

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);
```

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        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");

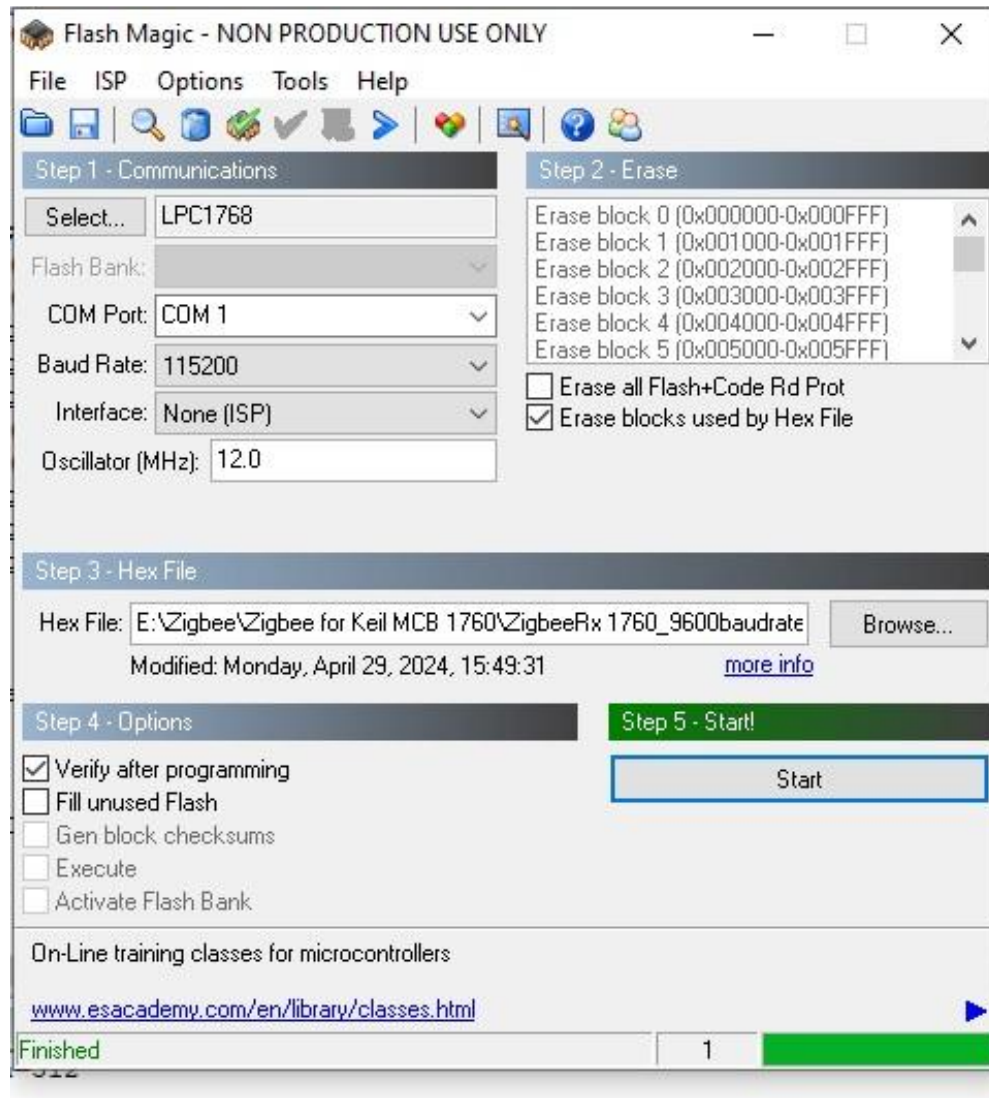
#endif

