源代码：

#include<AT89X52.H>

#include<HJ-2WD\_PWM\_FK.H>

#define Left\_moto\_go {P1\_2=0,P1\_3=1;}

#define Left\_moto\_go {P1\_2=0,P1\_3=1;}

#define Left\_moto\_back {P1\_2=1,P1\_3=0;}

#define Left\_moto\_Stop {P1\_2=0,P1\_3=0;}

#define Right\_moto\_go {P1\_6=1,P1\_7=0;}

#define Right\_moto\_back {P1\_6=0,P1\_7=1;}

#define Right\_moto\_Stop {P1\_6=0,P1\_7=0;}

#define Imax 14000

#define Imin 8000

#define Inum1 1450

#define Inum2 700

#define Inum3 3000

#ifndef \_LED\_H\_

#define \_LED\_H\_

#define Left\_1\_led P3\_4

#define Right\_1\_led P3\_5

#define Left\_2\_led P3\_6

#define Right\_2\_led P3\_3

#define PWMSD 9

#define Left\_moto\_pwm P1\_4

#define Right\_moto\_pwm P1\_5

bit Right\_moto\_stop=1;

bit Left\_moto\_stop =1;

unsigned int time=0;

unsigned char pwm\_val\_left =0;

unsigned char pwm\_val\_right =0;

unsigned char push\_val\_right=0;

unsigned char push\_val\_left=0;

sbit IN1=P1^2;

sbit IN2=P1^3;

sbit IN3=P1^6;

sbit IN4=P1^7;

sbit EN1=P1^4;

sbit EN2=P1^5;

sbit pwm=P2^7;

unsigned char f=0;

unsigned char Im[4]={0x00,0x00,0x00,0x00};

unsigned char show[2]={0,0};

unsigned long m,Tc;

unsigned char IrOK;

int i=0;

int j=1;

int h=0;

int k=0;

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

void delay(unsigned int k)

{

unsigned int x,y;

for(x=0;x<k;x++)

for(y=0;y<1827;y++);

}

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

void intersvr0(void) interrupt 0 using 1

{

Tc=TH0\*256+TL0; //提取中断时间间隔时长

TH0=0;

TL0=0;

if((Tc>Imin)&&(Tc<Imax))

{

m=0;

f=1;

return;

}

if(f==1)

{

if(Tc>Inum1&&Tc<Inum3)

{

Im[m/8]=Im[m/8]>>1|0x80; m++;

}

if(Tc>Inum2&&Tc<Inum1)

{

Im[m/8]=Im[m/8]>>1; m++;

}

if(m==32)

{

m=0;

f=0;

if(Im[2]==~Im[3])

{

IrOK=1;

}

else IrOK=0;

}

}

}

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

void run(void)

{

push\_val\_left=PWMSD;

push\_val\_right=PWMSD;

Left\_moto\_go ;

Right\_moto\_go ;

}

void backrun(void)

{

push\_val\_left=PWMSD;

push\_val\_right=PWMSD;

Left\_moto\_back ;

Right\_moto\_back ;

}

//右转

void rightrun(void)

{

push\_val\_left=PWMSD;

push\_val\_right=PWMSD;

Left\_moto\_go ;

Right\_moto\_back ;

}

void leftrun(void)

{

push\_val\_left=PWMSD;

push\_val\_right=PWMSD;

Left\_moto\_back ;

Right\_moto\_go ;

}

//STOP

void stoprun(void)

{

Left\_moto\_Stop ;

Right\_moto\_Stop ;

}

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

void pwm\_out\_left\_moto(void)

{

if(Left\_moto\_stop)

{

if(pwm\_val\_left<=push\_val\_left)

{

Left\_moto\_pwm=1;

}

else

{

Left\_moto\_pwm=0;

}

if(pwm\_val\_left>=20)

pwm\_val\_left=0;

}

else

{

Left\_moto\_pwm=0;

}

}

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

void pwm\_out\_right\_moto(void)

{

if(Right\_moto\_stop)

{

if(pwm\_val\_right<=push\_val\_right)

{

Right\_moto\_pwm=1;

}

else

{

Right\_moto\_pwm=0;

}

if(pwm\_val\_right>=20)

pwm\_val\_right=0;

}

else

{

Right\_moto\_pwm=0;

}

}

void intersvr1(void) interrupt 2 using 0

{

k=0;

k=k+1;

}

void timer0()interrupt 1 using 2

{

TH0=0XFc;

TL0=0X18;

time++;

pwm\_val\_left++;

pwm\_val\_right++;

pwm\_out\_left\_moto();

pwm\_out\_right\_moto();

}

void runcheck(void)

{

if(Left\_1\_led==0&&Right\_1\_led==0)

run();

else if(Left\_1\_led==0&&Right\_1\_led==1)

{

rightrun();

}

else if(Right\_1\_led==0&&Left\_1\_led==1)

{

leftrun();

}

else

{

run();

}

}

void backcheck(void)

{

if(Left\_1\_led==0&&Right\_1\_led==0)

backrun();

else if(Left\_1\_led==0&&Right\_1\_led==1)

rightrun();

else if(Right\_1\_led==0&&Left\_1\_led==1)

leftrun();

else

{

backrun();

}

}

void go(void)

{

while(i>j)

{

backcheck();

if( Right\_2\_led==1&&Left\_2\_led==1&&k==1)

{

i=i-k;

k=0;

}

}

while(i<j)

{

runcheck();

if(Right\_2\_led==1&&k==1)

{

i=i+k;

k=0;

}

}

j=i;

}

void main(void)

{

m=0;

f=0;

IT0=1;

EX0=1;

IT1=0;

EX1=1;

TMOD=0x11;

TH0=0xfc;

TL0=0x18;

TR0=1;

ET0=1;

EA=1;

while(1)

{

if(IrOK==1)

{

switch(Im[2])

{

case 0x0c:

j=1;

go();

break;

case 0x18:

j=2;

go();

break;

case 0x5e:

j=3;

go();

break;

case 0x08:

j=4;

go();

break;

case 0x1c:

j=5;

go();

break;

case 0x5a: //8

j=6;

go();

break;

case 0x42: //7

j=7;

go();

break;

case 0x52:

j=8;

go();

break;

case 0x4a:

j=9;

go();

break;

default:break;

}

IrOK=0;

}

stoprun();

}

}