

# W3150A+ Design Guide

For W3150A users

## Document History

Ver 1.0 (Sep 4, 2006)	First release
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## 1 Software Design guide for W3150A users

You can easily search changing points in the driver source code by using keyword "\_W3150A+\_1\_".

### 1.1 To remove the code related to W3150A defection

Below example code is the part of "socket.c".

```

/*
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 *
 * FileName : socket.c
 * Revision History :
 *
 * ..
 * -----
 * 08/29/2006  3.0.0  Jung  #define _W3150A+_1_
 *                               support W3150A+
 * -----
 * last update : 08/29/2006
 */
#include "socket.h"

#ifndef _W3150A+_1_ // don't need to use for W3150A+ users
    #ifdef _20051111_
        #include "../mcu/delay.h"
    #endif

    extern uint8 GW_MAC[6]; // gateway mac address defined in w3150a.c
    extern uint8 GW_IP[6]; // gateway mac address defined in w3150a.c
    extern uint8 is_gw_samenet;
#endif
    
```

### 1.2 To modify Interrupt clear method

In the W3150A, Interrupt register and Socket n interrupt register can be cleared by reading corresponding registers. In the W3150A+, writing operation is added for the register clear.

Below sample code is the part of "W3150A.c".

```
void iinchip_irq(void)
{
    ..
    if (int_val & INT_CH(0))
    {
        // W3150A interrupt clear method
        I_STATUS[0] = IINCHIP_READ(INT_STATUS(0));
        #ifdef _W3150A+_1_ // added code for W3150A+ users
        // W3150A+ interrupt clear method includes writing process
        IINCHIP_WRITE(INT_STATUS(0), I_STATUS[0]);
        #endif
    }
}
```

### 1.3 To modify other registers

- "Memory test" bit in MODE register is removed
- "Send complete" bit in Socket n Interrupt Registers is added
- "No delayed ACK" bit in Socket n Mode Registers is added
- "Zero chksum" bit in Socket n Mode registers is removed

### 1.4 SEND\_OK interrupt is added

Case	W3150A	W3150A+
How to check transmission is complete.	When Command Register is cleared	When SEND_OK bit in Sn_IR is set

## 2 Hardware Design Guide for W3150A users

W3150A+ has some changes as below, but it does not need any change in the existing board where W3150A has been applied.

Pin#	W3150A+	W3150A	Recommend
33	SPI_EN [in]	PLOCK [out]	If you don't use SPI, you'd better tie up low.
59, 60	TEST	NC	tie up low.

