WLINK-I^{2}C ISP
Operation Manual
REV. 1.0
May 7, 2012

Ver.	Date	Applicant	Description
1.0	2012/5/7	Derek	1st Version

Table of Contents

WLINK-I^{2}C ISP Operation Manual

Chapter 1 WLINK-I^{2}C ISP Description

1.1 WLINK-I^{2}C Description

WLINK-I^{2}C ISP program can be used with WLINK-I^{2}C Adapter, after compiled the Hex file, programming it to IC. Connecting port is from USB port of PC through WLINK-I^{2}C Adapter, transfer to I^{2}C, and then connect to Evaluation board, as below (Figure 1).

USB   WLINK-I^{2}C Adapter   Evaluation Board
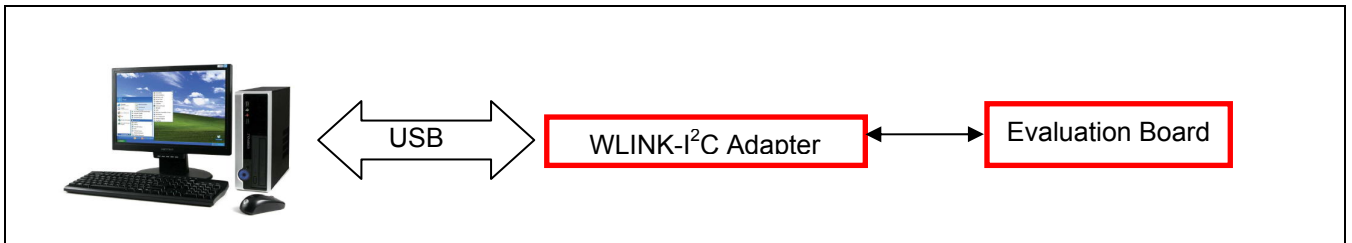
(Figure 1)

【PS】WLINK-I^{2}C Adapter driver installation procedure, please see "WLINK-I^{2}C Adapter Installation Description".

1.2 ISP Start Procedures

Use WT51F516 IC for an example to explain WLINK-I^{2}C ISP:

Following (Figure 1), connect PC, WLINK-I^{2}C and Evaluation Board, then go to Weltrend website and click WT51F516 ISP_Kit.exe to start ISP Program.

➢ ISP program start figure as below (Figure 2):
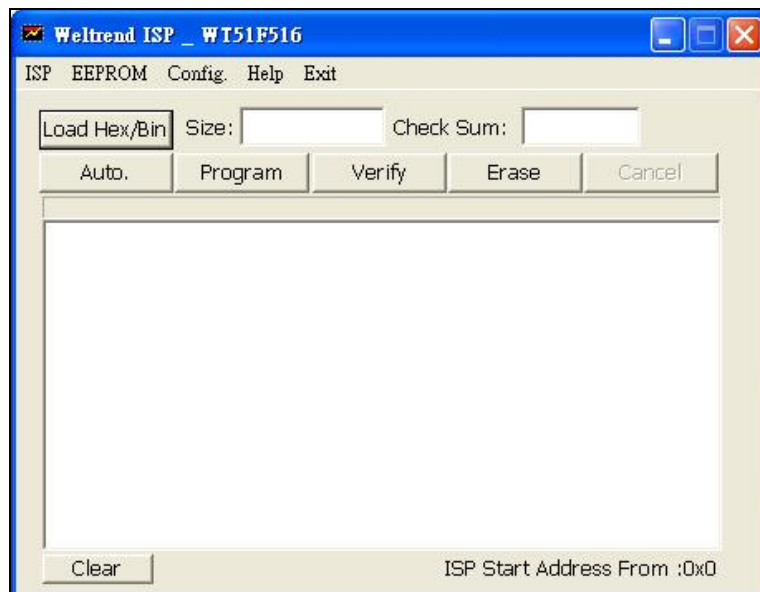
(Figure 2)

➢ ISP program start figure summary:

◆ ISP: Programming window interface

◆ E^{2}PROM.: Read and Write window interface for assigned IP

◆ Config.: Connecting window interface

1.3 Program Window Interface

There are five buttons on the ISP programming window (as Figure 2), they are "Load Hex/Bin", "Auto", "Program", "Verify" and "Erase", before using these functions, the following will go through its features.

➤ Load Hex/Bin: Choose the files that you want programming.

➤ Erase: Press the button all the connecting Flash ROM of IC will be erased.

➤ Program: Press the button all of the Hex or Bin files that are chosen will program to IC. Since Hex or Bin files will program to IC, the destination file must be loaded in advance, and then press "Program" for programming IC.

➤ Verify: The function of the button is comparing IC internal programming code with original program code if the same, by that to confirm all the chosen files if programming to IC correctly. (Please press "Load Hex/Bin" to load the files which you will execute comparison.

