SalvationDATA

Flash Programmer for WD

For WD HDD repair and its data recovery needs

User Manual revision 1.1

Last updated on November 21, 2006

FOR WINDOWS 98/2000/XP/2003

SalvationDATA Technologies

APPROVED
By Pat Lin at 2:28 pm, Nov 21, 2006

Thank you for purchasing **HD Doctor for WD** from SalvationDATA Technology, Inc. To ensure your success in the installation and use, please read the following explanations and guidelines thoroughly and very carefully. If there is more product information needed, you could contact us through our official website at http://www.salvationdata.com or Email sales@salvationdata.com.

Your inquiries and suggestions are warmly welcomed.

Sincerely yours,

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Note: This is the revision 1.1 of the user manual, still the program graphical interfaces and our user manuals are being improved, and therefore there would be some differences between the snapshots displayed here and the ones you see in program you receive. But there will be no change made to the functions. Please keep an eye on our website for any user manual update released.

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General Product Introduction

SalvationDATA Flash Programmer is specially designed for data recovery and drive repair needs towards Western Digital drives; by just simply connect the Flash Programmer through the HD Doctor to any kind of computer owns a USB socket (supports USB 1.1 and above protocols) and one of the following Microsoft OS: Windows 98/Windows 2000/Windows XP/Windows 2003; then you can start working on the PCB BIOS chip: erase the microcode, read microcode and save it in the current directory, write the defined microcode to the chip to replace the original one and compare the microcode in use with a defined one for difference.

NOTE:
Please read the HD Doctor for WD user manual first to understand when you should use Flash Programmer.
Carefully read and fully understand this manual is suggested for your better success in data recovery and drive repair.

Installing

The Flash Programmer will be installed on your computer by the time you install the HD Doctor for WD, you can find it easily in the installation folder of the HD Doctor for WD program.
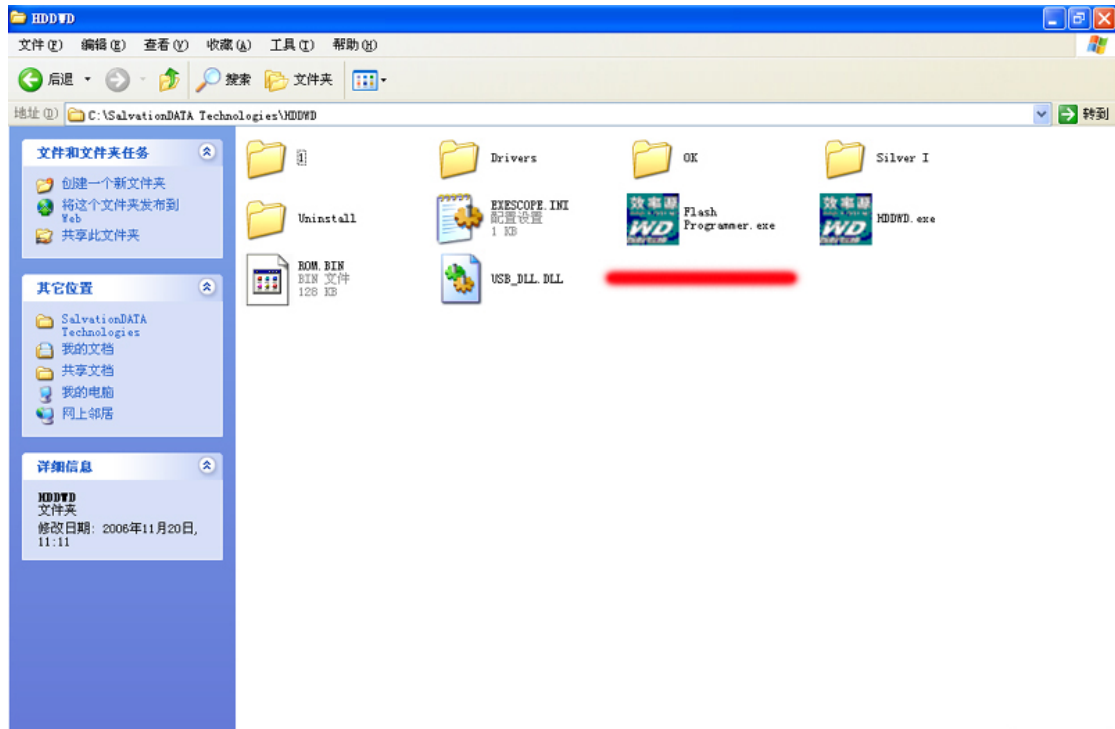
Fast Start

