+3.3V +3.3V +3.3V +3.3V +5V

R2 1.5k   R3 1.5k   R4 1.5k   R5 1.5k

J2

+5V +3.3V

+5V (Motor)
1
DATA
2
GND
3
GND
4
N/C
5
+3.3v (Logic)
6

1 2 3
4 5 6

J2, facing socket

Controller Port

PIC16C745   U1

1 MCLR   RB7 28
2 RA0   RB6 27
3 RA1   RB5 26
4 RA2   RB4 25
5 RA3   RB3 24
6 RA4   RB2 23
7 RA5   RB1 22
8 Vss   RB0 21   +5V
9 CLKIN   Vdd 20
10 CLKOUT   Vss 19
11 RC0   RC7 18
12 RC1   RC6 17
13 RC2   D+   16
14 Vusb   D-   15

C1 18pf
X1 6MHz
C2 18pf

R6 270   R7 270

D1 Green   D1 Red

+5V   D2   D3   D4   +3.3V

C5 22uf

R8 1.5k

+5V
C4 0.1uf

C3 0.22uf

R1 1.5k

J1

VCC   +5V
1
D-
2
D+
3
GND
4

USB