➤ Auto: The function of the button is to integrate "Erase", "Program" and "Verify" functions, after you press it, IC will be erased, then the file which is assigned will program to IC. At last, when the programming is finished, the internal program can be read and compared with the destination folder that is assigned programming, any error appeared in the comparison process, window will show the error information and interrupt operation.

## 1.4   Read and Write Interface Window for Assigned IP

Press "E^{2}PROM" then will show the window as below (Figure 3)：

➤   "Select E^{2}PROM Data": The Drop-down menu is for choosing the *.LST file which will be loaded, the file should be saved in the same folder with ISP program, by that it will show on the menu.
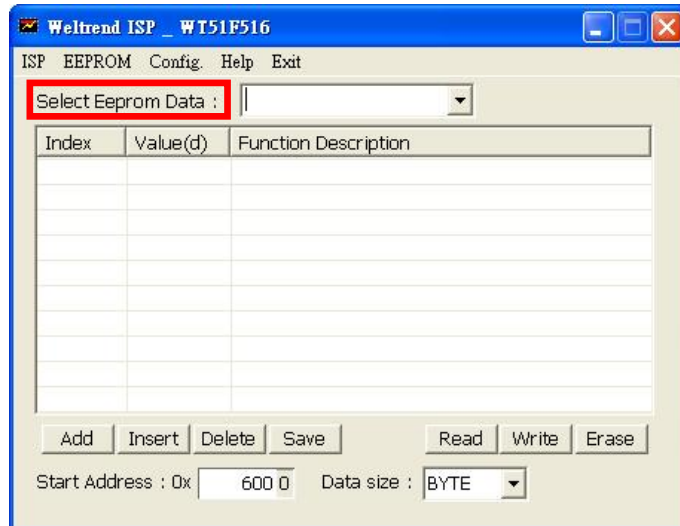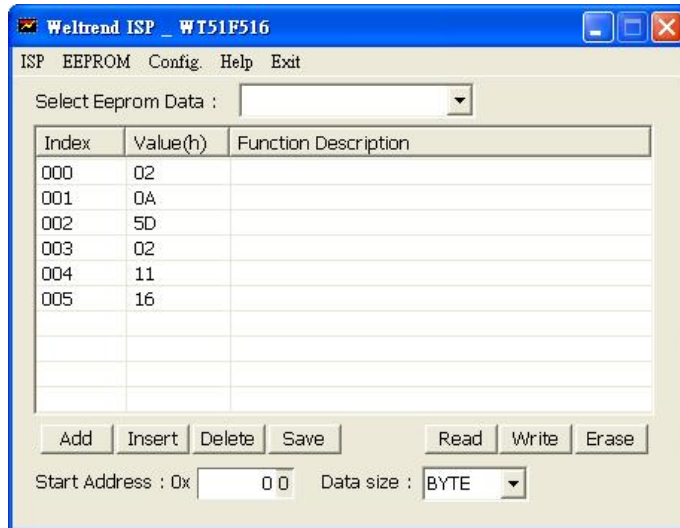
(Figure 3)

➤   "Add": The button is for adding "Read" and "Write" index address (Figure 4); the actual address is "absolute address" plus "index position" of Start Address.
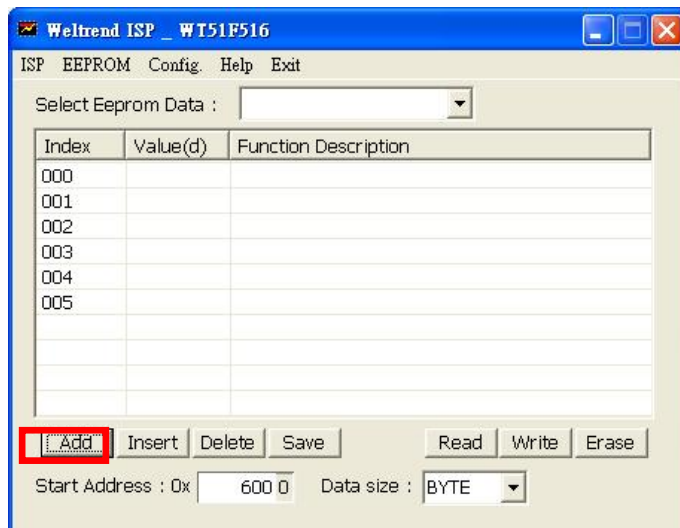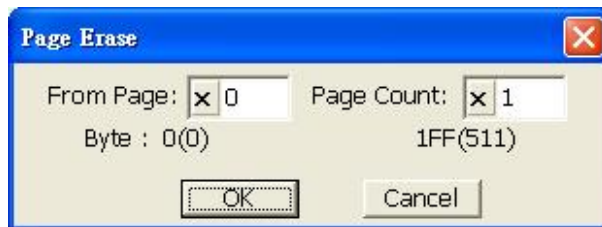
(Figure 4)

➢ "Save": Save "E^{2}PROM" window sheet as *.LST file.

