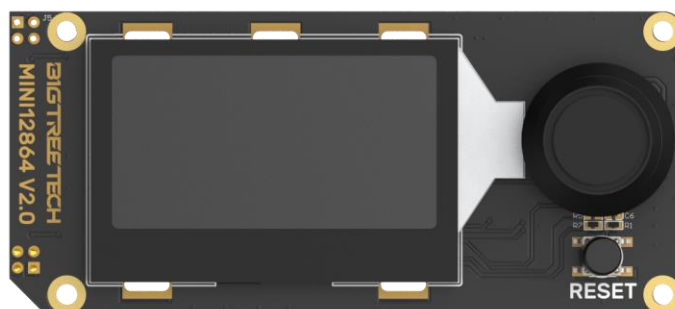


BIGTREETECH

MINI12864 V2.0

User Manual



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Revision History

Version	Revisions	Date
01.00	Original	2022/10/11

Product Profile

BIGTREETECH Mini12864 V2.0 is a medium-sized screen with RGB backlight launched by the 3D printing team of Shenzhen Big Tree Technology Co., Ltd.

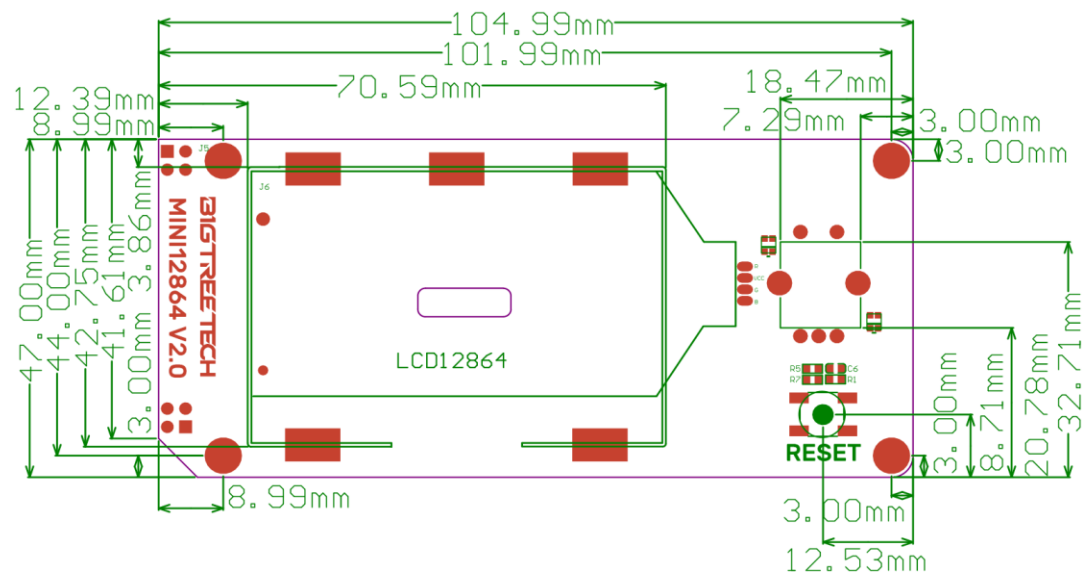
Feature Highlights

1. Communicate with the motherboard via EXP1 and EXP2;
2. RGB backlight, so cool;
3. Designed with the FPC connector to allow customers to choose their preferred connection way.

