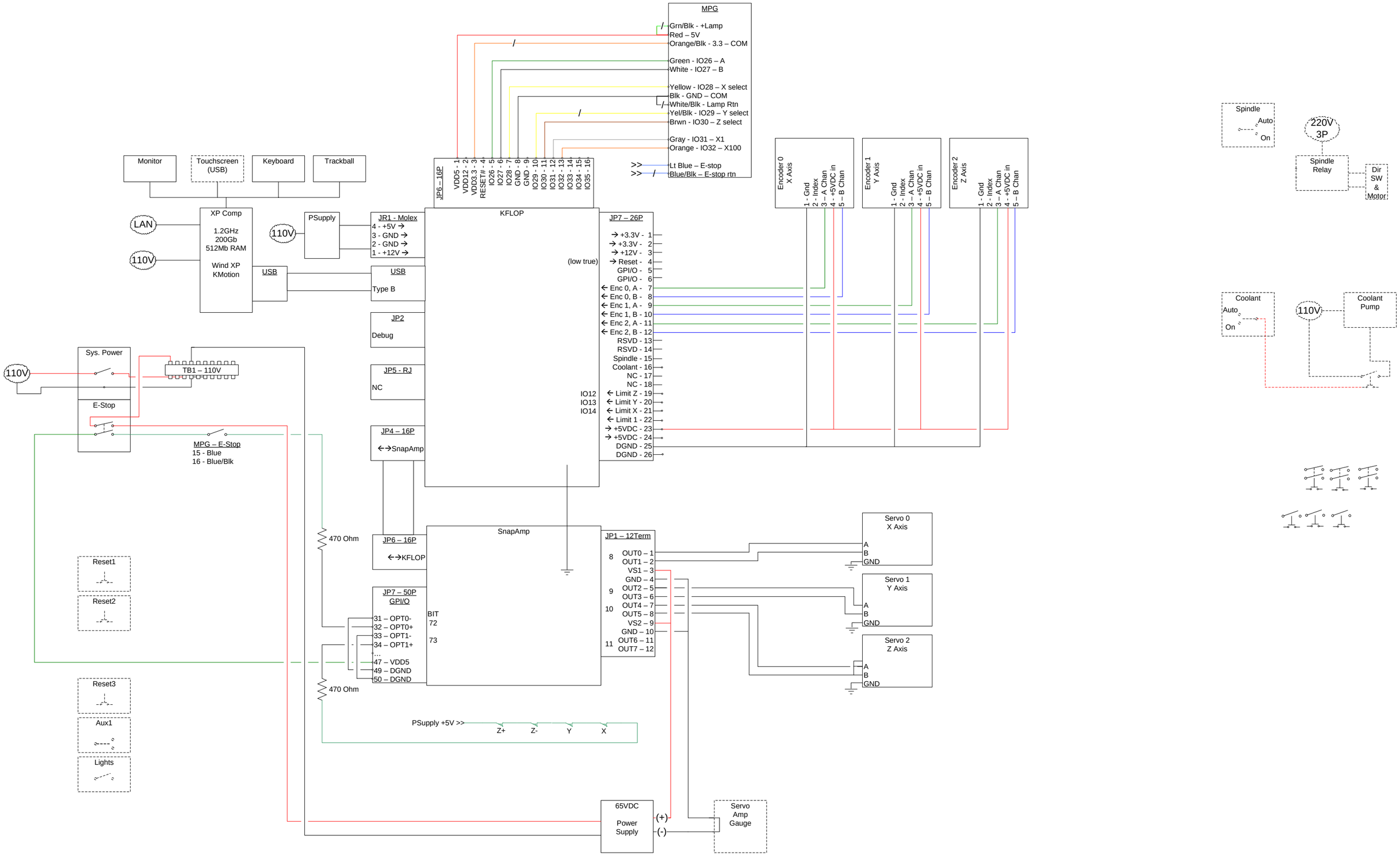
MPG
Grn/Blk - +Lamp
Red – 5V
Orange/Blk - 3.3 – COM
Green - IO26 – A
White - IO27 – B
Yellow - IO28 – X select
Blk - GND – COM
White/Blk - Lamp Rtn
Yel/Blk - IO29 – Y select
Brwn - IO30 – Z select
Gray - IO31 – X1
Orange - IO32 – X100
Lt Blue – E-stop
Blue/Blk – E-stop rtn
JP6 – 16P
VDD5 - 1
VDD12 - 2
VDD3.3 - 3
RESET# - 4
IO26 - 5
IO27 - 6
IO28 - 7
GND - 8
GND - 9
IO29 - 10
IO30 - 11
IO31 - 12
IO32 - 13
IO33 - 14
IO34 - 15
IO35 - 16
KFLOP
Encoder 0
X Axis
Encoder 1
Y Axis
Encoder 2
Z Axis
1 - Gnd
2 - Index
3 – A Chan
4 - +5VDC in
5 – B Chan
Spindle
Auto
On
220V
3P
Spindle
Relay
Dir
SW
&
Motor
Monitor
Touchscreen
(USB)
Keyboard
Trackball
XP Comp
1.2GHz
200Gb
512Mb RAM
Wind XP
KMotion
LAN
110V
110V
PSupply
110V
JR1 - Molex
4 - +5V
3 - GND
2 - GND
1 - +12V
USB
USB
Type B
JP2
Debug
JP5 - RJ
NC
JP4 – 16P
SnapAmp
JP7 – 26P
+3.3V - 1
+3.3V - 2
+12V - 3
(low true)
Reset - 4
GPI/O - 5
GPI/O - 6
Enc 0, A - 7
Enc 0, B - 8
Enc 1, A - 9
Enc 1, B - 10
Enc 2, A - 11
Enc 2, B - 12
RSVD - 13
RSVD - 14
Spindle - 15
Coolant - 16
NC - 17
NC - 18
IO12
IO13
IO14
Limit Z - 19
Limit Y - 20
Limit X - 21
Limit 1 - 22
+5VDC - 23
+5VDC - 24
DGND - 25
DGND - 26
Coolant
Auto
On
110V
Coolant
Pump
Sys. Power
110V
TB1 – 110V
E-Stop
MPG – E-Stop
15 - Blue
16 - Blue/Blk
470 Ohm
JP6 – 16P
KFLOP
JP7 – 50P
GPI/O
31 – OPT0-
32 – OPT0+
33 – OPT1-
34 – OPT1+
...
47 – VDD5
49 – DGND
50 – DGND
BIT
72
73
470 Ohm
SnapAmp
JP1 – 12Term
8
OUT0 – 1
OUT1 – 2
VS1 – 3
GND – 4
9
OUT2 – 5
OUT3 – 6
10
OUT4 – 7
OUT5 – 8
VS2 – 9
GND – 10
11
OUT6 – 11
OUT7 – 12
Servo 0
X Axis
A
B
GND
Servo 1
Y Axis
A
B
GND
Servo 2
Z Axis
A
B
GND
Reset1
Reset2
Reset3
Aux1
Lights
PSupply +5V >>
Z+
Z-
Y
X
65VDC
Power
Supply
(+)
(-)
Servo
Amp
Gauge