+5V

R1
51

TX
HFBR-1522Z

1
2
3
4

HFBR-4501Z
Connector
(Grey)

HFBR-4511Z
Connector
(Blue)

RX
HFBR-2522Z

4
3
2
1

+5V

C3
0.1 uF

DATA

C1
4.7 uF

C2
1500 pF

IC1

DATA

1/2 75451

+5V

IC2

R2
4.7 K

14 VDD   RB7 13
                RB6 12
          TX/RB5 11
16 OSC1   RB4 10
          RB3 9
15 OSC2   RX/RB2 8
          RB1 7
4 MCLR   RB0 6
3 T0CKI/RA4
2 RA3
1 RA2
18 RA1
17 RA0
5 VSS

PIC16F88

S1 S2 S3 S4

R3 10K R4 10K R5 10K R6 10K

multiplex_tx1
multiplex_rx1

multiplex_tx2
multiplex_rx2

+5V

IC3

R7
4.7 K

14 VDD   RB7 13
                RB6 12
          TX\RB5 11
16 OSC1   RB4 10
          RB3 9
15 OSC2   RX\RB2 8
          RB1 7
4 MCLR   RB0 6
3 T0CKI/RA4
2 RA3
1 RA2
18 RA1
17 RA0
5 VSS

PIC16F88

R8 220 R9 220 R10 220 R11 220

LED1 LED2 LED3 LED4