**// C programming of WDT to reset the system from infinite loop**

#include <lpc17xx.h>

#include <stdint.h>

void delay(uint32\_t i)

{

uint32\_t x;

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

}

int main(void)

{

LPC\_GPIO0->FIODIR =0xffffffff;

LPC\_WDT->WDCLKSEL = 1;//set clk source to pclk

LPC\_WDT->WDTC = 0x0007ffff;//100000000/16; // For 139msec delay

LPC\_WDT->WDMOD = 0x03;// Watchdog interrupt enable with watchdog reset

LPC\_WDT->WDFEED = 0xAA;

LPC\_WDT->WDFEED = 0x55;

while(1)

{

LPC\_GPIO0->FIOPIN =0xffffffff;

delay(300000);

LPC\_GPIO0->FIOPIN =0x00000000;

delay(300000);

while(1); //infinite loop

}

}

**// C programming of WDT to reset the system after time-out**

#include <lpc17xx.h>

void delay\_ms(uint32\_t j)

{ uint32\_t x,i;

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

{ for(x=0; x<6000; x++);// loop to generate 1 milisecond delay

}}

int main(void)

{ LPC\_GPIO0->FIODIR |=(3<<0);// P0.0,P0.1 as outputs for LEDs

if ((LPC\_WDT->WDMOD >> 2) & 1)

{LPC\_GPIO0->FIOSET |=(1<<1);//IO0SET = 0x00000002; /\* P0.1 LED ON \*/

delay\_ms(3000); /\* Indicate Watchdog Reset using LED at P0.1 \*/

LPC\_GPIO0->FIOCLR |=(1<<1);

delay\_ms(2000);}

LPC\_WDT->WDCLKSEL = 1;//set clk source to pclk

LPC\_WDT->WDTC = 0x0007ffff;//100000000/16; // For 139msec delay

LPC\_WDT->WDMOD = 0x03;// Watchdog interrupt enable with watchdog reset

LPC\_WDT->WDFEED = 0xAA;

LPC\_WDT->WDFEED = 0x55;

LPC\_GPIO0->FIOSET |=(1<<0);//IO0SET = 0x00000001; /\* P0.0 LED ON \*/

delay\_ms(50);

LPC\_GPIO0->FIOCLR |=(1<<0);//IO0CLR = 0x00000001; /\* P0.0 LED OFF \*/

delay\_ms(50);

LPC\_WDT->WDFEED = 0xAA;

LPC\_WDT->WDFEED = 0x55;

LPC\_GPIO0->FIOSET |=(1<<0);//IO0SET = 0x00000001; /\* P0.0 LED ON \*/

delay\_ms(55);

LPC\_GPIO0->FIOCLR |=(1<<0);//IO0CLR = 0x00000001; /\* P0.0 LED OFF \*/

delay\_ms(55);

LPC\_WDT->WDFEED = 0xAA;

LPC\_WDT->WDFEED = 0x55;

LPC\_GPIO0->FIOSET |=(1<<0);//IO0SET = 0x00000001; /\* P0.0 LED ON \*/

delay\_ms(60);

LPC\_GPIO0->FIOCLR |=(1<<0);//IO0CLR = 0x00000001; /\* P0.0 LED OFF \*/

delay\_ms(60);

LPC\_WDT->WDFEED = 0xAA;

LPC\_WDT->WDFEED = 0x55;

LPC\_GPIO0->FIOSET |=(1<<0);//IO0SET = 0x00000001; /\* P0.0 LED ON \*/

delay\_ms(65);

LPC\_GPIO0->FIOCLR |=(1<<0);//IO0CLR = 0x00000001; /\* P0.0 LED OFF \*/

delay\_ms(65);

LPC\_WDT->WDFEED = 0xAA;

LPC\_WDT->WDFEED = 0x55;

delay\_ms(70);

LPC\_GPIO0->FIOCLR |=(1<<0);//IO0CLR = 0x00000001; /\* P0.0 LED OFF \*/

delay\_ms(70);

LPC\_WDT->WDFEED = 0xAA; LPC\_WDT->WDFEED = 0x55; return 0; }

**// C programming of WDT to reset the system by monitoring WDT flag**

#include <lpc17xx.h>

#include <stdint.h>

void delay(uint32\_t i)

{

uint32\_t x;

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

}

int main(void)

{

LPC\_GPIO0->FIODIR =0xffffffff;

LPC\_WDT->WDCLKSEL = 1;//set clk source to pclk

LPC\_WDT->WDTC = 0x0007ffff;//100000000/16; // For 139msec delay

LPC\_WDT->WDMOD = 0x03;// Watchdog interrupt enable with watchdog reset

LPC\_WDT->WDFEED = 0xAA;

LPC\_WDT->WDFEED = 0x55;

if(LPC\_WDT->WDTC & 4)

{

LPC\_GPIO0->FIOSET |=(1<<1);

delay(300000);

LPC\_GPIO0->FIOCLR |=(1<<1);

delay(200000);

}

while(1)

{

LPC\_GPIO0->FIOSET |=(1<<0);

delay(50000);

LPC\_GPIO0->FIOCLR |=(1<<0);

delay(50000);

}

}

**// C programming of WDT with feeding without any malfunction**

#include <lpc17xx.h>

#include <stdint.h>

void delay(uint32\_t i)

{

uint32\_t x;

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

}

int main(void)

{

LPC\_GPIO0->FIODIR =0xffffffff;

LPC\_GPIO1->FIODIR &=~(1<<0);

LPC\_WDT->WDCLKSEL = 1;//set clk source to pclk

LPC\_WDT->WDTC = 0x0007ffff;//100000000/16; // For 139msec delay

LPC\_WDT->WDMOD = 0x03;// Watchdog interrupt enable with watchdog reset

LPC\_WDT->WDFEED = 0xAA;

LPC\_WDT->WDFEED = 0x55;

if(LPC\_WDT->WDTC & 4)

{

LPC\_GPIO0->FIOSET |=(1<<1);

delay(300000);

LPC\_GPIO0->FIOCLR |=(1<<1);

delay(200000);

}

while(1)

{

LPC\_GPIO0->FIOSET |=(1<<0);

delay(50000);

LPC\_GPIO0->FIOCLR |=(1<<0);

delay(50000);

LPC\_WDT->WDFEED = 0xAA;

LPC\_WDT->WDFEED = 0x55;

}

}