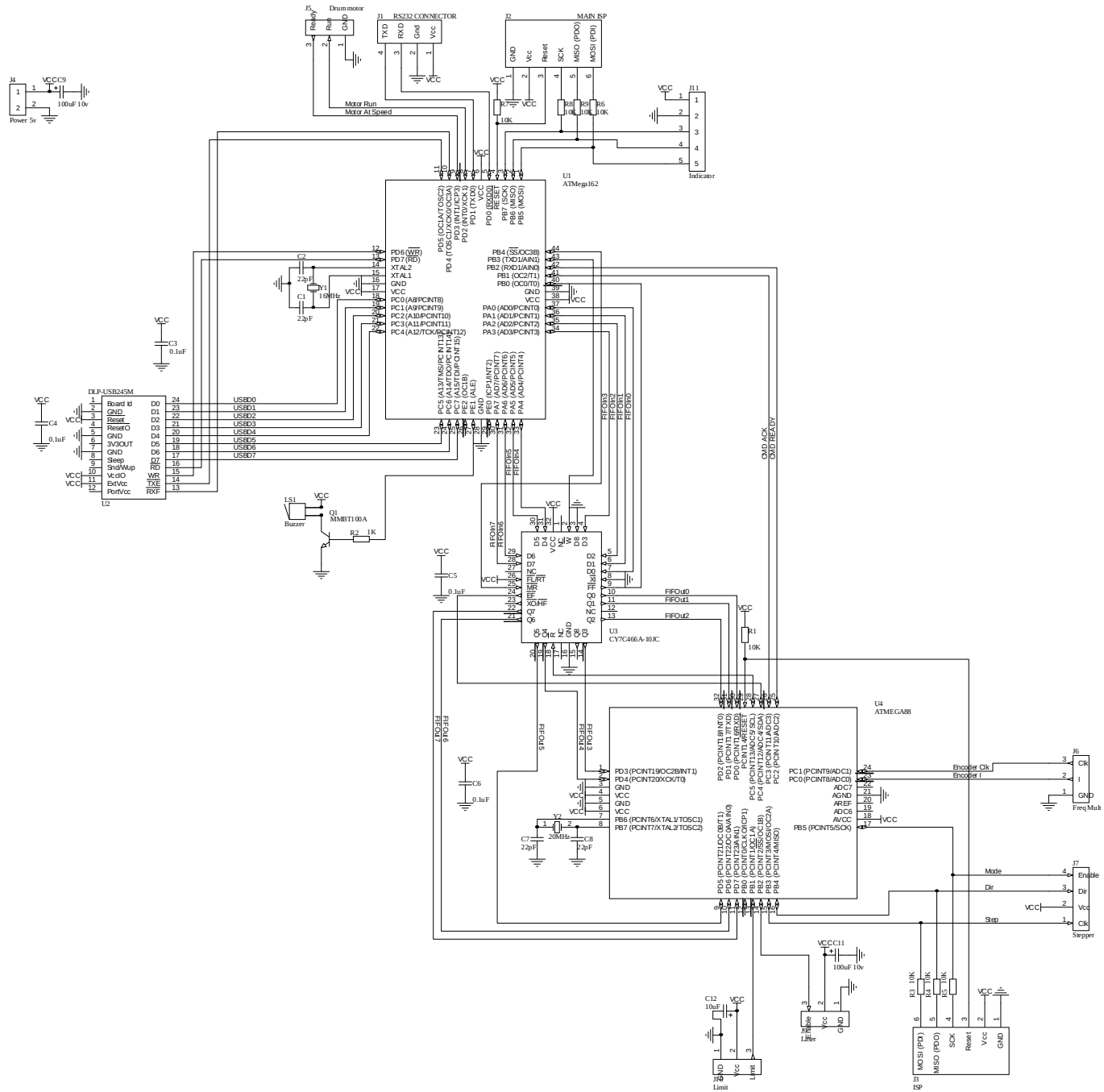
J5
Drum motor
Relay
Run
GND
J1
RS232 CONNECTOR
TXD
RXD
Gnd
Vcc
J2
MAIN ISP
GND
Vcc
Reset
SCK
MISO (PDO)
MOSI (PDI)
J4
Power 5v
C9
100uF 10v
Motor Run
Motor At Speed
R7
10K
R8
10K
R9
10K
R6
10K
J11
Indicator
U1
ATMega162
PD6 (WR)
PD7 (RD)
XTAL2
XTAL1
GND
VCC
PC0 (A8/PCINT8)
PC1 (A9/PCINT9)
PC2 (A10/PCINT10)
PC3 (A11/PCINT11)
PC4 (A12/TCK/PCINT12)
PC5 (A13/TMS/PCINT13)
PC6 (A14/TDO/PCINT14)
PC7 (A15/TDI/PCINT15)
PE2 (OC1B)
PE1 (ALE)
PE0 (RD)
PB4 (SS/OC3B)
PB3 (TXD1/AIN1)
PB2 (RXD1/AIN0)
PB1 (OC2/T1)
PB0 (OC0/T0)
PA0 (AD0/PCINT0)
PA1 (AD1/PCINT1)
PA2 (AD2/PCINT2)
PA3 (AD3/PCINT3)
PA6 (AD6/PCINT6)
PA5 (AD5/PCINT5)
PA4 (AD4/PCINT4)
C2
22pF
Y1
16MHz
C1
22pF
C3
0.1uF
DLP-USB245M
Board Id
GND
Reset
ResetO
GND
3V3OUT
GND
Sleep
SndWup
VccIO
ExtVcc
PortVcc
D0
D1
D2
D3
D4
D5
D6
D7
RD
WR
TXE
RXF
USBD0
USBD1
USBD2
USBD3
USBD4
USBD5
USBD6
USBD7
U2
C4
0.1uF
LS1
Buzzer
Q1
MMBT100A
R2
1K
FIFOin3
FIFOin2
FIFOin1
FIFOin0
FIFOin5
FIFOin4
FIFOin7
FIFOin6
OMD ACK
OMD READY
U3
CY7C466A-10JC
FIFOut0
FIFOut1
FIFOut2
C5
0.1uF
R1
10K
U4
ATMEGA88
PD3 (PCINT19/OC2B/INT1)
PD4 (PCINT20/XCK/T0)
PB6 (PCINT6/XTAL1/TOSC1)
PB7 (PCINT7/XTAL2/TOSC2)
PC1 (PCINT9/ADC1)
PC0 (PCINT8/ADC0)
ADC7
AGND
AREF
ADC6
AVCC
PB5 (PCINT5/SCK)
FIFOin5
FIFOin4
FIFOin3
FIFOin7
FIFOin6
C6
0.1uF
Y2
20MHz
C7
22pF
C8
22pF
J6
Freq Mult
Encoder Clk
Encoder I
J7
Stepper
Mode
Dir
Step
C11
100uF 10v
C12
10uF
J10
Limit
J14
Limer
R3 10K
R4 10K
R5 10K
J3
ISP