1. How to identify the type of a WD drive (through its PCB):

As you can see in the above picture, there are 3 test-programming slots on the PCB, drives with such PCBs belongs to WD Silver I series;

In the above picture, such drive with only 2 slots belongs to WD Silver II series;

The above drive with an "L" shape PCB belongs to WD Black I series;

The above drive with a common PCB belongs to WD Black II series.

Our Flash Programmer supports only the BIOS chips of Silver II, Black I and Black II series of drives only; it does not support chips from a Silver I series of drive. Here I am going to tell you why:

The following is a PCB of a Silver I drive and its BIOS chip:
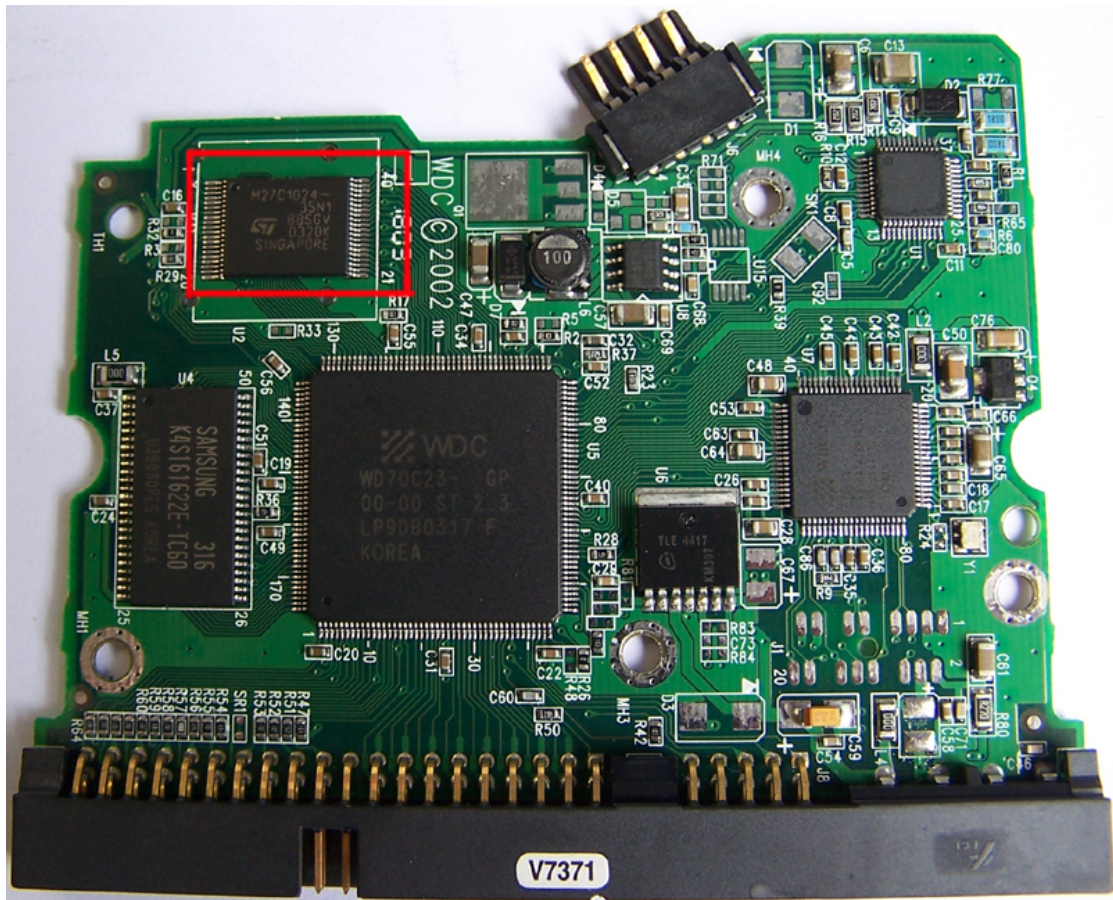
The following is a PCB of a Silver II drive and its BIOS chip:
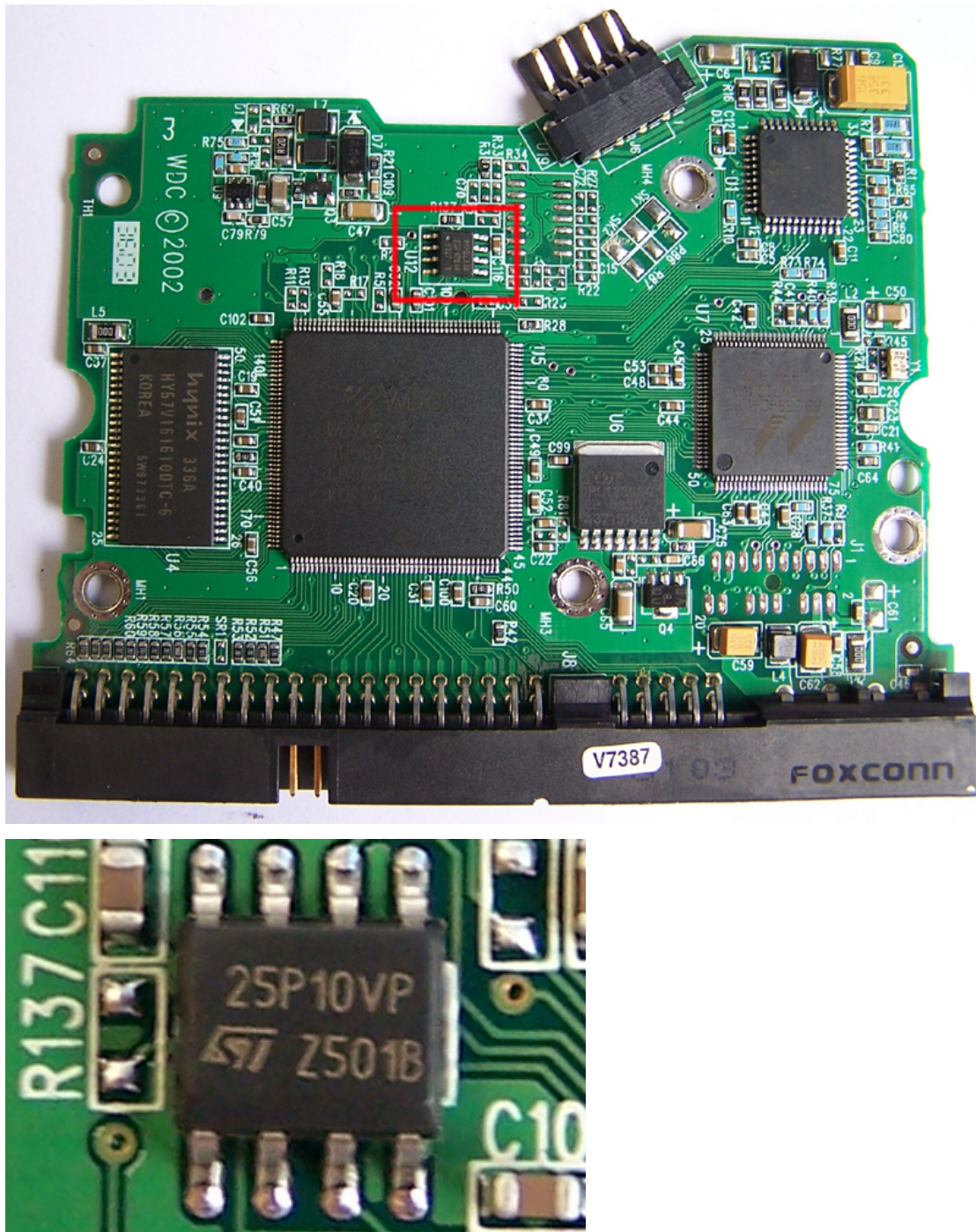
From the above two pictures you can see the Silver I drive BIOS chip is different from the BIOS chip of the Silver II drive (Black I and Black II series are the same with Silver II series in the BIOS chip), and our programmer supports only the chips with 8 pins, not that kind of Silver I with 40 pins. For Silver I series of drives, please use the HD Doctor for WD program "Download ROM" and "Upload ROM" function (refer to HD Doctor for WD user manual for details).

