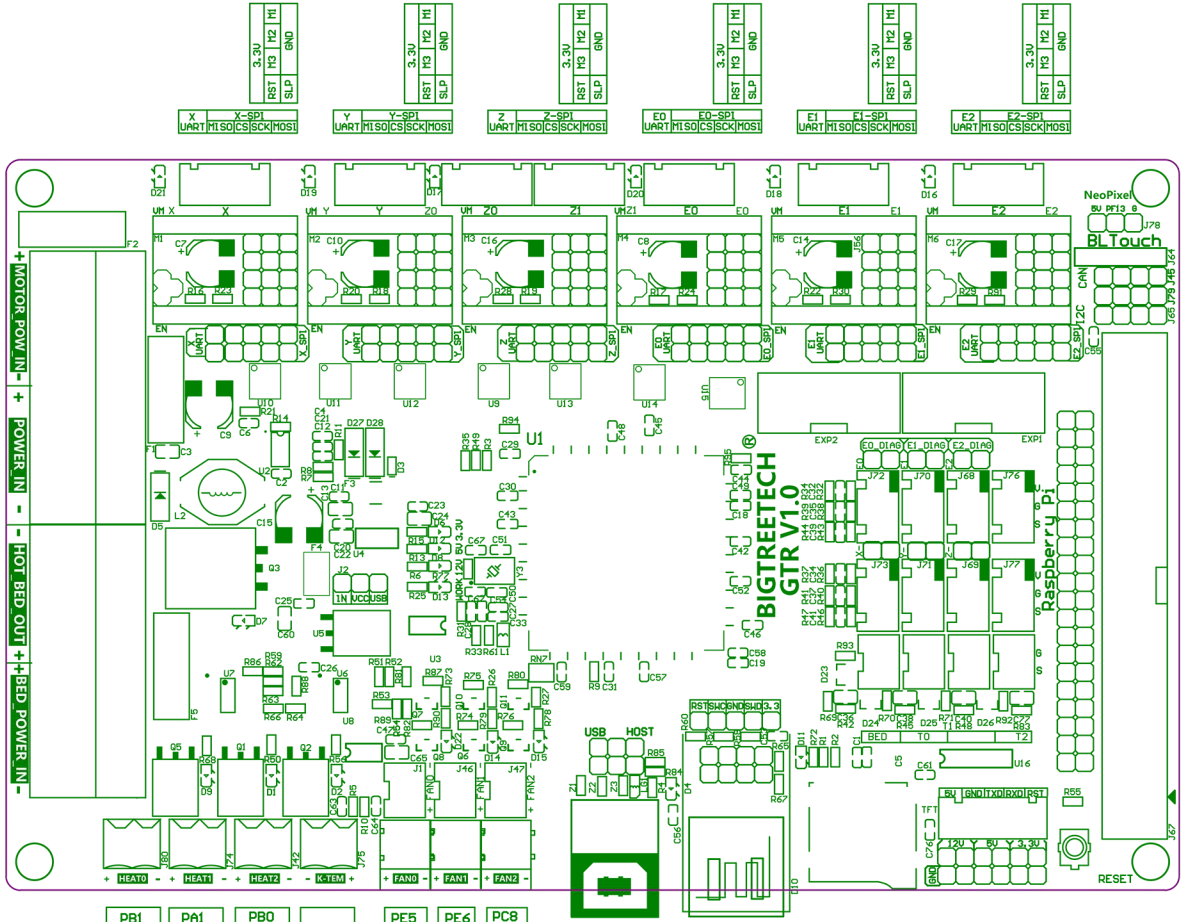


| | |
|---|---|
| MOTOR POWER IN | 12/24V |
| | GND |

| | |
|---|---|
| POWER IN | 12/24V |
| | GND |

| | |
|---|---|
| BED OUT | - |
| | PA2 |
| | + |

| | |
|---|---|
| BED POWER IN | 12/24V |
| | GND |

| | | | | |
|---|---|---|---|---|
| X | X-SPI | | | |
| UART | MISO | CS | SCK | MOSI |
| Y | Y-SPI | | | |
| UART | MISO | CS | SCK | MOSI |
| Z | Z-SPI | | | |
| UART | MISO | CS | SCK | MOSI |
| E0 | E0-SPI | | | |
| UART | MISO | CS | SCK | MOSI |
| E1 | E1-SPI | | | |
| UART | MISO | CS | SCK | MOSI |
| E2 | E2-SPI | | | |
| UART | MISO | CS | SCK | MOSI |

| | | | |
|---|---|---|---|
| 3.3V | M1 | M2 | GND |
| RST | M3 | SLP | |

## UART

| | |
|---|---|
| X | PC14 |
| Y | PE1 |
| Z | PB5 |
| E0 | PG10 |
| E1 | PD4 |
| E2 | PC12 |

| | EN | STEP | DIR |
|---|---|---|---|
| X | PF1 | PC15 | PF0 |
| Y | PE4 | PE3 | PE2 |
| Z | PB9 | PB8 | PB7 |
| E0 | PG13 | PG12 | PG11 |
| E1 | PD7 | PD6 | PD5 |
| E2 | PD2 | PD1 | PD0 |

