PIC16F84

(Direction seen from controller)

VDD

R1
16k

S1
SW-PB

C5
4n7

VSS

XT1
4.000 MHz

C1
10p

C2
10p

VDD

VSS

VSS

IC_PIC1

| | OSC1/CLKIN | OSC2/CLKOUT | | |
16	MCLR		15	
4	RA0	RB1	7	
17	RA1	RB2	8	
18	RA2	RB3	9	
1	RA3	RB4	10	
2	RA4/T0CKI	RB5	11	
3	RB0/INT	RB6	12	
6		RB7	13	

14 VDD

5 VSS

PIC TXD
5V DSR
5V DTR
PIC RXD

PIC16F84-04/P(18)

VSS

VDD

C8
100n

VDD

VSS

VSS
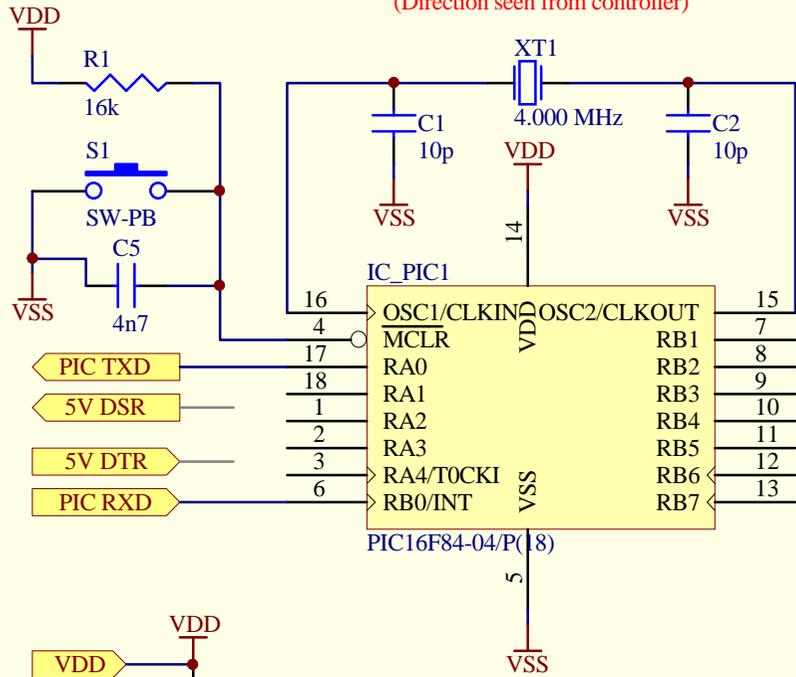
RS232

(Direction seen from host)

RS232 DTR
RS232 TXD

RS232 RXD
RS232 DSR

VSS

SUB1
DB9

1 6 2 7 3 8 4 9 5

MAX232

VSS

C3
10u

C4
10u

VDD

2 6 16

U1

		V+ V- VCC		
13	R1 IN	R1 OUT	12
8	R2 IN	R2 OUT	9
11	T1 IN	T1 OUT	14
10	T2 IN	T2 OUT	7
1	C1+	C2+	4
3	C1 -	C2 -	5

RS232 TXD   RS232
RS232 DTR
PIC TXD   5V
5V DSR   5V

PIC RXD
5V DTR   5V
RS232 RXD   RS232
RS232 DSR

C6
10u

C7
10u

GND

15

MAX232CPE(16)

VSS

VDD

C9
100n

VSS
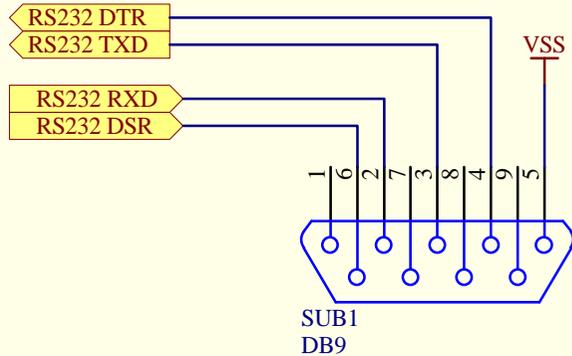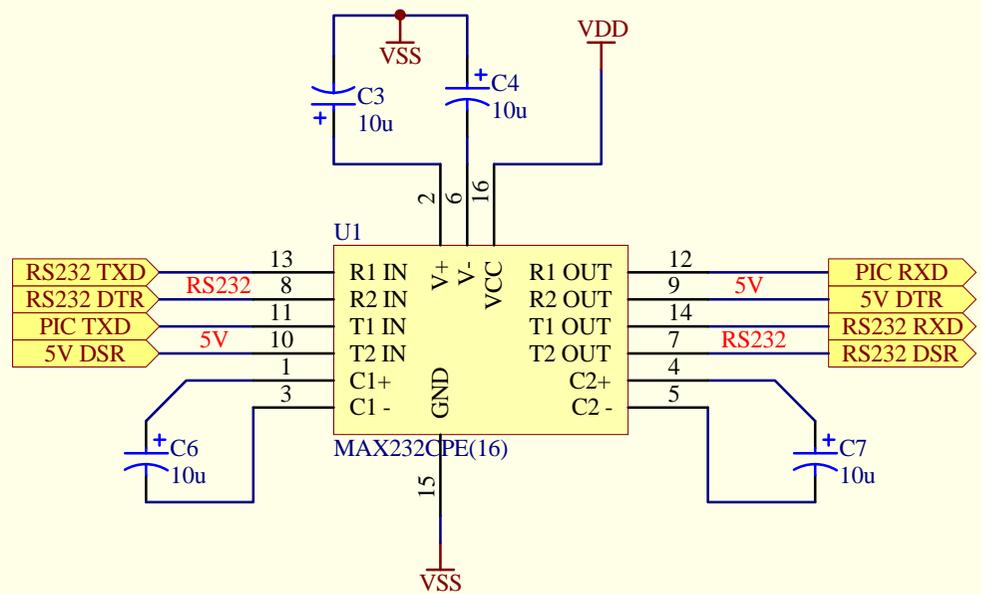
DSR and DTR signals are not used in
my RS232 routines, but are drawn for
completion. These signals are necessary
for hardware handshaking, whilst my
routines perform no handshaking. The
MAX232 has two output and two input
channels, specified to transmit up to 120
kbps depending on the type used.
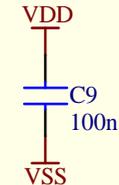
Title	
PIC-RS232 Interface using MAX232	
Written by	Date
Peter Luethi	20-Aug-2003
Dietikon, Switzerland	Revision 1.01 Page 1 of 1