**Expt. No. 4 LCD INTERFACING**

#include <LPC21xx.H>

#include<board.h>

void lcdcmd(unsigned int);

void lcddata(unsigned int);

void delay\_lcd(void);

void DisplayLCD(char \*str, int len);

int main(void)

{

 \*IODIR1=0X00FF0000;

 \*IODIR0=0x30000000;

 lcdcmd(0x38);

 lcdcmd(0x0e);

 lcdcmd(0x01);

 lcdcmd(0x06);

 lcdcmd(0x84);

 DisplayLCD("RAM", 3);

 while(1);

}

void lcdcmd(unsigned int cmddata)

{

 \*IOCLR1=0X00FF0000;

 \*IOCLR0=0x10000000;

 cmddata = cmddata << 16;

 \*IOSET1=cmddata;

 \*IOCLR0=0x20000000;

 delay\_lcd();

 \*IOSET0=0x20000000;

 delay\_lcd();

 return;

}

void DisplayLCD(char \*str, int len)

{

 while(len-- != 0)

 {

 lcddata(\*str);

 str++;

 }

}

void lcddata(unsigned int outdata)

{

 \*IOCLR1=0x00FF0000;

 \*IOSET0=0x10000000;

 outdata = outdata << 16;

 \*IOSET1=outdata;

 \*IOSET0=0x20000000;

 delay\_lcd();

 \*IOCLR0=0x20000000;

 delay\_lcd();

 return;

}

void delay\_lcd(void)

{

 int j;

 for (j=0;j<500;j++);

 return;

}