Specifications

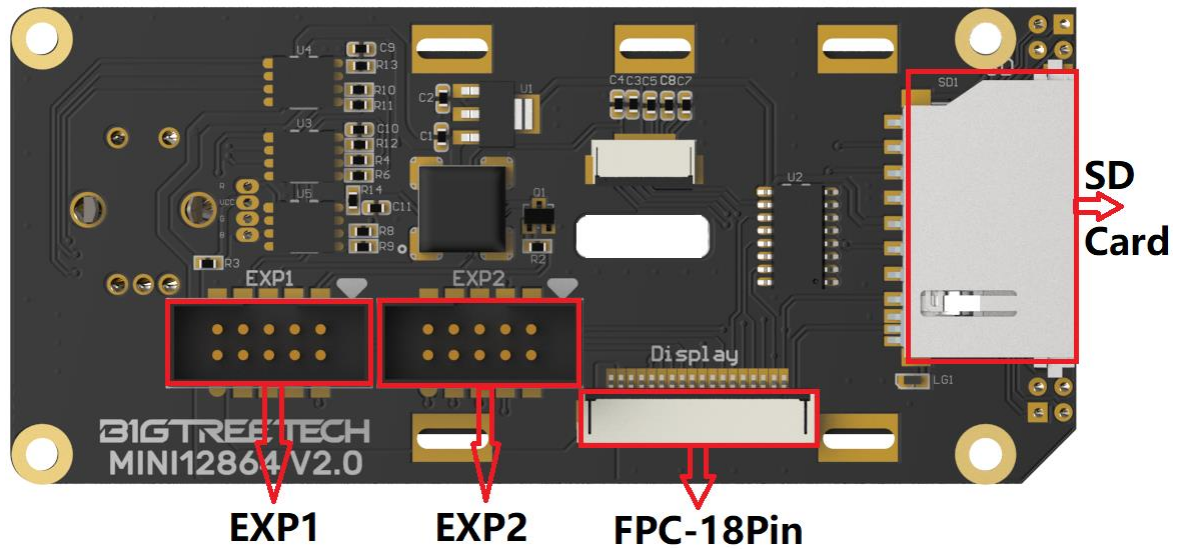
1. Dimensions: 104.99mm x 47mm
2. Mounting Size: Please refer to **BIGTREETECH Mini12864 V2.0top-SIZE.pdf**
3. Input: DC 5V
4. SD Card Logic Voltage: 3.3V and 5V (e.g.: motherboards that support MEGA2560 MCU, higher compatibility)
5. Interface: EXP1+EXP2 or FPC (Display)
6. Onboard Buzzer, RGB Light, RGB-LCD Screen