2. Before entering the program
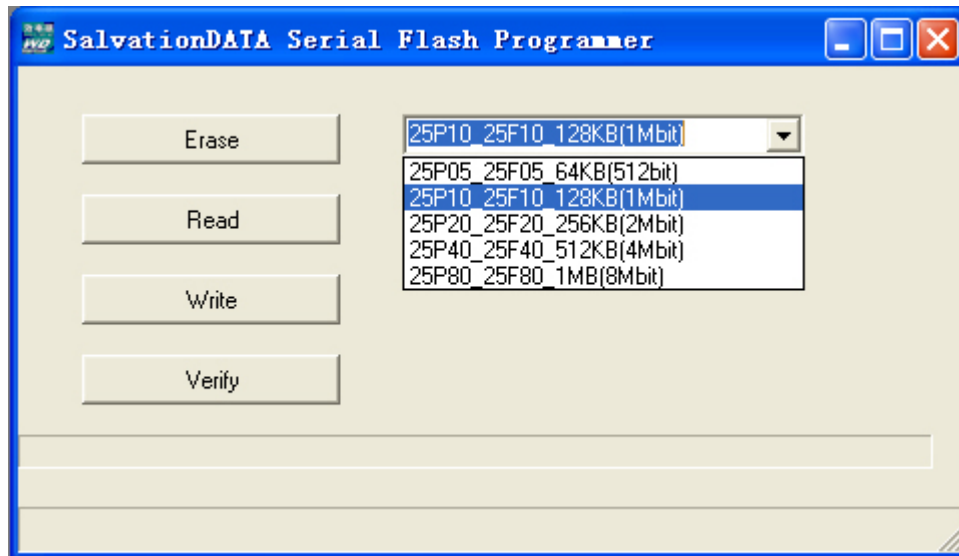

The connections of the programmer
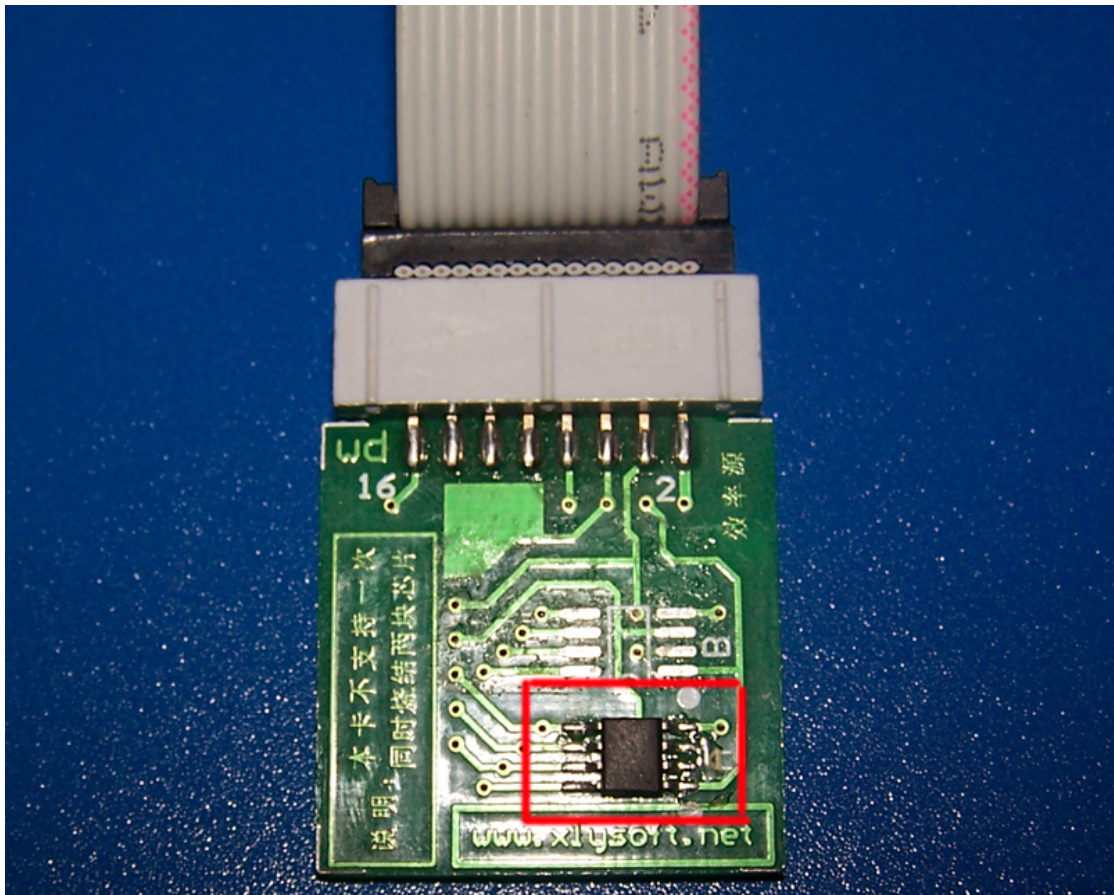
The placement of the chip (remove the chip from the PCB and connect the chip by soldering to the programmer)