        SysTick_Config(SystemCoreClock/100);        /* Generate interrupt each 10 ms */

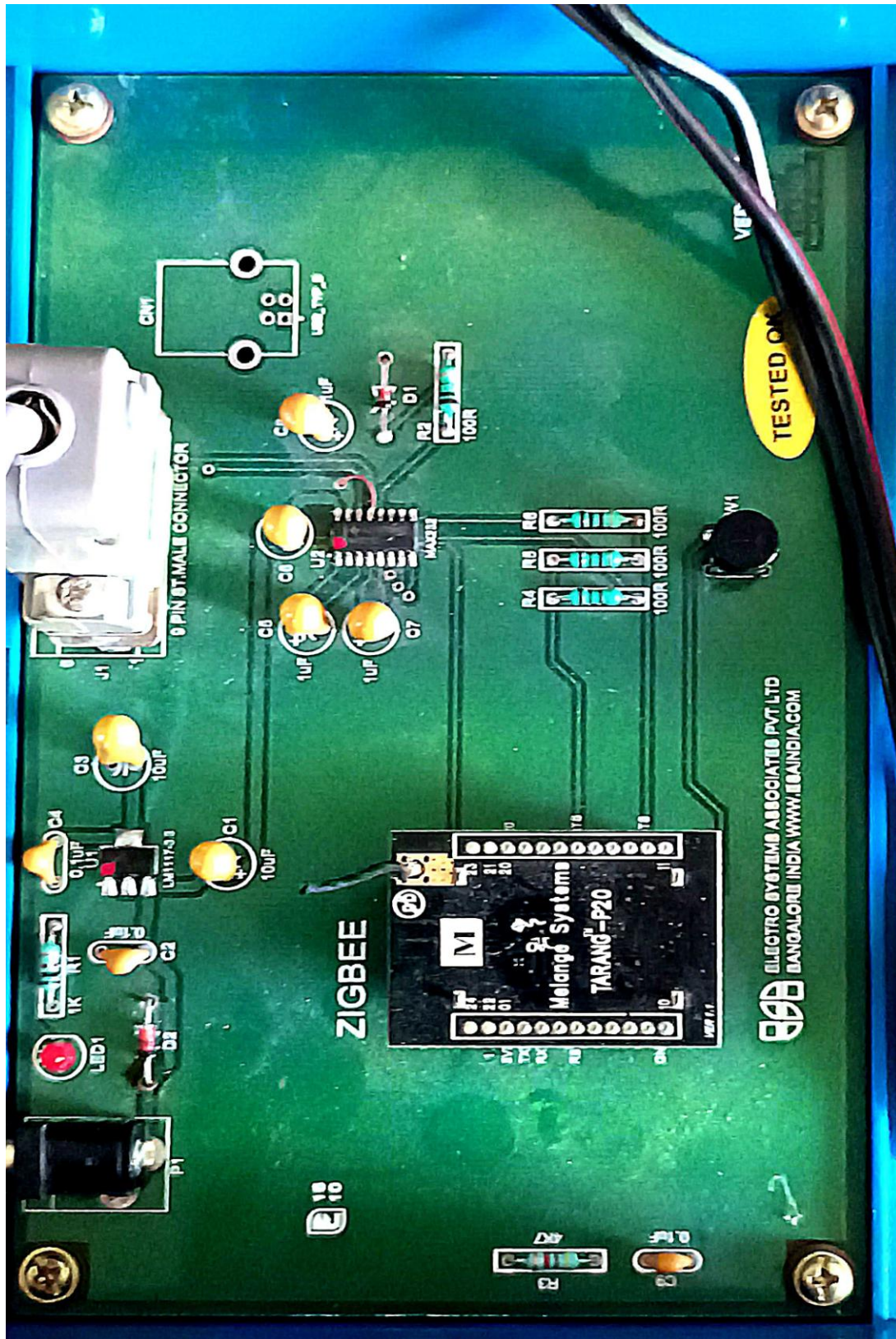
        while (1)
        {
                /* Loop forever */
                GLCD_DisplayChar(7, 4, __FI, SER_PutChar('G'));
        }
}

