

# PC 向 NIOSII 串口通信源码

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关于PC串口通信，最简单的就是利用库函数实现，如：MSC 的\_bios\_serialcom() 和TC下的 bioscom() 函数。本程序是通过PC的基本I/O函数实现文件的传送的。

```
Please input the source file path:
Absolute path or relative path is valid.
For example:
D:\source\sam1.dat Or sam1.dat
Input the file path: source\sam2.dat
File Size:553.8 k
Transmitting Data...

45%

MS-DOS 下演示效果 波特率为: 9600bps
```

源码:

```
// Create by itspy 独舞 qq: 275885635
/* Function discription: Transimit the bin file
   uart:com1 baud rate: 9600bps */
#include <dos.h>
#include <stdio.h>
#include <conio.h>

#define COM1BASE 0x3F8 /* COM1_ISR Port Base Address */

char path1[100]; /*source file*/
void COM1_Init();
void SendData();

void main(void)
{
    int c;unsigned long i;
    COM1_Init();
    SendData();
    getch();
}
void COM1_Init()
{
    outportb(COM1BASE + 3, 0x80); /* SET DLAB ON */
    outportb(COM1BASE + 0, 0x0C); /* Set Baud rate 9600 BPS (Default
```

```

0x03=38400BPS) Divisor Latch Low Byte */
    outportb(COM1BASE + 1, 0x00); /* Set Baud rate - Divisor Latch High Byte
*/
    outportb(COM1BASE + 3, 0x03); /* 8 Bits, No Parity, 1 Stop Bit */
    outportb(COM1BASE + 2, 0xC7); /* FIFO Control Register */
    outportb(COM1BASE + 4, 0x0B); /* Turn on DTR, RTS, and OUT2 ,stream
control*/
}
void SendData()
{
    /* open a specific file and send */
    FILE *fp;
    unsigned char Byte,tmp,FLAG;
    unsigned long i,FILESIZE;
    struct time t; struct date d;
    clrscr();
    printf("Please input the source file path:\n");
    printf("Absolute path or relative path is valid.\n");
    printf("For example:\nD:\\\\source\\\\sam1.dat Or sam1.dat\n");
    printf("Input the file path: ");gets(path1);
    if((fp=fopen(path1,"rb"))!=NULL){
        FILESIZE=0;
        while(!feof(fp)){ fread(&tmp,1,1,fp);FILESIZE++;}
        printf("File Size: %.1f k\n", (float)(FILESIZE)/1024);
        rewind(fp);
        i=0;
        printf("Transmitting Data...\n\n");
        while(!feof(fp)){
            fread(&Byte,1,1,fp);
            tmp=Byte;
            if(feof(fp))
                break;
            else{
                i++;
                outport(COM1BASE,tmp); /*send data */
                printf("\b\b\b\b\b\b%2.0f%%", (float)(i*100/FILESIZE));
            }
        }
        FLAG=0;
        fclose(fp);
    }
    else
        printf("Can not open the file: %s",path1);
    (!FLAG)? printf("\n\nTransimission
Completed.\n"):printf("\n\nTransimission Failed.\n");

```

```
gettime(&t);
printf("End At: %2d%2d:%2d",t.ti_hour,t.ti_min,t.ti_sec);
getdate(&d);
printf("    %d-%d-%d",d.da_year,d.da_mon,d.da_day);
getch();
}
```