And don't forget to connect the HD Doctor to your computer.

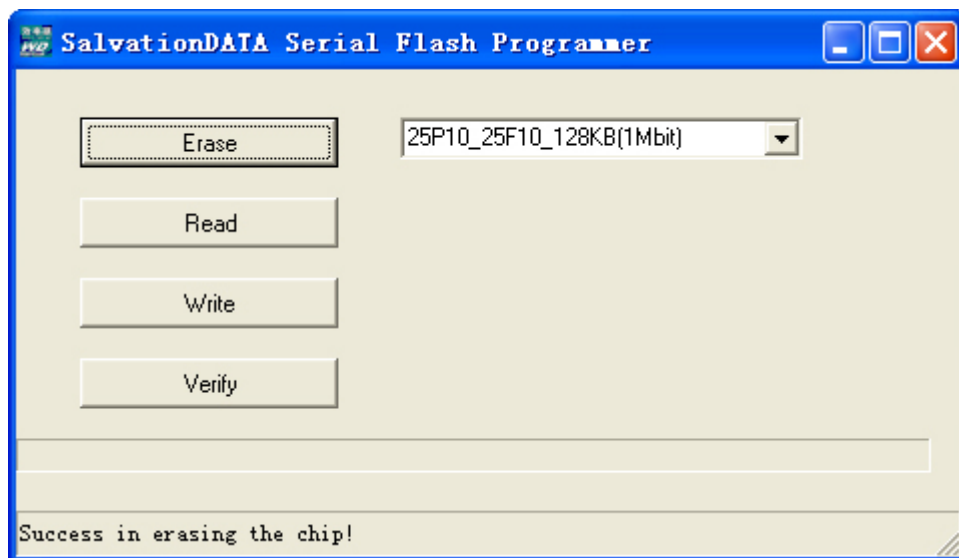You can then double click the Flash Programmer.exe to launch the program.

