



```

1  /*****
2  *文件名: pid.c
3  *文件描述: PID控制电机转速
4
5  *****/
6
7  #include <reg51.h>
8  #include <intrins.h>
9
10 sbit plus_10=P1^3;          //对各个按钮进行位定义
11 sbit minus_10=P1^4;
12 sbit plus=P1^5;
13 sbit minus=P1^6;
14 sbit enter=P1^7;
15 sbit PWM_OUT1=P1^1;
16 sbit PWM_OUT2=P1^0;
17 sbit dir=P1^2;
18
19 struct PID                  //定义PID结构体
20 {
21     int SetValue;           //设定值
22     // long SumError;        //误差
23     double Proportion;      //比例系数
24     double Integral;        //积分系数
25     double Derivative;      //微分系数
26     int LastError;
27     int PrevError;
28 }sPID,*sptr= &sPID;
29
30 int PWM,PWM_temp=1,count0=0,Speed_Set,Seep_Measure,counter_100ms,counter_10ms;
31 bit flag_100ms,flag_10ms,start,plus_10_lock=1,minus_10_lock=1,plus_lock=1,
32     minus_lock=1,enter_lock=1;
33 char num[] = {0x3f, 0x06, 0x5b, 0x4f, 0x66, 0x6d, 0x7d, 0x07, 0x7f, 0x6f}; //0~9 对应数码
34
35 /*****
36 *函数名: void delaysms(unsigned char x)
37 *函数功能: 简单延时 支持0~255ms

```

