

# Lab-2

---

Sunday, July 19, 2020 2:36 PM

Title:- Interfacing LED with LPC2129

Date:- 24/07/2020

**AIM: Write a program to blink LEDs from P0.16 to P0.23 interfaced with LPC2129.**

Source code:

```
#include<LPC21xx.h>
```

```
void delay_ms(unsigned int count)
```

```
{
```

```
    unsigned int j=0,i=0;
```

```
    for(j=0;j<count;j++)
```

```
    {
```

```
        for(i=0;i<3000;i++);
```

```
    }
```

```
}
```

```
int main()
```

```
{
```

```
    PINSEL1=0x00000000;
```

```
    IOODIR=0x00FF0000;
```

```
    while(1)
```

```
    {
```

```
        IOOSET=0x00FF0000;
```

```

        delay_ms(1000);

        IOOCLR=0x00FF0000;

        delay_ms(1000);

    }

}

```

Output:

LED On state:



LED Off state:



**AIM: Write a program to blink LEDs with P0.0 to P0.7 and P1.20 to P1.25 of LPC2129.**

Source code:-

```

#include<LPC21xx.h>

void delay_ms(unsigned int count)

{

```

```

unsigned int j=0,i=0;

for(j=0;j<count;j++)

{

    for(i=0;i<3000;i++);

}

}

int main()

{

    PINSEL0=0x00000000;

    PINSEL2=0x00000000;

    IO0DIR=0x000000FF;

    IO1DIR=0x03F00000;

    while(1)

    {

        IO0SET=0x000000FF;

        IO1SET=0x03F00000;

        delay_ms(1000);

        IO0CLR=0x000000FF;

        IO1CLR=0x03F00000;

        delay_ms(1000);

    }

}

```

Output:-

Port 0:

On state:

General Purpose Input/Output 0 (GPIO 0)

GPIO0

IO0DIR: 0x000000FF

IO0SET: 0x000000FF

IO0CLR: 0x00000000

IO0PIN: 0x03FFFFFF

Pins: 0x7BFFFFFF

Off state:

General Purpose Input/Output 0 (GPIO 0)

GPIO0

IO0DIR: 0x000000FF

IO0SET: 0x00000000

IO0CLR: 0x00000000

IO0PIN: 0x03FFFF00

Pins: 0x7BFFFF00

Port 1:

On state:

General Purpose Input/Output 1 (GPIO 1)

GPIO1

IO1DIR: 0x03F00000

IO1SET: 0x03F00000

IO1CLR: 0x00000000

IO1PIN: 0xFFFF0000

Pins: 0xFFFF0000

Off state:

General Purpose Input/Output 1 (GPIO 1)

GPIO1

IO1DIR: 0x03F00000

IO1SET: 0x00000000

IO1CLR: 0x00000000

IO1PIN: 0xFC0F0000

Pins: 0xFC0F0000

Inference:

In this experiment I learnt about how to interface the LED with LPC2129 and how to use the registers.