Key Explanations on Each Function

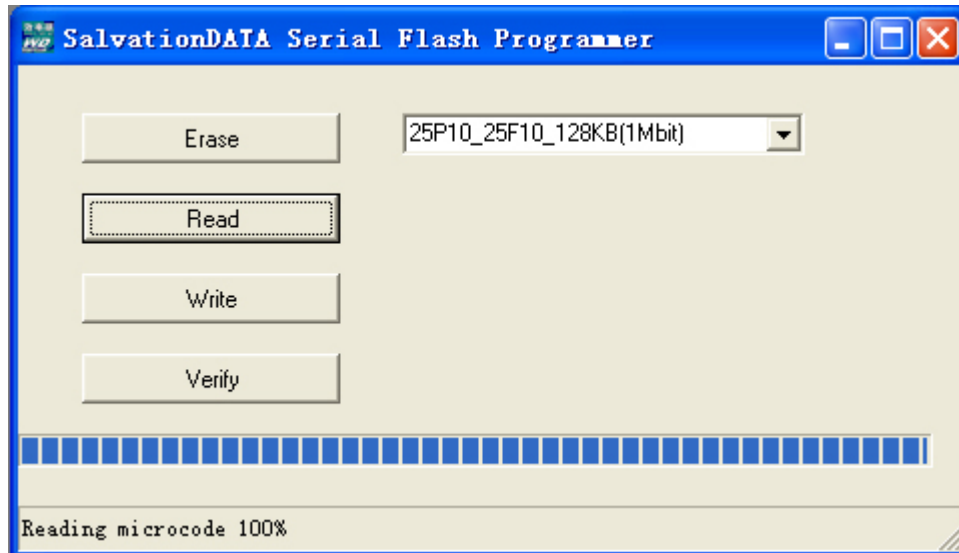## Select the type of your chip

Select the corresponding type from the list before you do anything. The chips we send to you are all 25P10.

Erase

This function is to erase the chip to make it ready for rewriting. After the erase done, the chip will become empty.

Read

Read all microcode from the target chip and save as a ROM.BIN file in the current folder.
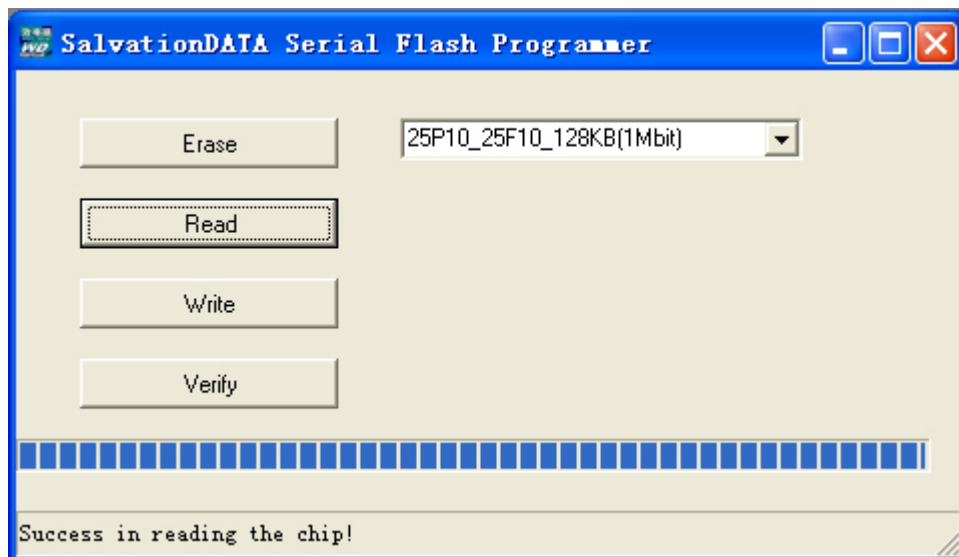
Read operation finished.

Write
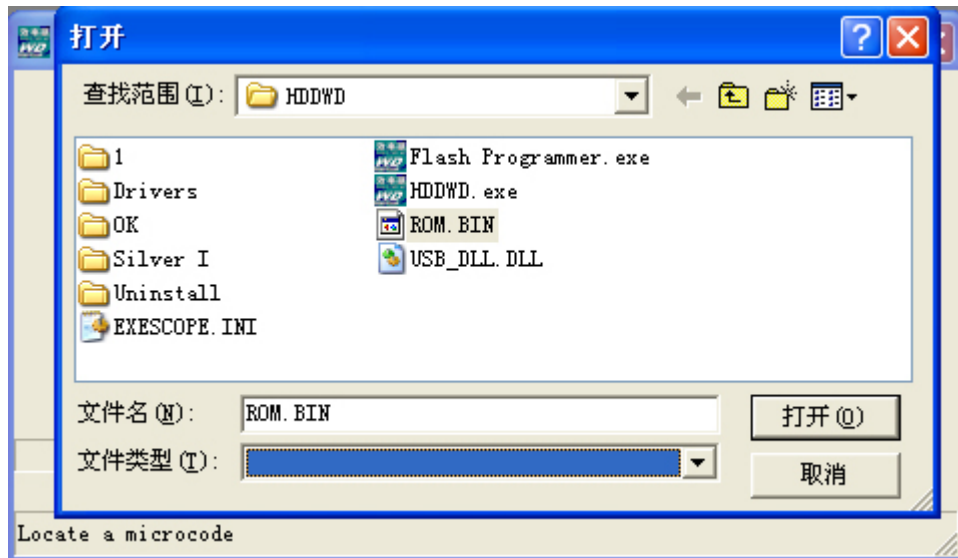
To upload a saved ROM.BIN to replace the microcode currently in the chip. First to locate the target ROM.BIN.