Dimensions

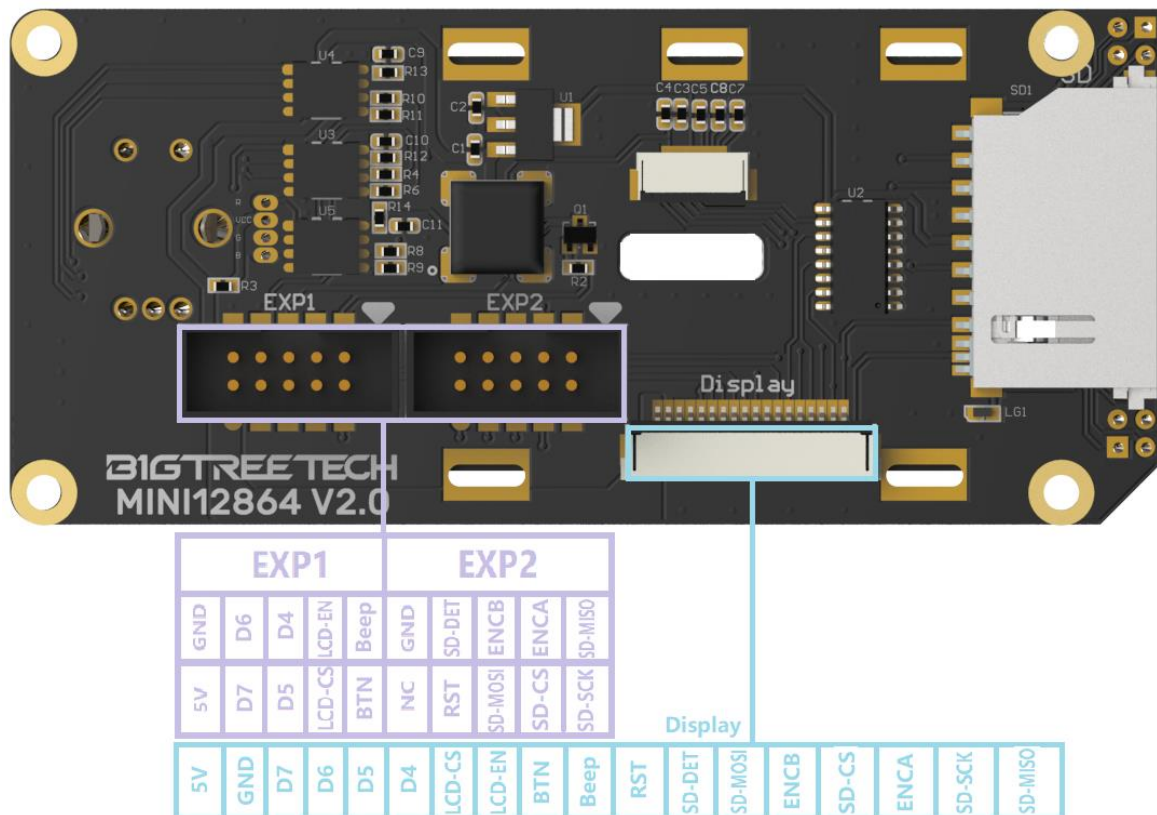


Peripheral Port

Connector Diagram



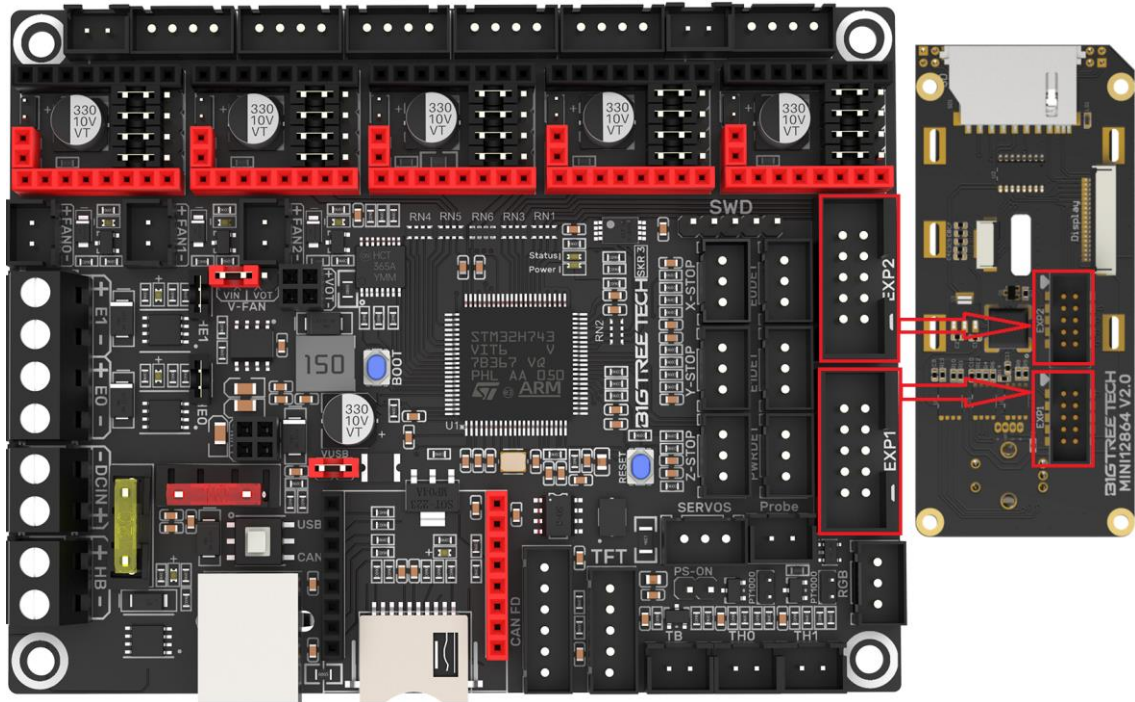
Pinout Diagram



Connection Description

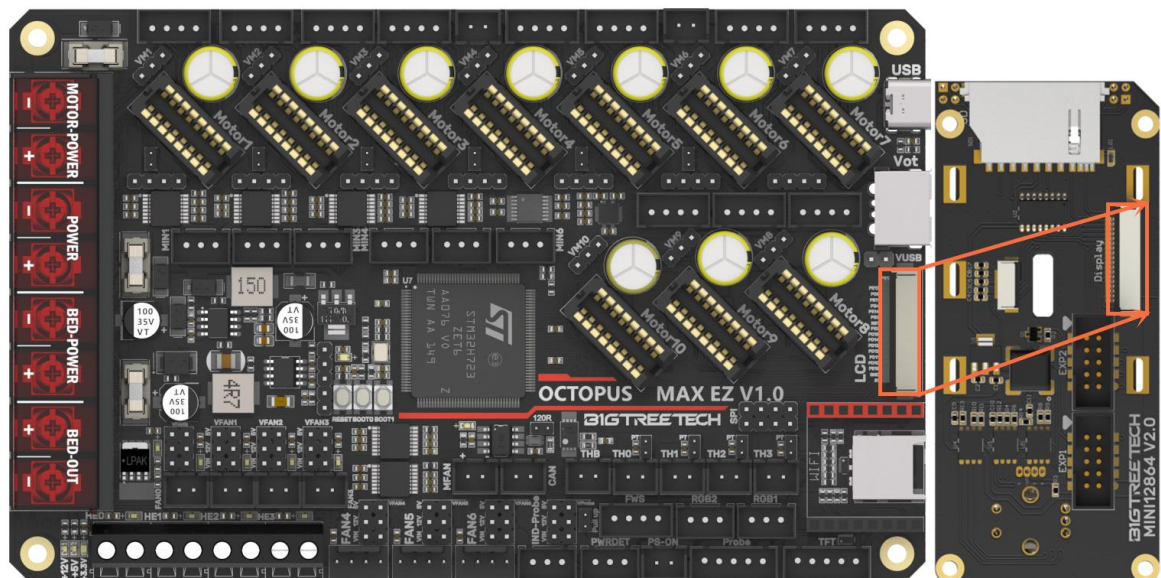