```

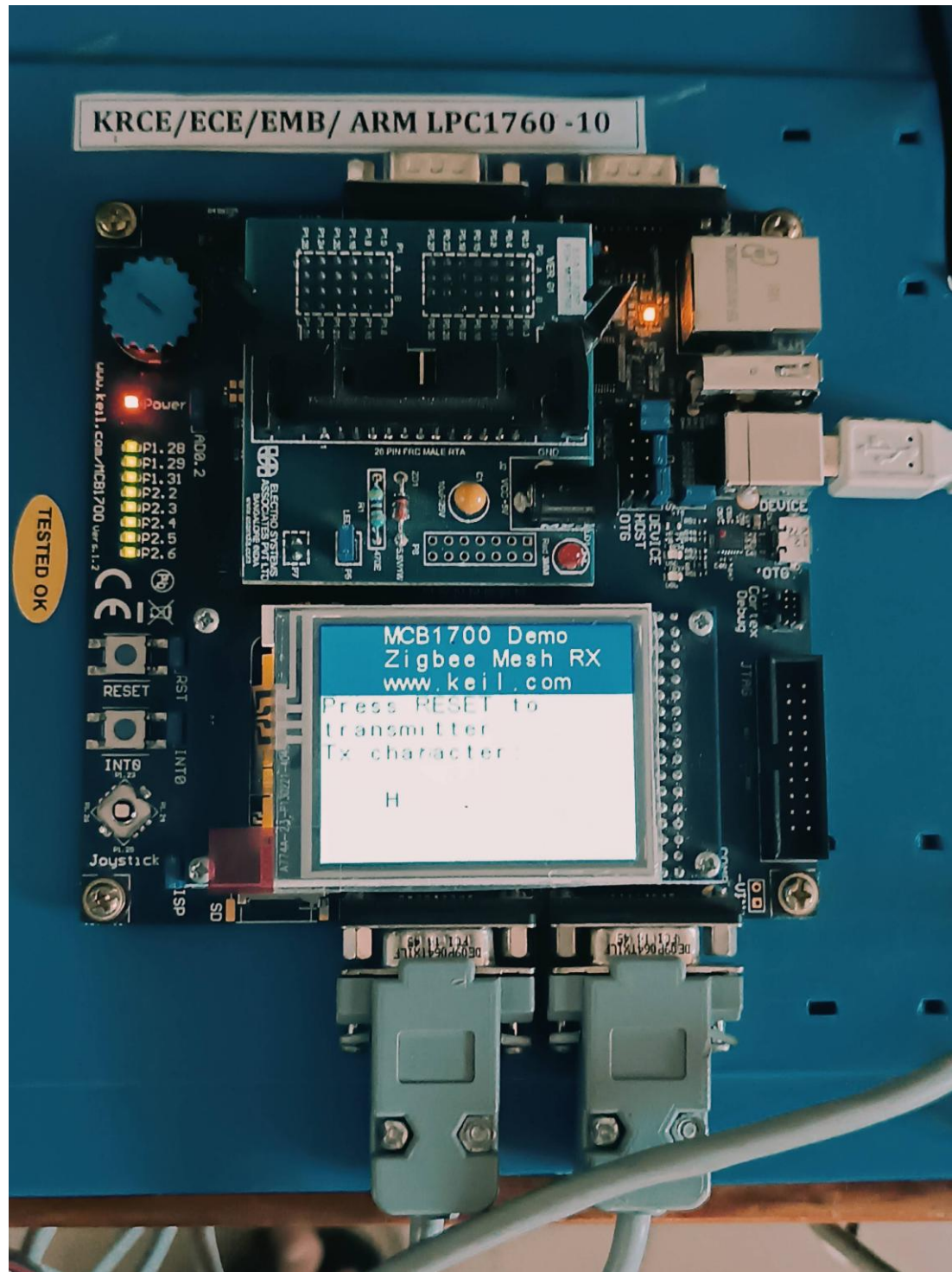
ZIGBEE IMPLEMENTATION:



ZIGBEE MODULE



ZIGBEE TRANSMITTER:



ZIGBEE RECEIVER:

