Klipper Building Options for BTT SKR MINI E3 V1.2:

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(Top)
                    Klipper Firmware Configuration
[*] Enable extra low-level configuration options
    Micro-controller Architecture (STMicroelectronics STM32)  --->
    Processor model (STM32F103)  --->
[ ] Disable SWD at startup (for GigaDevice stm32f103 clones) (NEW)
    Bootloader offset (28KiB bootloader)  --->
    Clock Reference (8 MHz crystal)  --->
    Communication interface (USB (on PA11/PA12))  --->
    USB ids  --->
*1 (!PC13) GPIO pins to set at micro-controller startup

[Space/Enter] Toggle/enter      [?] Help            [/] Search
[Q] Quit (prompts for save)     [ESC] Leave menu
```

*1 select "Enable extra low-level configuration options" and configure "GPIO pins to set at micro-controller startup" to "!PC13".

The "make flash" command does not work on the SKR mini E3. Instead, after running "make", copy the generated "out/klipper.bin" file to a file named "firmware.bin" on an SD card and then restart the SKR mini E3 with that SD card.

Marlin 2.0.x Firmware Changes:

In Platformio.ini file change: default_envs =
STM32F103RC_btt

In Configuration.h file change:

#define SERIAL_PORT -1

#define SERIAL_PORT_2 2

#define MOTHERBOARD BOARD_BTT_SKR_MINI_E3_V1_2

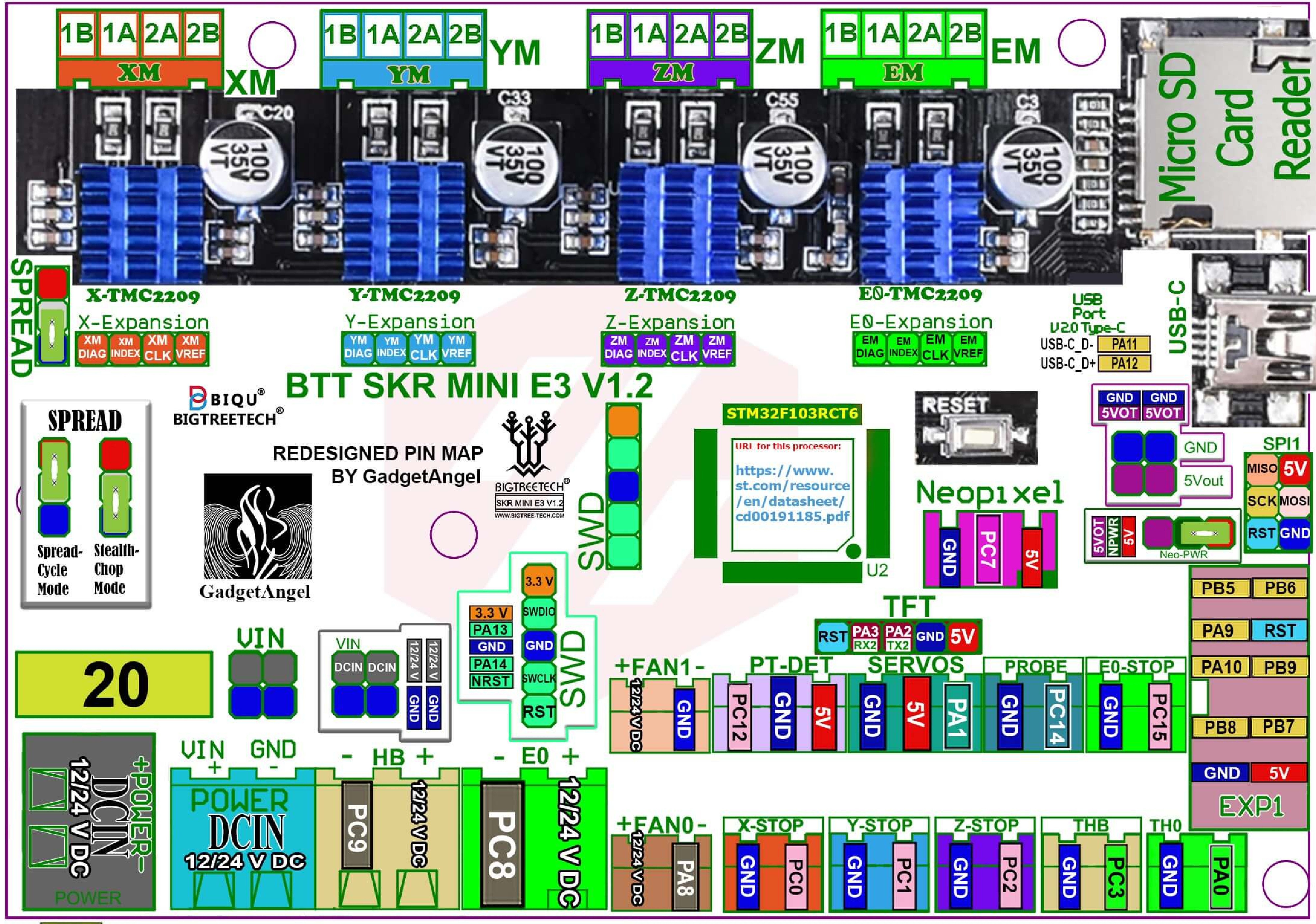
Note: Serial Port definitions in Marlin 2.0.x for this Board:

-1: USB Port; 2: TFT Port;

Micro SD Card Reader

SSEL	PA4
MOSI	PA7
SCK	PA5
MISO	PA6
DET	PC4

Note: If you are unsure about any of the information provided on this PIN Diagram, please ask for help from the 3D printer community, check the Processor's data sheet and board's schematic diagram.



20 For the heated bed, logic, fans and hotend

UART

XUART	PB15
YUART	PC6
ZUART	PC10
E0UART	PC11

Powered By MCU's 5V Rail — DCDC Mode V1.0 board, +5V, Neo-PWR

Powered By DCDC Mode V1.0 board (bridge) — DCDC Mode V1.0 board, +5V, Neo-PWR

SPI1 Header

Micro-SD Card Reader

SPI1

PA6	5V
PA5	PA7
RST	GND

	EN	STEP	DIR
XM	PB14	PB13	PB12
YM	PB11	PB10	PB2
ZM	PB1	PB0	PC5
EM	PD2	PB3	PB4