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LAMPIRAN B

PROGRAM SISTEM LIFT DENGAN BAHASA C

/******

This program was produced by the

CodeWizardAVR V2.05.3 Standard

Automatic Program Generator

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Project :

Version :

Date : 3/24/2013

Author : user

Company : free

Comments:

Chip type : ATmega8535

Program type : Application

AVR Core Clock frequency: 12.000000 MHz

Memory model : Small

External RAM size : 0

Data Stack size : 128

```
*****/
```

```
#include <mega8535.h>
```

```
#include <delay.h>
```

```
#include <stdio.h>
```

```
// Declare your global variables here
```

```
#define lnt1 PIND.5 //sensor optocoupler lantai 1
```

```
#define lnt2 PIND.6 //sensor optocoupler lantai 2
```

```
#define lnt3 PIND.4 //sensor optocoupler lantai 3
```

```
#####
```

```
#define lnt11 PINB.2 //tombol ke arah lantai 1 di lantai 1
```

```
#define lnt12 PINB.1 //tombol ke arah lantai 2 di lantai 1
```

```
#define lnt13 PINB.0 //tombol ke arah lantai 3 di lantai 1
```

```
#define lnt21 PINB.4 //tombol ke arah lantai 1 di lantai 2
```

```
#define lnt22 PINB.3 //tombol ke arah lantai 2 di lantai 2
```

```
#define lnt23 PINB.5 //tombol ke arah lantai 3 di lantai 2
```

```
#define lnt31 PINB.6 //tombol ke arah lantai 1 di lantai 3
```

```
#define lnt32 PINB.7 //tombol ke arah lantai 2 di lantai 3
```

```
#define lnt33 PIND.0 //tombol ke arah lantai 3 di lantai 3
```

```

#define pgl_lnt1 PIND.1 //tombol panggil lift ke lantai 1

#define pgl_lnt2 PIND.2 //tombol panggil lift ke lantai 2

#define pgl_lnt3 PIND.3 //tombol panggil lift ke lantai 3

#####

unsigned int i,o;

bit a=0,b=0,c=0,d=0,e=0,f=0,g=0,h=0,j=0,k=0,l=0,m=0,mode_naik,mode_turun;

void naik()

//{

//for (i=0;i<100;i++)

    {PORTA=0x81;

    delay_ms(10);

    PORTA=0X42;

    delay_ms(10);

    PORTA=0X24;

    delay_ms(10);

    PORTA=0X18;

    delay_ms(10);

    }

//}

void turun()

//{ for (i=0;i<100;i++)

```

```

{  PORTA=0x18;

    delay_ms(10);

    PORTA=0X24;

    delay_ms(10);

    PORTA=0X42;

    delay_ms(10);

    PORTA=0X81;

    delay_ms(10);

    }

//}

void buka()

{

for (i=0;i<50;i++) //fungsi untuk membuka pintu sarang dengan motor servo

    {

    PORTD.7=1;

    delay_ms(2);

    PORTD.7=0;

    delay_ms(20);

    }

}

```

```

void tutup()

{

for (i=0;i<50;i++) //fungsi untuk menutup pintu sarang dengan motor servo

{

PORTD.7=1;

delay_ms(0.5);

PORTD.7=0;

delay_ms(20);

}

}

void main(void)

{

// Declare your local variables here

// Input/Output Ports initialization

// Port A initialization

// Func7=Out Func6=Out Func5=Out Func4=Out Func3=Out Func2=Out
Func1=Out Func0=Out

// State7=0 State6=0 State5=0 State4=0 State3=0 State2=0 State1=0 State0=0

PORTA=0x00;

DDRA=0xFF;

```

```

// Port B initialization

// Func7=In Func6=In Func5=In Func4=In Func3=In Func2=In Func1=In
Func0=In

// State7=P State6=P State5=P State4=P State3=P State2=P State1=P State0=P

PORTB=0xFF;

DDRB=0x00;

// Port C initialization

// Func7=Out Func6=Out Func5=Out Func4=Out Func3=Out Func2=Out
Func1=Out Func0=Out

// State7=0 State6=0 State5=0 State4=0 State3=0 State2=0 State1=0 State0=0

PORTC=0x00;

DDRC=0xFF;

// Port D initialization

// Func7=Out Func6=In Func5=In Func4=In Func3=In Func2=In Func1=In
Func0=In

// State7=1 State6=T State5=T State4=T State3=P State2=P State1=P State0=P

PORTD=0x8F;

DDRD=0x80;

// Timer/Counter 0 initialization

// Clock source: System Clock

```

```
// Clock value: Timer 0 Stopped

// Mode: Normal top=0xFF

// OC0 output: Disconnected

TCCR0=0x00;

TCNT0=0x00;

OCR0=0x00;

// Timer/Counter 1 initialization

// Clock source: System Clock

// Clock value: Timer1 Stopped

// Mode: Normal top=0xFFFF

// OC1A output: Discon.

// OC1B output: Discon.

// Noise Canceler: Off

// Input Capture on Falling Edge

// Timer1 Overflow Interrupt: Off

// Input Capture Interrupt: Off

// Compare A Match Interrupt: Off

// Compare B Match Interrupt: Off

TCCR1A=0x00;

TCCR1B=0x00;

TCNT1H=0x00;
```



```
TCNT1L=0x00;

ICR1H=0x00;

ICR1L=0x00;

OCR1AH=0x00;

OCR1AL=0x00;

OCR1BH=0x00;

OCR1BL=0x00;

// Timer/Counter 2 initialization

// Clock source: System Clock

// Clock value: Timer2 Stopped

// Mode: Normal top=0xFF

// OC2 output: Disconnected

ASSR=0x00;

TCCR2=0x00;

TCNT2=0x00;

OCR2=0x00;

// External Interrupt(s) initialization

// INT0: Off

// INT1: Off

// INT2: Off
```

```
MCUCR=0x00;

MCUCSR=0x00;

// Timer(s)/Counter(s) Interrupt(s) initialization

TIMSK=0x00;

// USART initialization

// USART disabled

UCSRB=0x00;

// Analog Comparator initialization

// Analog Comparator: Off

// Analog Comparator Input Capture by Timer/Counter 1: Off

ACSR=0x80;

SFIOR=0x00;

// ADC initialization

// ADC disabled

ADCSRA=0x00;

// SPI initialization

// SPI disabled
```

```

SPCR=0x00;

// TWI initialization

// TWI disabled

TWCR=0x00;

cek_lantai:

if (Int1==1) {turun();goto cek_lantai;}

goto tunggu;

//-----fungsi arah tujuan dari lantai 1-----//

tunggu:

if(pgl_lnt1==0&&Int3==0){a=1;goto turun_bawah;};

if(pgl_lnt2==0&&Int3==0){b=1;goto turun_bawah;};

if(pgl_lnt3==0&&Int3==0)goto cek_lantai_3;

if(pgl_lnt1==0&&Int1==0)goto cek_lantai_1;

if(pgl_lnt2==0&&Int1==0){b=1;goto naik_atas;};

if(pgl_lnt3==0&&Int1==0){c=1;goto naik_atas;};

```

```
if(pgl_lnt1==0&&lnt2==0){a=1;goto turun_bawah;};  
  
if(pgl_lnt2==0&&lnt2==0)goto cek_lantai_2;  
  
if(pgl_lnt3==0&&lnt2==0){c=1;goto naik_atas;};  
  
goto tunggu;
```

```
rutin_tujuan:
```

```
lantai_sama:
```

```
while(a==1)
```

```
{
```

```
buka();
```

```
delay_ms(1000);
```

```
tutup();
```

```
goto tunggu;
```

```
//a=0;
```

```
}
```

```
//if (a==0 && b==0 && c==0) goto main_fungsi;
```

```
naik_atas:
```

```
mode_naik=1;mode_turun=0;
```

```
lantai_atas:
```

```
naik();

if(pgl_lnt1==0) a=1;

if(pgl_lnt2==0) b=1;

if(pgl_lnt3==0) c=1;

if((b==1||e==1||h==1||l==1)&&lnt2==0) goto cek_lantai_2;

if((c==1||m==1||f==1||j==1)&&lnt3==0) goto cek_lantai_3;

goto lantai_atas;
```

turun_bawah:

```
mode_naik=0;mode_turun=1;
```

lantai_bawah:

```
turun();
```

```
if(pgl_lnt1==0) a=1;
```

```
if(pgl_lnt2==0) b=1;
```

```
if(pgl_lnt3==0) c=1;
```

```
if((b==1||e==1||h==1||l==1)&&lnt2==0) goto cek_lantai_2;
```

```
if((g==1||a==1||k==1||d==1)&&lnt1==0) goto cek_lantai_1;
```

```
goto lantai_bawah;
```

cek_lantai_1:

```
buka();

cek_tujuan1:

if(lnt11==0) k=1;

if(lnt12==0) l=1;

if(lnt13==0) m=1;

delay_ms(100);

o=o+1;

if (o<=10) goto cek_tujuan1;

o=0;

tutup();

a=0;d=0;g=0;k=0;

mode_naik=1;mode_turun=0;

if(mode_naik==1&&(l==1||m==1||f==1||j==1||e==1||h==1)) goto naik_atas;

else goto tunggu;

cek_lantai_2:

buka();

cek_tujuan2:

if(lnt21==0) d=1;

if(lnt22==0) e=1;

if(lnt23==0) f=1;
```

```
delay_ms(100);

o=o+1;

if (o<=10) goto cek_tujuan2;

o=0;

tutup();

b=0;e=0;h=0;l=0;

if(mode_naik==1) goto lantai_atas;

if(mode_turun==1)goto lantai_bawah;
```

```
cek_lantai_3:

buka();

cek_tujuan3:

if(lnt31==0) g=1;

if(lnt32==0) h=1;

if(lnt33==0) j=1;

delay_ms(100);

o=o+1;

if (o<=10) goto cek_tujuan3;

o=0;

tutup();

c=0;m=0;f=0;j=0;
```

