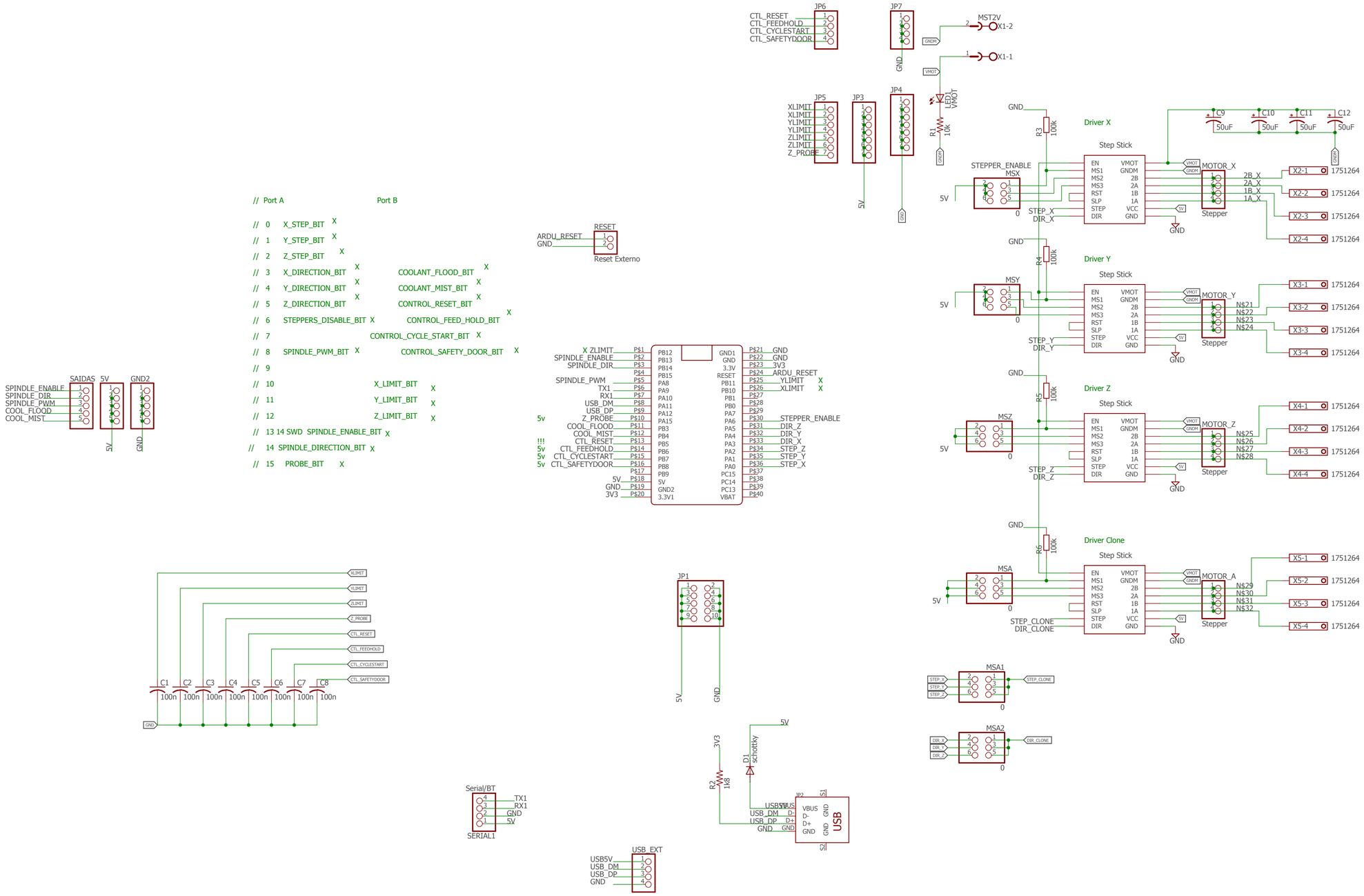
// Port A
Port B
// 0 X_STEP_BIT X
// 1 Y_STEP_BIT X
// 2 Z_STEP_BIT X
// 3 X_DIRECTION_BIT X
// 4 Y_DIRECTION_BIT X
// 5 Z_DIRECTION_BIT X
// 6 STEPPERS_DISABLE_BIT X
// 7
// 8 SPINDLE_PWM_BIT X
// 9
// 10
// 11
// 12
// 13 14 SWD SPINDLE_ENABLE_BIT X
// 14 SPINDLE_DIRECTION_BIT X
// 15 PROBE_BIT X
COOLANT_FLOOD_BIT X
COOLANT_MIST_BIT X
CONTROL_RESET_BIT X
CONTROL_FEED_HOLD_BIT X
CONTROL_CYCLE_START_BIT X
CONTROL_SAFETY_DOOR_BIT X
X_LIMIT_BIT X
Y_LIMIT_BIT X
Z_LIMIT_BIT X
SAIDAS
5V
GND2
SPINDLE_ENABLE
SPINDLE_DIR
SPINDLE_PWM
COOL_FLOOD
COOL_MIST
RESET
ARDU_RESET
GND
Reset Externo
JP6
CTL_RESET
CTL_FEEDHOLD
CTL_CYCLESTART
CTL_SAFETYDOOR
JP7
MST2V
X1-2
X1-1
LED1
VMOT
R1 10k
JP5
JP3
JP4
XLIMIT
YLIMIT
ZLIMIT
Z_PROBE
PB12 PB13 PB14 PB15 PA8 PA9 PA10 PA11 PA12 PA15 PB3 PB4 PB5 PB6 PB7 PB8 PB9 5V GND2 3.3V1
GND1 GND 3.3V RESET PB11 PB10 PB1 PB0 PA7 PA6 PA5 PA4 PA3 PA2 PA1 PA0 PC15 PC14 PC13 VBAT
X ZLIMIT P$1
SPINDLE_ENABLE P$2
SPINDLE_DIR P$3
P$4
SPINDLE_PWM P$5
TX1 P$6
RX1 P$7
USB_DM P$8
USB_DP P$9
5v Z_PROBE P$10
COOL_FLOOD P$11