The upload will start once you define the target ROM.BIN;

Write operation finished.

Verify

To compare the microcode in use with a defined one for difference; first to locate a target ROM.BIN;
Then the verification will be carried out.

Verification finished.

Special Notices:

Even there are two stations designed on the programmer, you can not operate on two chips in the meantime; means that you can solder only one chip onto the programmer at a time for operation.
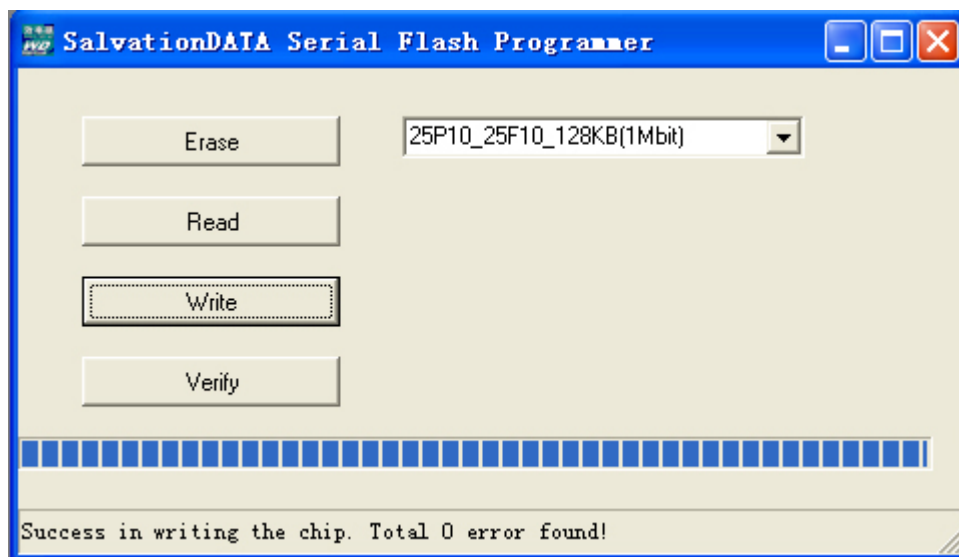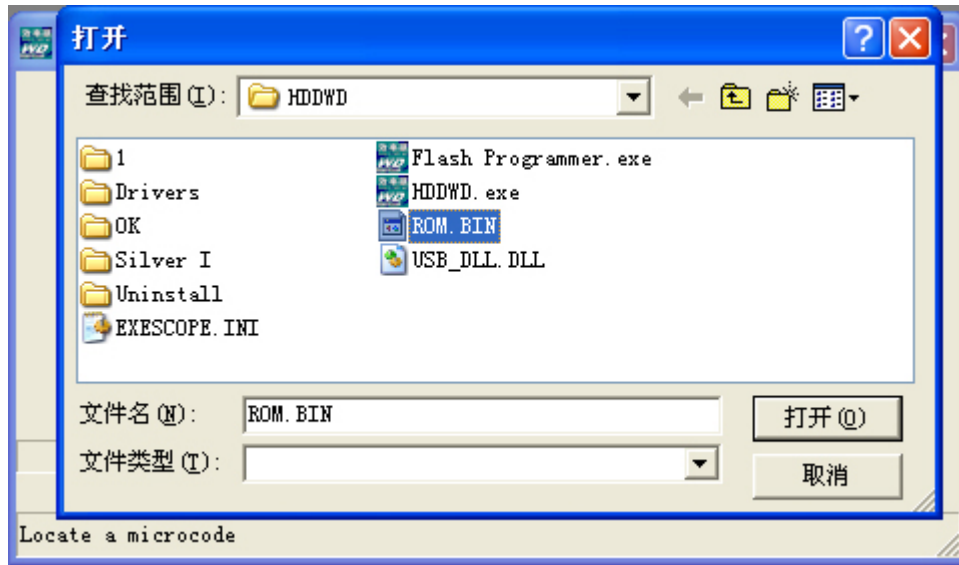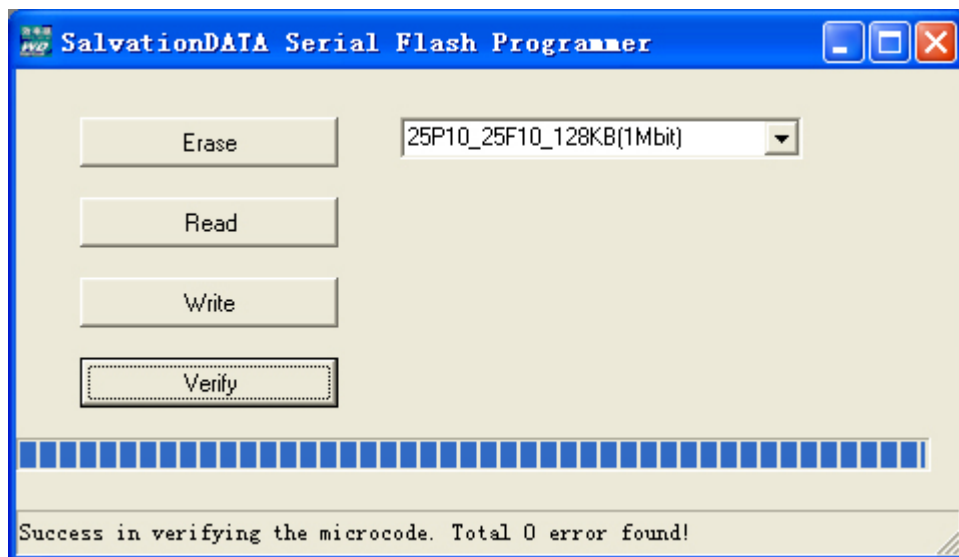
WD HDD detailed information

