#include "ASA\_Lib.h" //測試程式 成功 (Bluetooth to UART1)(UART0 to PC)(SPC傳資料，用ATOM終端機監視)

#include "ASA\_Lib\_DAC00.h"

#include <math.h>

#include <string.h>

#define FOSC 11059200// Clock Speed

#define BAUD0 9600 //

#define BAUD1 9600//UL 115200

#define MYUBRR0 FOSC/16/BAUD0-1

#define MYUBRR1 FOSC/16/BAUD1-1

volatile uint8\_t i,get[100];

int k,position;

void USART\_Flush( void )

{

unsigned char dummy;

while ( UCSR1A & (1<<RXC1) ) dummy = UDR1;

}

void USART0\_Init( unsigned int ubrr )

{

/\* Set baud rate \*/

UCSR0B|=(1<<RXCIE0)|(1<<TXCIE0); //致能TX，RX complete interrupt

UBRR0H |= (unsigned char)(ubrr>>8); //p.362 // fosc = 11.0592MHz，Baud Rate=9600，U2X=0 =>UBRR=71，U2X=1=>UBRR=143

UBRR0L |= (unsigned char)ubrr;

/\* Enable receiver and transmitter \*/

UCSR0B |= (1<<RXEN0)|(1<<TXEN0); //enables the USARTn Receiver，enables the USARTn Transmitter

/\* Set frame format: 8data, 2stop bit \*/

//UCSR1C = (0<<USBS1)|(3<<UCSZ10); //selects the number of stop bits，USBS1=1=> 2 bits

UCSR0C |= (1<<UPM01)|(0<<UPM00)|(1<<USBS0)|(1<<UCSZ01)|(1<<UCSZ00)|(0<<UCPOL0);//Character Size=8 bits，UCPOL1=上升/下降

}

void USART1\_Init( unsigned int ubrr )

{

/\* Set baud rate \*/

UCSR1B|=(1<<RXCIE1)|(1<<TXCIE1); //致能TX，RX complete interrupt

UBRR1H |= (unsigned char)(ubrr>>8); //p.362 // fosc = 11.0592MHz，Baud Rate=9600，U2X=0 =>UBRR=71，U2X=1=>UBRR=143

UBRR1L |= (unsigned char)ubrr;

/\* Enable receiver and transmitter \*/

UCSR1B |= (1<<RXEN1)|(1<<TXEN1); //enables the USARTn Receiver，enables the USARTn Transmitter

/\* Set frame format: 8data, 2stop bit \*/

//UCSR1C = (0<<USBS1)|(3<<UCSZ10); //selects the number of stop bits，USBS1=1=> 2 bits

UCSR1C |= (1<<UPM11)|(0<<UPM10)|(1<<USBS1)|(1<<UCSZ11)|(1<<UCSZ10)|(0<<UCPOL1);//Character Size=8 bits，UCPOL1=上升/下降

}

void USART1\_Transmit( unsigned char data )

{

/\* Wait for empty transmit buffer \*/

/\* Put data into buffer, sends the data \*/

PORTB|=(1<<PB4);

PORTB&= ~(1<<PB3);

UDR1 = data;

while ( !( UCSR1A & (1<<UDRE1)) ) //If UDREn is one, the buffer is empty

;

}

// uint8\_t uart1\_get() {

// while(!(UCSR1A&(1<<RXC1)));

// // {

// // //printf("stuck\n" );

// // }

//

// a++;

// return UDR1;

// }

int main(void)

{

ASA\_M128\_set();

printf("start1111\n");

DDRB |= (1<<DDB7)|(1<<DDB6)|(1<<DDB5); //洞洞板通道開啟

PORTB |= (1<<PB6);//洞洞板通道開啟(洞洞板轉到2)

DDRB=0xff;

i=0;

for(int j=0;j<100;j++)

{

get[j]=0;

}

position=0;

k=0;

USART1\_Init ( MYUBRR1 );

//USART0\_Init ( MYUBRR0 );

sei(); // 開啟所有中斷功能

// while (1) {

// USART1\_Transmit(9);

// }

//USART1\_Transmit(9);

while(1)

{

if(i>0)

{

printf("%d %d %d %d\n",get[0],get[1],get[2],get[3]);

for(int j=0;j<100;j++)

{

get[j]=0;

}

printf("i=%d\n",i );

i=0;

}

}

return 0;

}

ISR(USART1\_RX\_vect) {

get[i]=UDR1;

i++;

}