MINI UPS V2.0

Power failure module

User Manual

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VERSION BETA 1.0

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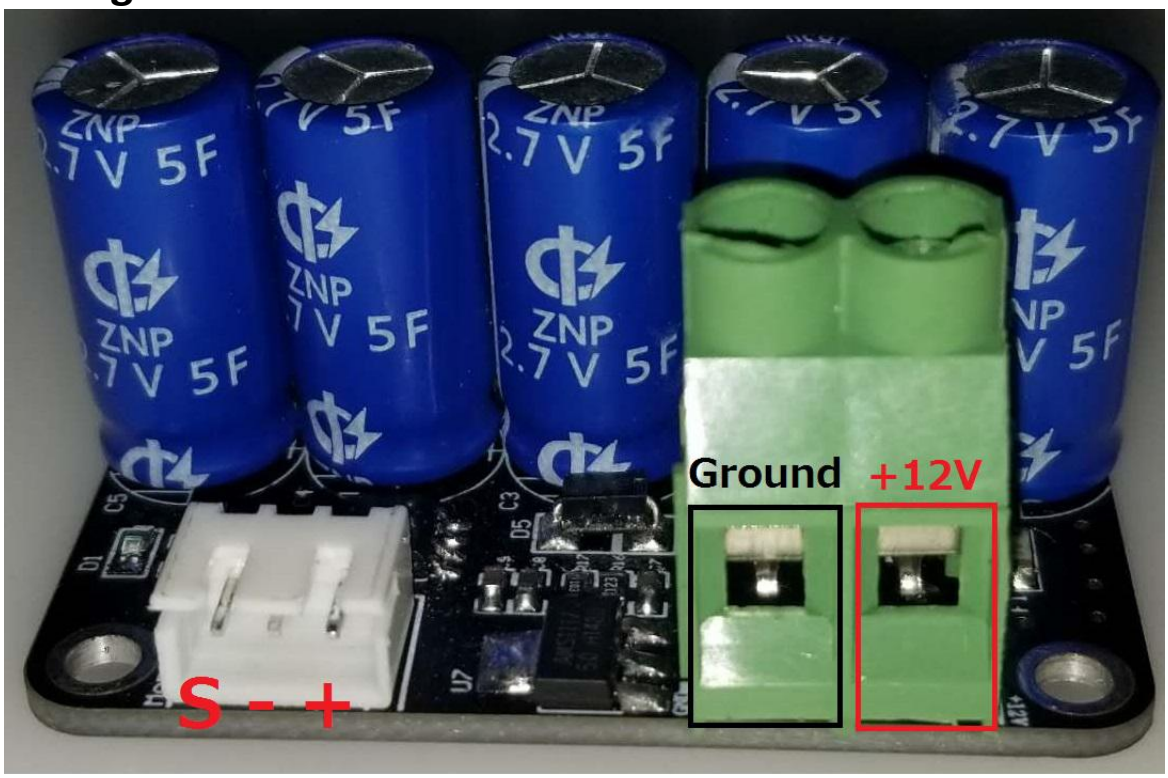
Product Introduction

BigTree Technology Co., Ltd. developed this power failure module to detect a power failure during printing and ensuring the print can be resumed after power is returns.

Board specifications

1) Size: 50 x 32.5mm
2) Input voltage: min. 10V DC, max.12V DC
3) Max. current: 25A

Wiring



The green connector should be connected to a 12V power supply.

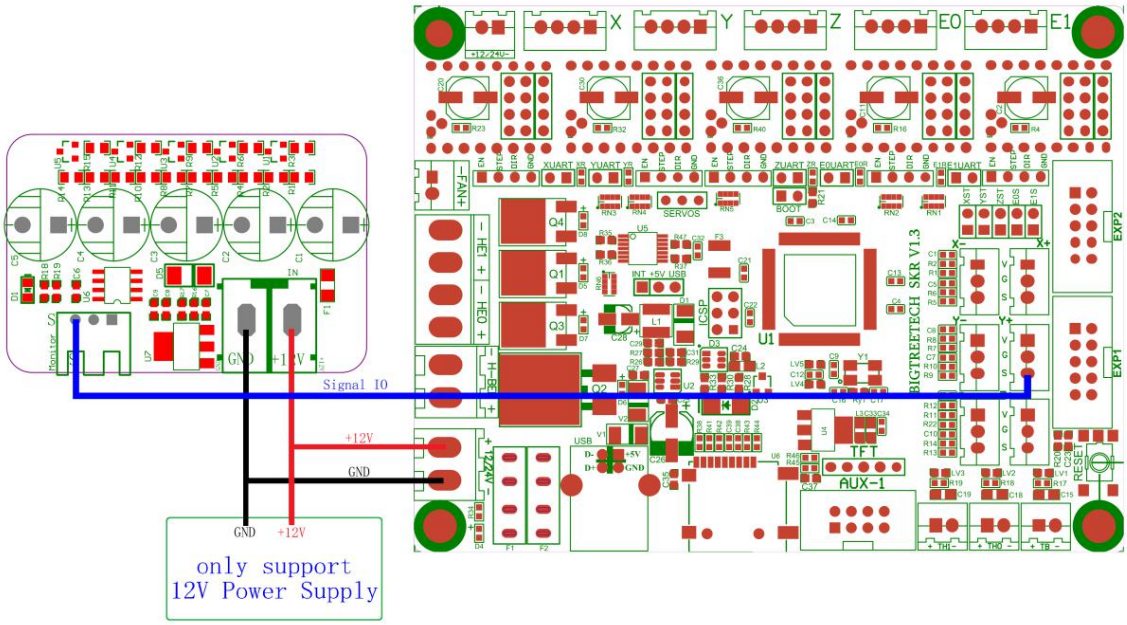
The white connector should be connected to any of the endstops or other suitable port.

Note:

The module can only work normally at 12V voltage, when the working voltage is higher than 13V, the module will be burnt out.

The module outputs a low level when it is working normally, and outputs a high level when it detects a power failure(<10V power input).

Connect to BIGTREETECH SKR V1.3



Firmware

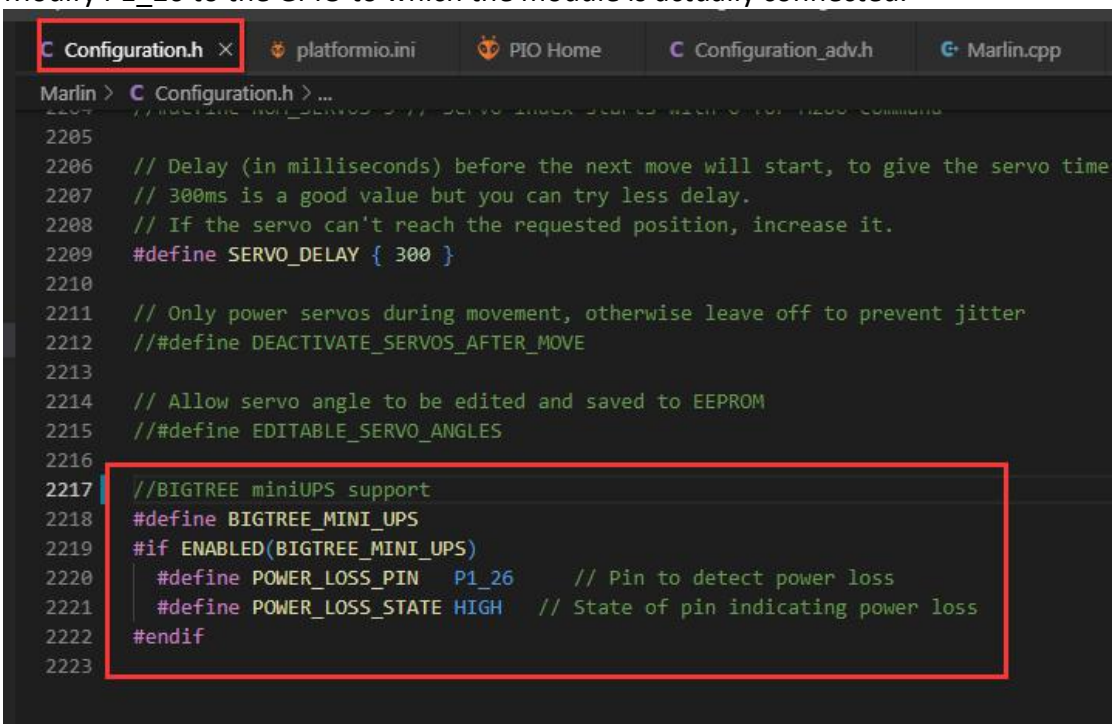
Download the Marlin 2.0:
https://github.com/bigtreetech/Marlin/tree/marlin-2.0-mini-ups

Please modify the parameters according to the printer and then add the function of this power failure module.

BIGTREETECH touchscreen series:

The BIGTREETECH touchscreen series have the function of saving print progress, just add BIGTREE_MINI_UPS support in the file configuration.h, the picture as shown below.

The POWER_LOSS_PIN in the figure is the GPIO port to which the module is connected. Modify P1_26 to the GPIO to which the module is actually connected.



Reprap LCD12864/LCD2004/CR10_STOCKDISPLAY:

If user uses a Reprap LCD12864/LCD2004 or other similar display, you will also need to enable saving data (saving print progress) in the file configuration_adv.h, as shown below