PCB	Firmware Ver.	Model No.	Motor No.	Chip
2060-001113-001	00CPF0	WD400EB	1028	27F
2060-001076-002	22BVA0	WD300AB	1518	29F
2060-001068-001	00BHF0	WD200EB	1012	29F
2060-001100-003	00CSF0	WD200EB	1025	27C
2060-001100-003	32CSF0	WD200EB	1025	29F
2060-001003-001	00BPA1	WD300AB	4066	27C
2060-001003-001	00AUA1	WD300BB	4066	27C
2060-001092-006	00CRA1	WD800JB	1014	29F
2060-001159-006	00DKA0	WD400BB	1051	29P10
2060-001100-001	75CSF0	WD200EB		29F10
2060-001129-001	23DEA0	WD400BB	1033	29F
2060-001092-007	00CAA1	WD400BB	1014	
2060-001189-003	00ETA0	WD800JB	1051	25P
2060-001173-004	00HTA0	WD1600BB		25P
2060-001076-002	00BVA0	WD600AB	1405	29F
2060-001160-001	00DUA3	WD1200JB	1045	
2060-001128-005	00DAA3	WD1200BB	1029	
2060-001092-007	00CCB0	WD1000BB	1014	
2060-001265-001	00GVC0	WD1600JB	1024	

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HD Doctor For WD Professional Warranty

HD Doctor For WD warranty covers workmanship and defects in material. The Warranty **dose not** cover lost program Discs. The HD Doctor For WD license is a technical license that is bound to the program once the software has been registered and unlocked. Please label the disc and mainframe and keep in a safe place.

HD Doctor For WD Professional Guarantee and Discount Coupon

SalvationDATA Technology, Inc. guarantees that HD Doctor For WD Professional will perform as stated. If HD Doctor For WD is not able to assist in recovering your data, we will apply the purchase price to our in-lab Data Recovery Services (This coupon does not apply to Upgrades. This coupon also cannot be used with any discount offers). Coupon will be honored once, up to one year from the original purchase date, per registered user. User must provide proof of purchase.

Thank you.

Technical Support

If you encounter any problem during installing or using SalvationDATA HD Doctor For WD PRO, please visit us at http://www.salvationdata.com for FAQs or quiz via Email for supports. We will do our best providing service to you.

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Thank you again for using SalvationDATA product.