COOL_MIST P$12
CTL_RESET P$13
!!! 5v CTL_FEEDHOLD P$14
5v CTL_CYCLESTART P$15
5v CTL_SAFETYDOOR P$16
P$17
5V_ P$18
GND P$19
3V3 P$20
P$21 GND
P$22 GND
P$23 3V3
P$24 ARDU_RESET
P$25 YLIMIT X
P$26 XLIMIT X
P$27
P$28
P$29
P$30 STEPPER_ENABLE
P$31 DIR_Z
P$32 DIR_Y
P$33 DIR_X
P$34 STEP_Z
P$35 STEP_Y
P$36 STEP_X
P$37
P$38
P$39
P$40
C1 C2 C3 C4 C5 C6 C7 C8
100n
GND
JP1
5V
GND
3V3
R2 1k8
D1 Schottky
Serial/BT
TX1
RX1
GND
5V
SERIAL1
USB_EXT
USB5V
USB_DM
USB_DP
GND
JP2
VBUS
D-
D+
GND
USB
S1
S2
R3 100k
Driver X
Step Stick
STEPPER_ENABLE
MSX
STEP_X
DIR_X
EN MS1 MS2 MS3 RST SLP STEP DIR
VMOT GNDM 2B 2A 1B 1A VCC GND
MOTOR_X
Stepper
2B_X
2A_X
1B_X
1A_X
C9 C10 C11 C12
50uF
X2-1 X2-2 X2-3 X2-4
1751264
R4 100k
Driver Y
MSY
STEP_Y
DIR_Y
MOTOR_Y
N$21 N$22 N$23 N$24
X3-1 X3-2 X3-3 X3-4
R5 100k
Driver Z
MSZ
STEP_Z
DIR_Z
MOTOR_Z
N$25 N$26 N$27 N$28
X4-1 X4-2 X4-3 X4-4
R6 100k
Driver Clone
MSA
STEP_CLONE
DIR_CLONE
MOTOR_A
N$29 N$30 N$31 N$32
X5-1 X5-2 X5-3 X5-4
MSA1
MSA2
STEP_X
STEP_Y
STEP_Z
DIR_X
DIR_Y
DIR_Z
XLIMIT
YLIMIT
ZLIMIT
Z_PROBE
CTL_RESET
CTL_FEEDHOLD
CTL_CYCLESTART
CTL_SAFETYDOOR