Connect with the Motherboard with EXP1+EXP2

e.g.: MINI12864 V2.0 + SKR3



Connect with the Motherboard with FPC

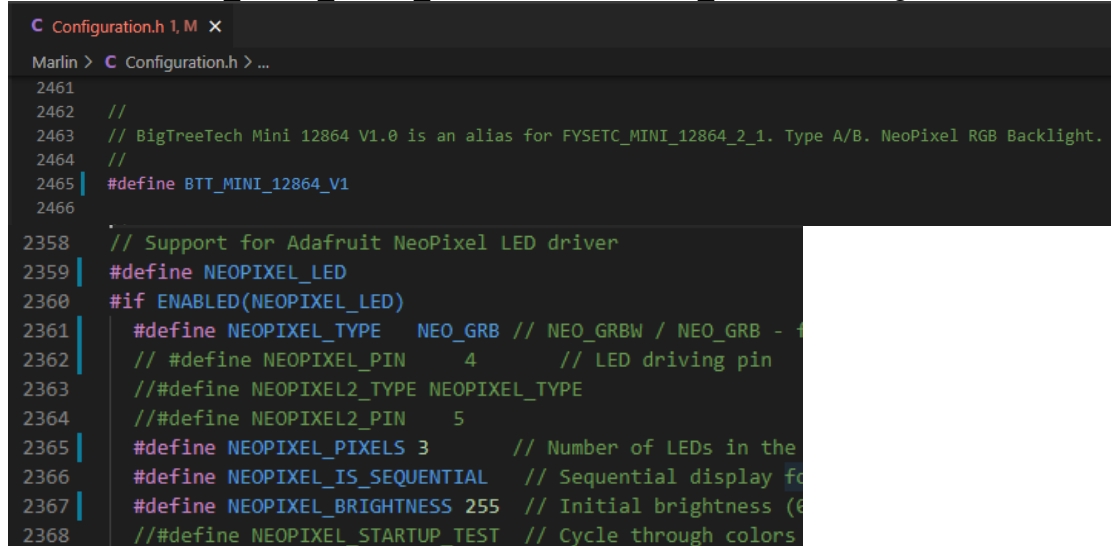
e.g.: MINI12864 V2.0 + Octopus MAX EZ V1.0



