

ATMEGA32 İÇİN

```
/*
 * frekansmetre.c
 *
 * Created: 09.02.2014 10:14:42
 * Author: BERKAY
 */

#include <avr/io.h>
#define F_CPU 1000000
#include <avr/interrupt.h>
#include "lcd16.h"

volatile int sayac,frekans=0;

void timer1_init(){
    TCCR1B=0X02;
    TCNT1=0;
    TIMSK=(1<<TOIE1);
    sei();
    sayac=0;
}

ISR(TIMER1_OVF_vect){

    sayac++;

    TCNT1=0;
}

ISR(INT1_vect){

    frekans++;
}

void cont(){

    PORTD^=(1<<6);

    gotoXy(0,1);
    integerToLcd(frekans); // print frequency value on 16x2 lcd

    frekans=0;
    TCNT1=0;
    sayac=0;
}
```

```

int main(void)
{
    sayac=0;
    DDRD|=(1<<6); // for led
    DDRB=0XFF;
    timer1_init();
    MCUCR|=(1<<ISC10)|(1<<ISC11);
    GICR|=(1<<INT1);

    lcdInit();

    gotoxy(0,0);
    prints("Frekans metre");
    gotoxy(6,1);
    prints("HZ");

    while(1)
    {
        if (sayac>=1){
            if(TCNT1>=56660){
                cont();
            }
        }
    }
    return 0;
}

```

ATMEGA 8 İÇİN

```

/*
 * frekansmetre.c
 *
 * Created: 09.02.2014 10:14:42
 * Author: BERKAY
 */

#include <avr/io.h>
#define F_CPU 1000000
#include <avr/interrupt.h>
#include "lcd16.h"

volatile int sayac,frekans=0;

void timer2_init(){
    TCCR2=0X07;
    TCNT2=0;

```

```

        TIMSK=(1<<TOIE2);
        sei();
        sayac=0;
    }

ISR(TIMER2_OVF_vect){

    sayac++;

    TCNT2=0;

}

ISR(INT0_vect){

    frekans++;

}

void cont(){

    PORTD^=(1<<7);

    gotoXy(0,1);
    integerToLcd(frekans); // print frequency value on 16x2 lcd

    frekans=0;
    TCNT2=0;
    sayac=0;

}

int main(void)
{

    DDRD|=(1<<7); // for led
    DDRB=0XFF;

    MCUCR|=(1<<ISC00)|(1<<ISC01);
    GICR|=(1<<INT0);

    lcdInit();

    gotoXy(0,0);
    prints("Frekans metre");
    gotoXy(6,1);
    prints("HZ");

    timer2_init();
    while(1)
    {
        if (sayac>=3){

```

```
        if(TCNT2>=211){  
            cont();  
        }  
    }  
    else{  
        PORTD&=~(1<<7);  
    }  
}  
return 0;  
}
```