ZIGBEE PROGRAM:

#include <stdio.h>

#include "LPC17xx.H" /\* LPC17xx definitions \*/

#include "GLCD.h"

#include "Serial.h"

#define \_\_FI 1 /\* Font index 16x24 \*/

void ZigbeeMeshTX\_Init(void)

{

/\*user may configure zigbee by entering below AT commands in any serial terminal

using RS232 cable\*/

/\*To check whether Zigbee is configured or not you can use hyperterminal or any serial

port/terminals by entering the commands in tx in serial window of PC to zigbee using RS232

cable\*/

SER\_SendString("+++"); /\* To enter AT command mode \*/

SER\_SendString("ATNDA00003000\r"); /\* This

command sets the Destination address as 00003000 \*/

SER\_SendString("ATGWR\r"); /\* Write to flash \*/

SER\_SendString("ATNUD00002000\r"); /\* This

command sets the Source address as 00002000 \*/

SER\_SendString("ATGWR\r"); /\* Write to flash \*/

SER\_SendString("ATNCHF\r");

/\* This command sets the CHANNEL as 0F \*/

SER\_SendString("ATSBD3\r");

/\* This command sets the baud as 9600 \*/

SER\_SendString("ATGWR\r"); /\* Write to flash \*/

SER\_SendString("ATNPI00001111\r"); /\* This

command sets the Personal Area Network ID/address as 00001111 \*/

SER\_SendString("ATGWR\r");

/\* Write to flash \*/

SER\_SendString("ATGEX\r"); /\* To Exit AT command mode\*/

}

/\*----------------------------------------------------------------------------

Main Program

\*----------------------------------------------------------------------------\*/

int main (void) {

LPC\_SC->PCONP|=(1<<15);

SER\_Init(); /\* UART Initialization \*/

LPC\_GPIO0->FIODIR |= 0x007f8000;

ZigbeeMeshTX\_Init();

#ifdef \_\_USE\_LCD

GLCD\_Init(); /\* Initialize graphical LCD \*/

GLCD\_Clear(White); /\* Clear graphical LCD display \*/

GLCD\_SetBackColor(Blue);

GLCD\_SetTextColor(White);

GLCD\_DisplayString(0, 0, \_\_FI, " MCB1700 Demo ");

GLCD\_DisplayString(1, 0, \_\_FI, " Zigbee Mesh TX ");

GLCD\_DisplayString(2, 0, \_\_FI, " www.keil.com ");

GLCD\_SetBackColor(White);

GLCD\_SetTextColor(Blue);

GLCD\_DisplayString(5, 0, \_\_FI, "Tx character:");

GLCD\_DisplayString(3, 0, \_\_FI, "Press RESET to ");

GLCD\_DisplayString(4, 0, \_\_FI, "TRANSMIT");

#endif

SysTick\_Config(SystemCoreClock/100); /\* Generate interrupt each 10 ms \*/

while (1)

{ /\* Loop forever \*/

GLCD\_DisplayChar(7, 4, \_\_FI,SER\_PutChar('G'));

}

}