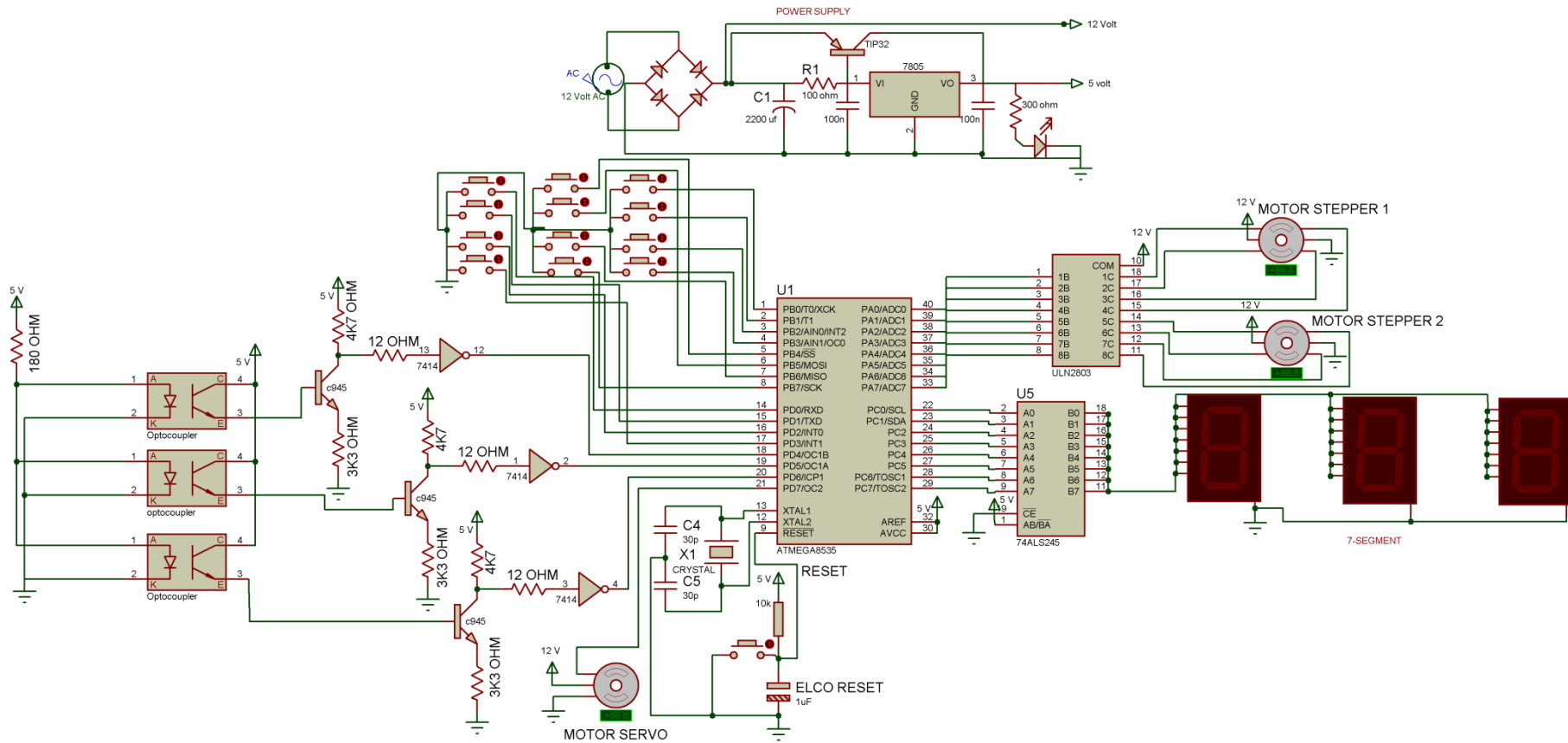
```
mode_turun=1;mode_naik=0;

if((h==1||g==1||d==1)) goto turun_bawah;

if((h==0||g==0||d==0||k==0||l==0||e==0)) goto tunggu;

}
```


LAMPIRAN A GAMBAR SISTEM ALAT SECARA KESELURUHAN



LAMPIRAN C FOTO DOKUMENTASI PERANCANGAN



