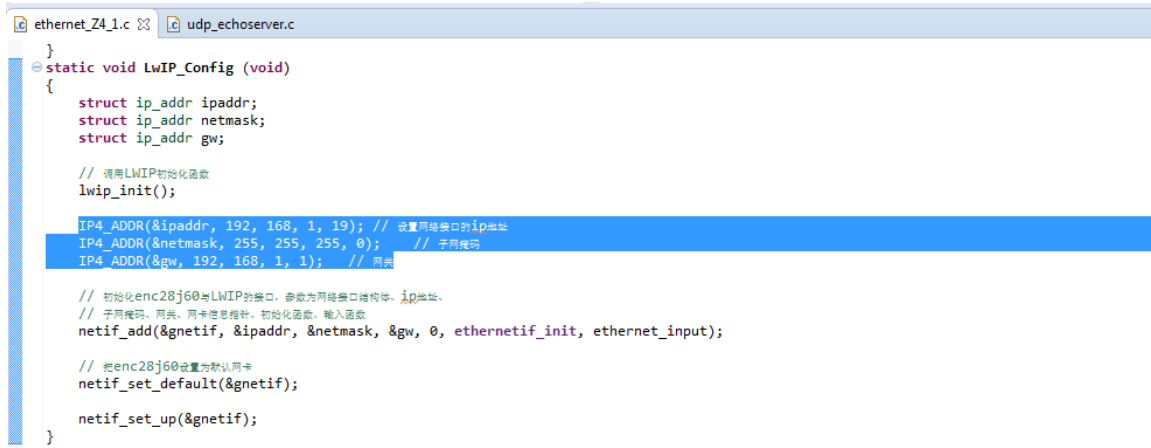


MPC5748G ethernet Demo User Guide

This demo ports LWIP and the Ethernet PHY is DP83848C. And the data rate is set 100Mbps. The demo implements the function: when PC sends message to board, the board will send the received message back to PC.

1. Configure MPC5748G board IP



```
static void LwIP_Config (void)
{
    struct ip_addr ipaddr;
    struct ip_addr netmask;
    struct ip_addr gw;

    // 调用LWIP初始化函数
    lwip_init();

    IP4_ADDR(&ipaddr, 192, 168, 1, 19); // 设置网络接口的ip地址
    IP4_ADDR(&netmask, 255, 255, 255, 0); // 子网掩码
    IP4_ADDR(&gw, 192, 168, 1, 1); // 网关

    // 初始化enc28j60与LWIP的接口, 参数为网络接口结构体、ip地址、
    // 子网掩码、网关、网卡信息指针、初始化函数、输入函数
    netif_add(&netif, &ipaddr, &netmask, &gw, 0, ethernetif_init, ethernet_input);

    // 把enc28j60设置为默认网卡
    netif_set_default(&netif);

    netif_set_up(&netif);
}
```

2. Configure MPC5748G board port



```
/* Includes -----*/
#include "lwip/pbuf.h"
#include "lwip/udp.h"
#include "lwip/tcp.h"
#include <string.h>
#include <stdio.h>

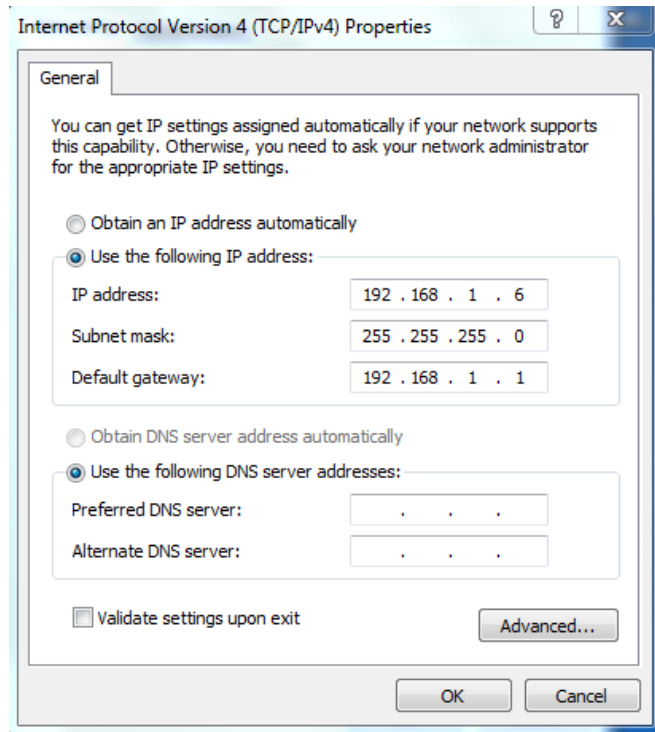
/* Private typedef -----*/
/* Private define -----*/
#define UDP_SERVER_PORT 7 /* define the UDP local connection port */

/* Private macro -----*/
/* Private variables -----*/
/* Private function prototypes -----*/
void udp_echo_server_receive_callback(void *arg, struct udp_pcb *upcb, struct pbuf *p, struct ip_addr *addr, u16_t port);

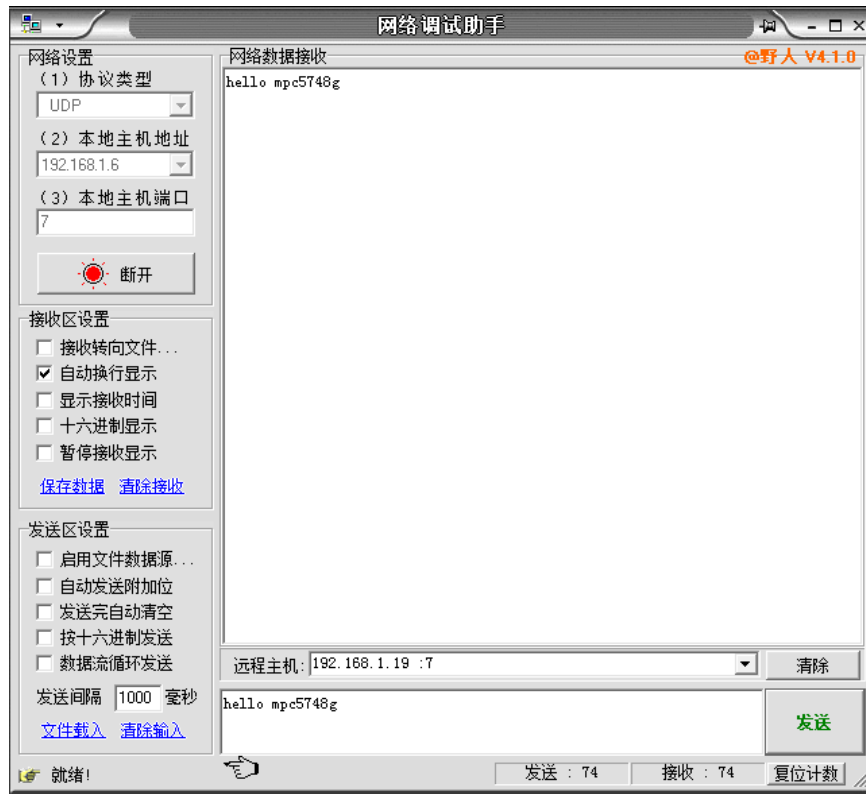
/* Private functions -----*/

/**
 * @brief Initialize the server application.
 * @param None
 */
```

3. Configure PC IP (Board and PC should be in the same network segment)



4. Configure net assistant



Test:

Connect PC with board, in the window of net assistant, send string and board will receive string and send back to pc. And in the window of net assistant, you will see the message which is sent by board.

