MINI UPS V2.0

Power failure module

User Manual

SHENZHEN BIGTREE TECHNOLOGY CO., LTD.
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VERSION BETA 1.0

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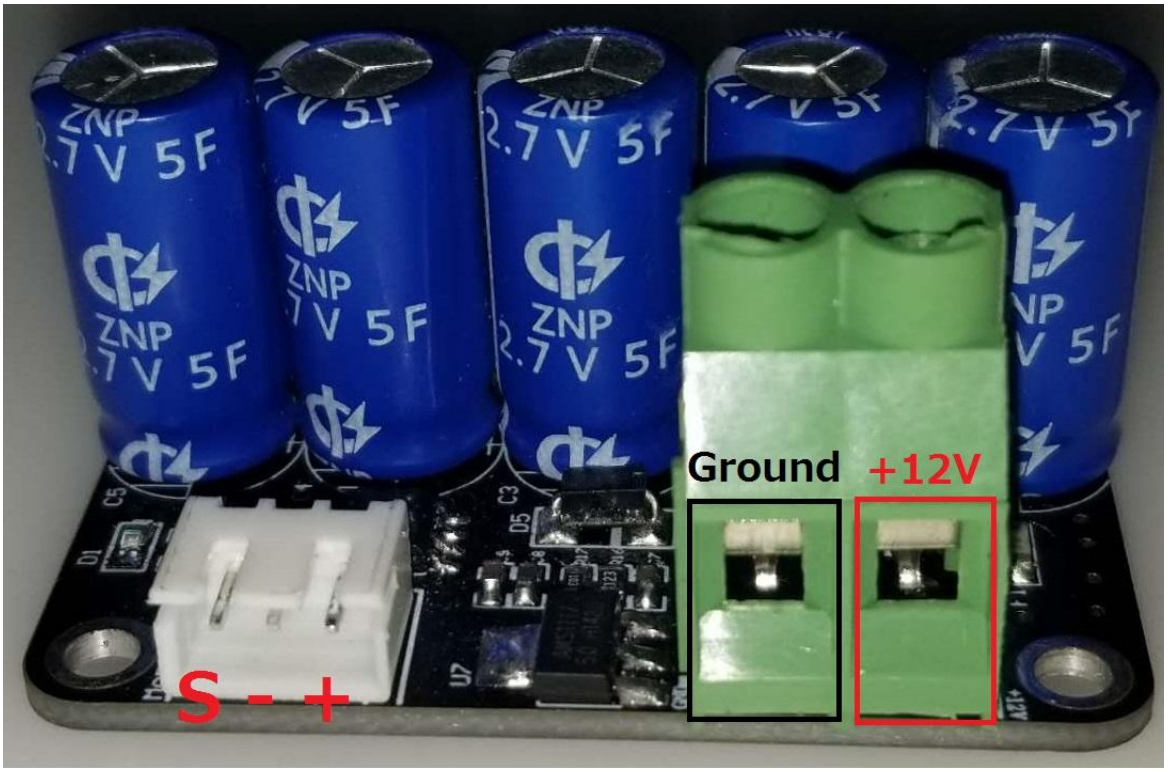
Product Introduction

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.

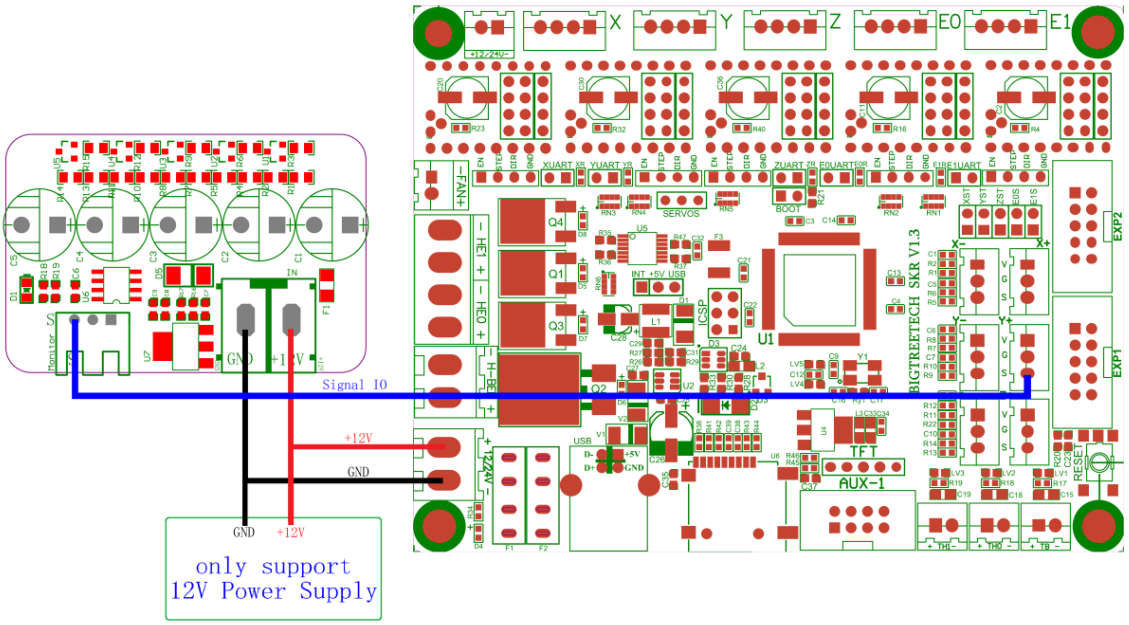
The white connector should be connected to any of the endstops or other suitable port.

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

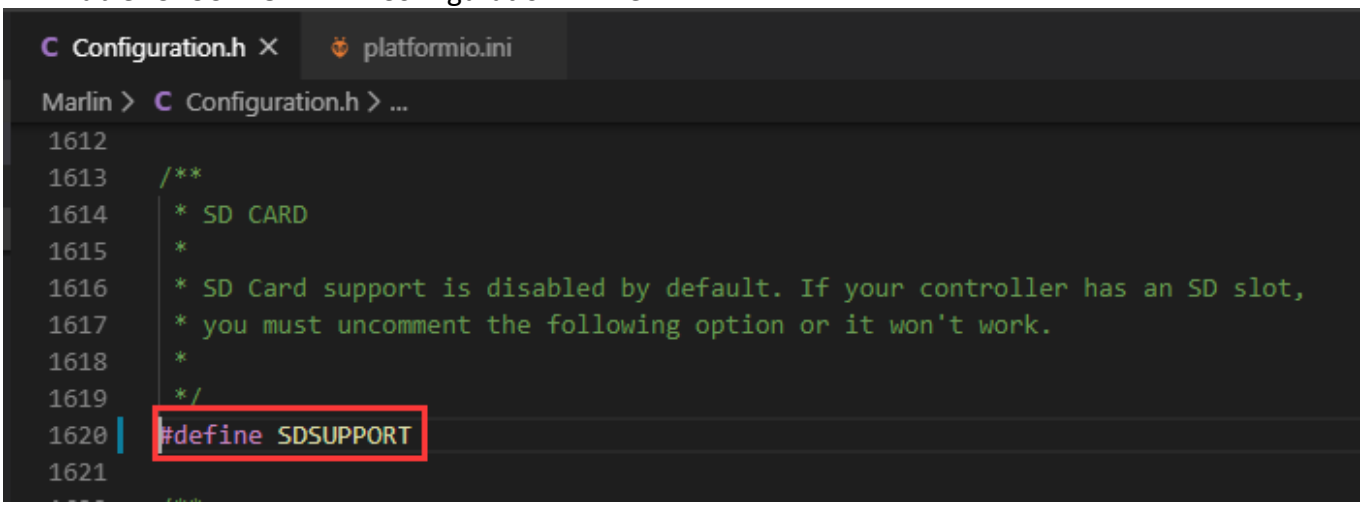


Firmware

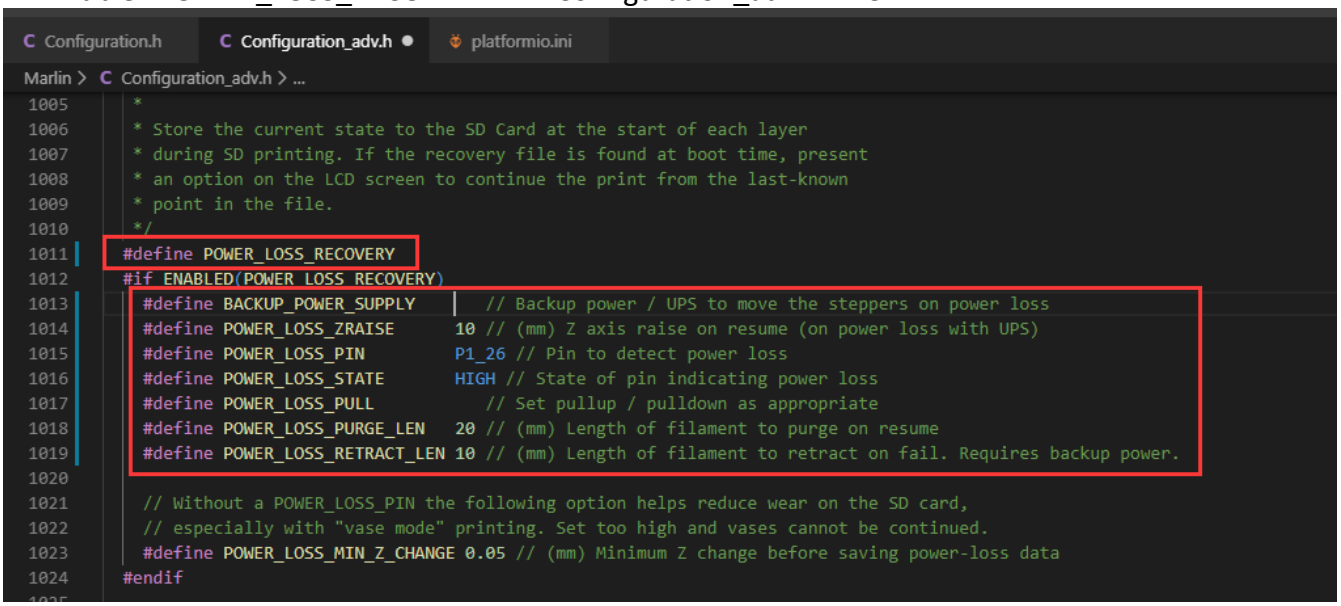
Download the Marlin 2.0:
https://github.com/MarlinFirmware/Marlin/tree/bugfix-2.0.x

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

1. Enable “SDSUPPORT” in “Configuration.h” file



2. Enable “POWER_LOSS_RECOVERY” in “Configuration_adv.h” file



Enable “BACKUP_POWER_SUPPLY” means that we have a backup power supply for the stepper so that the hotend can leave the printed model when power failed.
“POWER_LOSS_ZRAISE” is the height of Z-axis rise when power failed.
“POWER_LOSS_PIN” is the GPIO port to which the module is connected, Modify “P1_26” to the GPIO to which the module is actually connected.