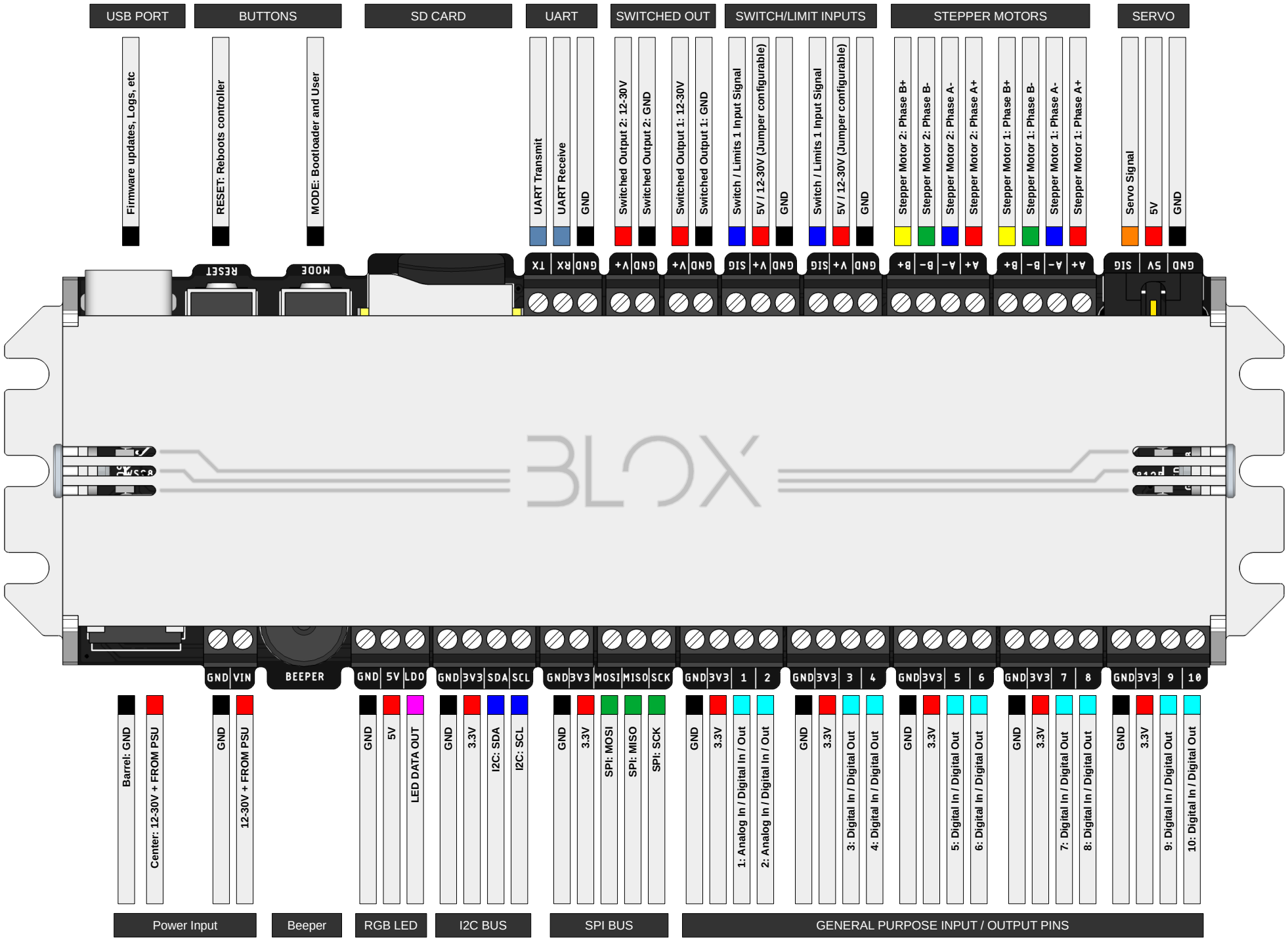
USB PORT
Firmware updates, Logs, etc
BUTTONS
RESET: Reboots controller
MODE: Bootloader and User
SD CARD
UART
UART Transmit
UART Receive
GND
SWITCHED OUT
Switched Output 2: 12-30V
Switched Output 2: GND
Switched Output 1: 12-30V
Switched Output 1: GND
SWITCH/LIMIT INPUTS
Switch / Limits 1 Input Signal
5V / 12-30V (Jumper configurable)
GND
Switch / Limits 1 Input Signal
5V / 12-30V (Jumper configurable)
GND
STEPPER MOTORS
Stepper Motor 2: Phase B+
Stepper Motor 2: Phase B-
Stepper Motor 2: Phase A-
Stepper Motor 2: Phase A+
Stepper Motor 1: Phase B+
Stepper Motor 1: Phase B-
Stepper Motor 1: Phase A-
Stepper Motor 1: Phase A+
SERVO
Servo Signal
5V
GND
RESET
MODE
TX RX GND
V+ GND
V+ GND
SIG V+ GND
SIG V+ GND
B+ B- A- A+
B+ B- A- A+
SIG 5V GND
BLOX
GND VIN
BEEPER
GND 5V LDO
GND 3V3 SDA SCL
GND 3V3 MOSI MISO SCK
GND 3V3 1 2
GND 3V3 3 4
GND 3V3 5 6
GND 3V3 7 8
GND 3V3 9 10
Barrel: GND
Center: 12-30V + FROM PSU
GND
12-30V + FROM PSU
GND
5V
LED DATA OUT
GND
3.3V
I2C: SDA
I2C: SCL
GND
3.3V
SPI: MOSI
SPI: MISO
SPI: SCK
GND
3.3V
1: Analog In / Digital In / Out
2: Analog In / Digital In / Out
GND
3.3V
3: Digital In / Digital Out
4: Digital In / Digital Out
GND
3.3V
5: Digital In / Digital Out
6: Digital In / Digital Out
GND
3.3V
7: Digital In / Digital Out
8: Digital In / Digital Out
GND
3.3V
9: Digital In / Digital Out
10: Digital In / Digital Out
Power Input
Beeper
RGB LED
I2C BUS
SPI BUS
GENERAL PURPOSE INPUT / OUTPUT PINS