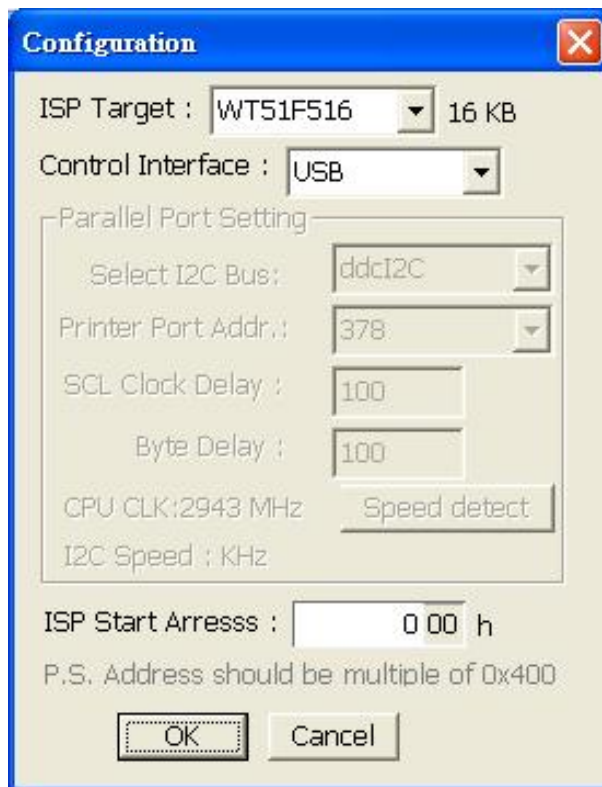➢ "Read": Read the value from assigned address as (Figure 5).

(Figure 5)

➢ "Write": Fill the value that will be changed into the assigned address.

➢ "Erase": Erase the assigned "Page", press "Erase" then will show the (Figure 6).

(Figure 6)

1.5 Connecting Window Interface

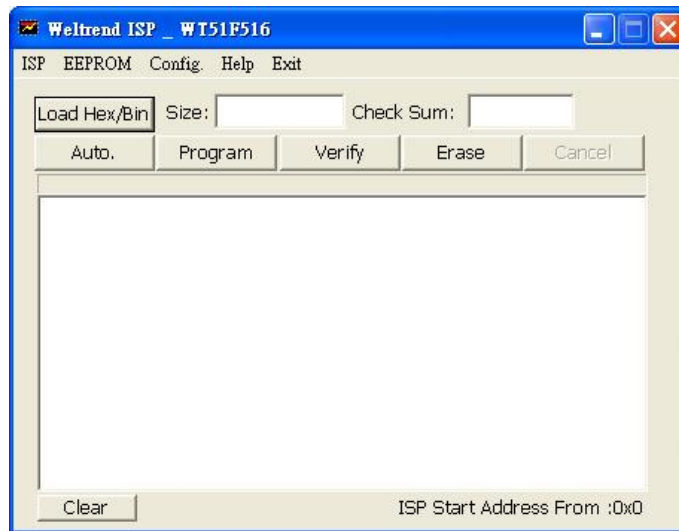The interface window is for IC type setting and communication as below (Figure 7).
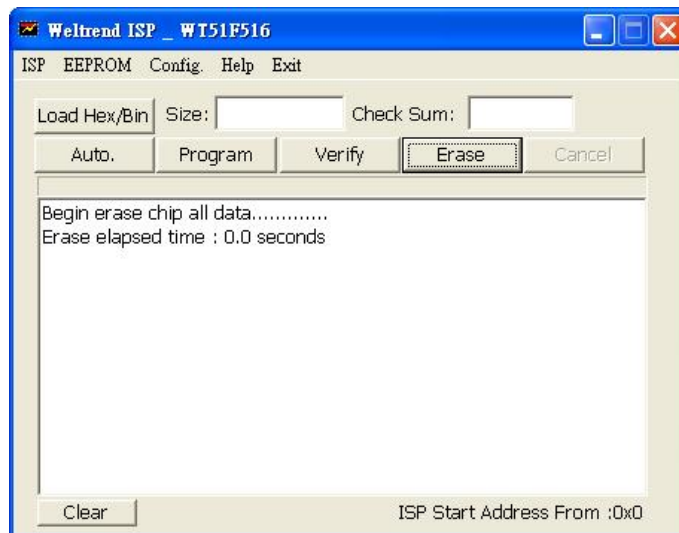

(Figure 7)