Motherboard Firmware Instruction

Marlin

1. Uncomment **BTT_MINI_12864_V1** and **NEOPIXEL_LED** in Configuration.h.



```
Configuration.h 1, M x
Marlin > C Configuration.h > ...
2461
2462 //
2463 // BigTreeTech Mini 12864 V1.0 is an alias for FYSETC_MINI_12864_2_1. Type A/B. NeoPixel RGB Backlight.
2464 //
2465 #define BTT_MINI_12864_V1
2466
2358 // Support for Adafruit NeoPixel LED driver
2359 #define NEOPIXEL_LED
2360 #if ENABLED(NEOPIXEL_LED)
2361   #define NEOPIXEL_TYPE    NEO_GRB // NEO_GRBW / NEO_GRB - 1
2362   // #define NEOPIXEL_PIN    4      // LED driving pin
2363   // #define NEOPIXEL2_TYPE NEOPIXEL_TYPE
2364   // #define NEOPIXEL2_PIN    5
2365   #define NEOPIXEL_PIXELS 3      // Number of LEDs in the
2366   #define NEOPIXEL_IS_SEQUENTIAL // Sequential display for
2367   #define NEOPIXEL_BRIGHTNESS 255 // Initial brightness (0-255)
2368   // #define NEOPIXEL_STARTUP_TEST // Cycle through colors
```

2. If the screen does not display content, you may need to initialize EEPROM with "M502" and then "M500" after flashing to ensure the new contrast settings are used.

Klipper

```
#####
# BigTreeTech mini12864 (with neopixel backlight leds)
#####
```

```
[display]
lcd_type: uc1701
cs_pin: EXP1_3
a0_pin: EXP1_4
rst_pin: EXP1_5
contrast: 63
encoder_pins: ^EXP2_5, ^EXP2_3
click_pin: ^!EXP1_2
## Some micro-controller boards may require an spi bus to be specified:
#spi_bus: spi
## Alternatively, some micro-controller boards may work with software spi:
#spi_software_miso_pin: EXP2_1
#spi_software_mosi_pin: EXP2_6
#spi_software_sclk_pin: EXP2_2
```

```
[output_pin beeper]
pin: EXP1_1
```



```
[neopixel btt_mini12864]
pin: EXP1_6
chain_count: 3
color_order: RGB
initial_RED: 0.4
initial_GREEN: 0.4
initial_BLUE: 0.4
```

Cautions

Ensure that the power is turned off when wiring. Turn on the power only after checking the correct connection of the cables and the driver to prevent the board and screen from being burnt due to incorrect wiring, causing unnecessary costs.

If you need other resources for this product, please visit <https://github.com/bigtreotech/> and find them yourself. If you cannot find the resources you need, you can contact our after-sales support.

If you encounter other problems during use, feel free to contact us, and we are answering them carefully; any good opinions or suggestions on our products are welcome, too and we will consider them carefully. Thank you for choosing BIGTREETECH. Your support means a lot to us!