## SPI

| X-CS | Y-CS | Z-CS | E0-CS | E1-CS | E2-CS |
|---|---|---|---|---|---|
| PC14 | PE1 | PB5 | PG10 | PD4 | PC12 |
| MISO | PB6 | | | | |
| MOSI | PG15 | | | | |
| SCK | PB3 | | | | |

NeoPixel

| | | |
|---|---|---|
| 5V | PF13 | GND |

BLTouch

| | | | | |
|---|---|---|---|---|
| GND | 5V | PB11 | GND | PH11 |

EXTENSION-0(CAN)

| | | | |
|---|---|---|---|
| 5V | PH13 | PI9 | GND |

EXTENSION-1

| | | | |
|---|---|---|---|
| 5V | PI10 | PI8 | GND |

EXTENSION-2(I2C)

| | | | |
|---|---|---|---|
| 5V | GND | PH8 | PH7 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PB13 | PB12 | PB15 | RST | NC | PA15 | PA8 | PG7 | PG5 | 5V |
| PB14 | PD10 | PH10 | PB10 | GND | PC11 | PC10 | PG8 | PG6 | GND |
| EXP2 | | | | | EXP1 | | | | |

## StallGuard

| X-DIAG1 | Y-DIAG1 | Z-DIAG1 | E0-DIAG1 | E1-DIAG1 | E2-DIAG1 |
|---|---|---|---|---|---|
| X- | Y- | Z- | E0 | E1 | E2 |

| E0 | E1 | E2 | Extend-Interface-1 |
|---|---|---|---|
| 3.3V | 3.3V | 3.3V | 3.3V |
| GND | GND | GND | GND |
| PG14 | PG9 | PD3 | PI11 |

| | | | |
|---|---|---|---|
| 3.3V | 3.3V | 3.3V | 3.3V |
| GND | GND | GND | GND |
| PF2 | PC13 | PE0 | PH6 |

| X- | Y- | Z- | Extend-Interface-2 |
|---|---|---|---|
| GND | GND | GND | GND |
| PC0 | PC1 | PC2 | PC3 |
| BED | T0 | T1 | T2 |

| | |
|---|---|
| 3V3 | 5V |
| NC | 5V |
| NC | GND |
| NC | PA10 |
| NC | PA9 |
| GND | NC |
| NC | NC |
| NC | GND |
| NC | NC |
| NC | NC |
| NC | GND |
| NC | NC |
| NC | NC |
| GND | NC |
| NC | NC |
| NC | GND |
| NC | NC |
| NC | GND |
| NC | NC |
| NC | NC |
| GND | NC |

Raspberry Pi

## Extended Board Interface

| MOTO_MOSI | | MOTO_MISO | |
|---|---|---|---|
| PI2 | KMOSI | MOTO_SCK | |
| PF3 | M1_STEP | PI1 | KSCK |
| PI4 | M1_STOP | PF4 | M2_STOP |
| PF5 | TEMP_M5 | PF6 | M3_STOP |
| PF7 | TEMP_M4 | PF8 | M1_EN |
| PF9 | TEMP_M2 | PF10 | TEMP_M3 |
| PC9 | FAN_M4 | PG3 | M1_DIR |
| PG4 | M1_CS | PG2 | M2_EN |
| PD15 | HEAT_M1 | PD14 | M2_STEP |
| PD13 | HEAT_M2 | PD11 | M2_DIR |
| PD12 | HEAT_M3 | PE14 | FAN_M5 |
| PI6 | HEAT_M5 | PE13 | HEAT_M4 |
| PF12 | M5_STOP | PE12 | M3_STEP |
| PE15 | M2_CS | PE10 | M3_DIR |
| PE11 | FAN_M3 | PE8 | M4_EN |
| PE9 | FAN_M2 | PG1 | M4_DIR |
| PE7 | M3_CS | PF15 | M4_CS |
| PG0 | M4_STEP | PI0 | M5_EN |
| PF14 | M3_EN | PH15 | M5_DIR |
| PH12 | M5_STEP | PH14 | M5_CS |
| PH2 | KCS | PI5 | FAN_M1 |
| PA3 | TEMP_M1 | PF13 | RGB_LED |
| PI7 | M4_STOP | 5V | |
| 3V3 | | GND | |

| | | | |
|---|---|---|---|
| PB1 | PA1 | PB0 | |
| HEAT0 | HEAT1 | HEAT2 | K-TEM |

| | | |
|---|---|---|
| PE5 | PE6 | PC8 |
| FAN0 | FAN1 | FAN2 |

WIFI

| | | | |
|---|---|---|---|
| 3.3V | PF11 | NC | PC7 |
| PC6 | PC5 | NC | GND |

ICSP (SWD on schematic)

| | | | | |
|---|---|---|---|---|
| RST | SWC | GND | SWD | 3.3V |

TFT

| | | | | |
|---|---|---|---|---|
| (UART) | | | | |
| 5V | GND | TX3 | RX3 | RST |

- Corrected PIN Values. PIN Value placed here came from the GTR V1.0 Schematic Diagram.

- PIN Values that do not exists.