Chapter 2 WLINK-I^{2}C ISP Programming Description

2.1 Erase IC

Start window as below (Figure 8), now make sure PC, WLINK-I^{2}C and Evaluation Board all connected, press "Erase".
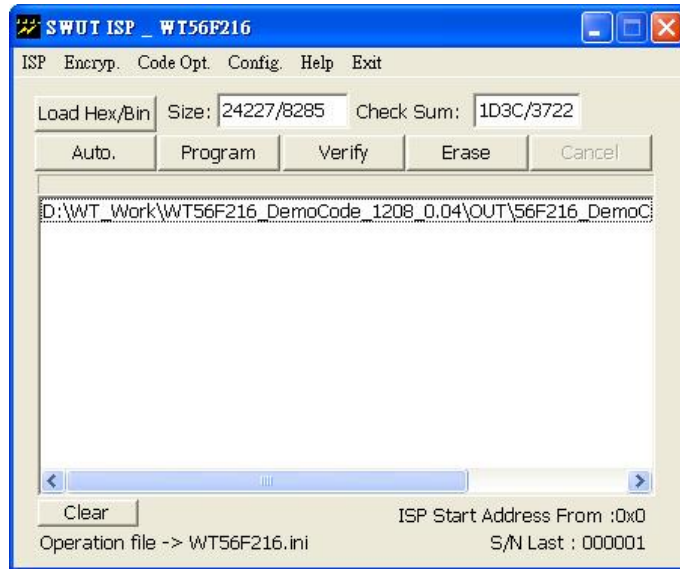The IC on the Evaluation Board can be erased (Figure 9)
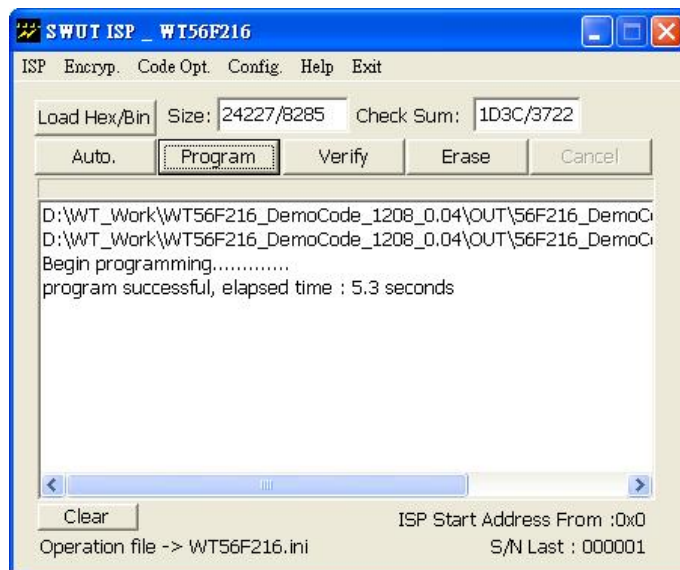
(Figure 8)

(Figure 9)

2.2   Programming IC

If you want to program "HEX" or "BIN" file to IC, please make sure PC, WLINK-I²C and Evaluation Board had connected, then press "Load Hex/Bin" to load the files that will be programmed (Figure 10).
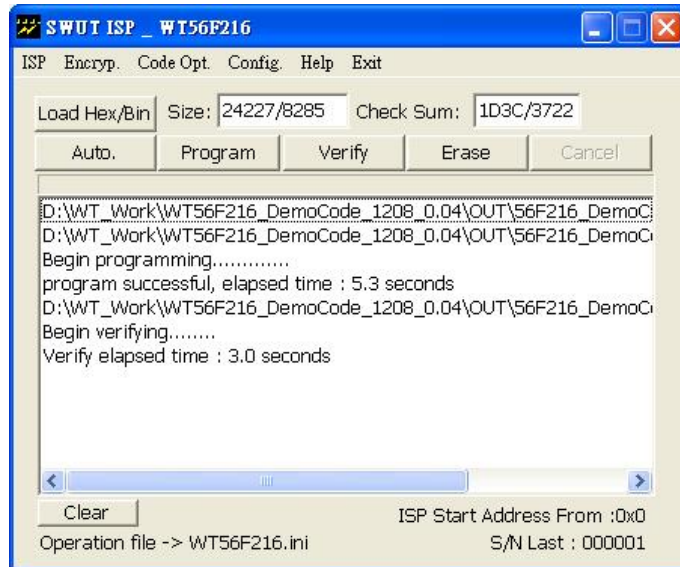

(Figure 10)

Then press "Program" for programming loaded files to IC, programming information and time will show on the window (Figure 11).

(Figure 11)

2.3　IC Verification

After programming files to IC, you can use "Verify" function to confirm the files of IC internal had programmed successfully. After programming, then press "Verify" you can compare IC internal information with HEX files contents (Figure 12).

(Figure 12)

2.4　Auto Operation

Please load HEX files which will be programmed before operating "Auto", when you press "Auto", IC will execute "Erase", "Program" and "Verify".