实验3-任務1

**#include** "msp430.h"

**unsigned** **int** i;

**void** **delay\_cycles**(**unsigned** **long** utime);

**int** **main** ( **void** )

{

**unsigned** **short** key=7;

WDTCTL = WDTPW + WDTHOLD;

P2SEL &=~(BIT2+BIT5);

P2SEL2 &=~(BIT2+BIT5);

P2OUT |=BIT2+BIT5;

P2DIR |=BIT2+BIT5;

P1SEL=0x00;

P1SEL2=0x00;

P1DIR=0x00;

P1OUT=0xff;

P1REN=0xff;

**while** (1)

{

**if**((P1IN & BIT0)==0) key=0;

**else** **if**((P1IN & BIT1)==0) key=1;

**else** **if**((P1IN & BIT2)==0) key=2;

**else** **if**((P1IN & BIT3)==0) key=3;

**else** **if**((P1IN & BIT4)==0) key=4;

**else** **if**((P1IN & BIT5)==0) key=5;

**else** **if**((P1IN & BIT6)==0) key=6;

**else** **if**((P1IN & BIT7)==0) key=7;

**if** (key==0){

**for** (i=0;i<0x120;i++)

{

P2OUT^=(BIT2+BIT5);

**\_\_delay\_cycles**(1908);

}

}

**if** (key==1){

**for** (i=0;i<0x120;i++)

{

P2OUT^=(BIT2+BIT5);

**\_\_delay\_cycles**(1700);

}

}

**if** (key==2){

**for** (i=0;i<0x120;i++)

{

P2OUT ^=(BIT2+BIT5);

**\_\_delay\_cycles**(1515);

}

}

**if** (key==3){

**for** (i=0;i<0x120;i++)

{

P2OUT ^=(BIT2+BIT5);

**\_\_delay\_cycles**(1432);

}

}

**if** (key==4){

**for** (i=0;i<0x120;i++)

{

P2OUT ^=(BIT2+BIT5);

**\_\_delay\_cycles**(1275);

}

}

**if** (key==5){

**for** (i=0;i<0x120;i++)

{

P2OUT ^=(BIT2+BIT5);

**\_\_delay\_cycles**(1136);

}

}

**if** (key==6){

**for** (i=0;i<0x120;i++)

{

P2OUT ^=(BIT2+BIT5);

**\_\_delay\_cycles**(1012);

}

}

**if** (key==7){

P2OUT |=BIT2+BIT5;

}

}

}

**void** **delay\_cycles**(**unsigned** **long** utime){

**unsigned** **long** j;

**for**(j=0;j<utime;j++);

实验3-任務2

**#include** "msp430.h"

**void** **delay**(**unsigned** **long** utime);

**int** **main** ()

{

**unsigned** **long** i;

WDTCTL = WDTPW + WDTHOLD; //关闭看门狗

P1SEL = 0x00;

P1SEL2 = 0x00;

P1DIR |= BIT4+BIT5+BIT6+BIT7;

P1DIR &=~(BIT0+BIT1+BIT2+BIT3);

P1OUT |= BIT0+BIT1+BIT2+BIT3;

P1REN |= BIT0+BIT1+BIT2+BIT3;

**for**(;;){

P1OUT |=BIT6;

P1OUT &=~BIT7;

**for**(i=0;i<0x0020;i++){

P1OUT |=BIT4+BIT5;

delay(0x0400);

P1OUT &=~(BIT4+BIT5);

delay(0x0200);

}

P1OUT &=~BIT6;

P1OUT |=BIT7;

**for**(i=0;i<0x0020;i++){

P1OUT |=BIT4+BIT5;

delay(0x0400);

P1OUT &=~(BIT4+BIT5);

delay(0x0200);

}

P1OUT |=BIT6;

P1OUT &=~BIT7;

**for**(i=0;i<0x0040;i++){

P1OUT |=BIT4+BIT5;

delay(0x0200);

P1OUT &=~BIT4;

delay(0x0200);

P1OUT &=~BIT5;

delay(0x0200);

}

**for**(i=0;i<0x0040;i++){

P1OUT |=BIT4+BIT5;

delay(0x0200);

P1OUT &=~BIT5;

delay(0x0200);

P1OUT &=~BIT4;

delay(0x0200);

}

}

}

**void** **delay**(**unsigned** **long** utime){

**unsigned** **long** j;

**for**(j=0;j<utime;j++);

}

实验3-任務3

**#include** "msp430.h"

**void** **delay**(**unsigned** **long** utime){

**unsigned** **long** j;

**for**(j=0;j<utime;j++);

}

**int** **main** ()

{

**register** **int** i;

WDTCTL = WDTPW + WDTHOLD; //关闭看门狗

P1SEL &=~BIT7;

P1SEL2 &=~BIT7;

P1DIR |=BIT7;

P1OUT |=BIT7;

P2SEL &=~BIT0;

P2SEL2 &=~BIT0;

P2DIR &=~BIT0;

**for**(;;){

**if** ((P2IN & BIT0)==0) {

**for**(i=0;i<6;i++){

P1OUT ^=BIT7;

delay(0x4000);

}

}

P1OUT |=BIT7;

}

}