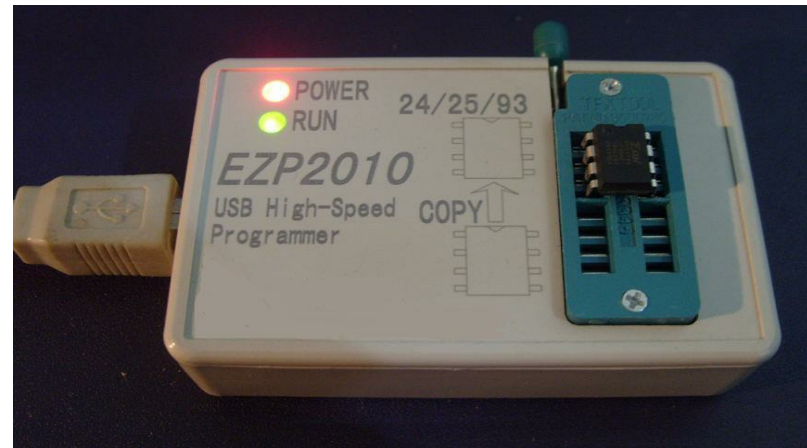


# EZP2010 high-speed programmer manual features

---

## Product picture:



## Field of application:

This programmer can read and write the bios chips of DVD,TV,PC,harddisk,etc.

## Features:

1. USB 2.0 interface, the speed is 12Mbps.
2. The speed of reading and writing is very fast.
3. Auto detect chip modles.
4. Auto select power votage.
6. Auto off-line chip copy.
7. Software and firmware update.
8. Surpport 25 FLASH, 24 EEPROM, 25 EEPROM, 93 EEPROM,etc.
9. Small shape.
- 10.Windows 2000, Windows XP, Windows Vista, Windows 7.

## List:

- |                                    |   |
|------------------------------------|---|
| 1. Programmer                      | 1 |
| 2. Usb cable                       | 1 |
| 3. CD                              | 1 |
| 4. Manual(a file on CD)            | 1 |
| 5. 5V power for off-line chip copy | 1 |
| 6. Simple socket for SMD chips     | 2 |

# EZP2010 high-speed programmer manual

## chip list

---

**This programmer supports all the 24, 25, 93 series memory chips!**

### \*\*\*\*\*25 SPI

#### **FLASH**\*\*\*\*\*

**AMIC:** A25L05P, A25L512, A25L010, A25L10P, A25L020, A25L20P, A25L040, A25L40P, A25L080, A25L80P, A25L016, A25L16P, A25L032

**ATMEL:** AT25F512, AT25F512A, AT25F512B, AT25F1024, AT25F1024A, AT25FS010, AT25DF021, AT25F2048, AT25DF041A, AT25F4096, AT25FS040, AT26F004, AT26DF081A, AT25DF161, AT26DF161, AT26DF161A, AT25DF321, AT25DF321A, AT26DF321, AT25DF641

**EON:** EN25F05, EN25LF05, EN25P05, EN25D10, EN25F10, EN25LF10, EN25P10, EN25D20, EN25F20, EN25LF20, EN25D40, EN25F40, EN25LF40, EN25D80, EN25F80, EN25Q80, EN25T80, EN25B16, EN25B16T, EN25D16, EN25F16, EN25Q16, EN25T16, EN25B32, EN25B32T, EN25F32, EN25P32, EN25Q32, EN25B64, EN25B64T, EN25F64, EN25P64, EN25Q64, EN25F128, EN25Q128

**ES:** ES25P10, ES25P20, ES25M40, ES25M40A, ES25P40, ES25M80, ES25M80A, ES25P80, ES25M16, ES25M16A, ES25P16, ES25P32

**ESMT:** F25L004A, F25L04UA, F25L008A, F25L08PA, F25L016A, F25L16PA, F25L32PA, F25L32QA

**MXIC:** MX25L512, MX25V512, MX25L1005, MX25L2005, MX25L4005A, MX25V4005, MX25L8005, MX25V8005, MX25L1605D, MX25L1635D, MX25L3205D, MX25L3225D, MX25L3235D, MX25L3237D, MX25L6405D, MX25L12805D

**NEXFLASH:** NX25P10, NX25P20, NX25P40, NX25P80, NX25P16, NX25P32

**PMC:** PM25LV512A, PM25LV010A, PM25LV020, PM25LV040, PM25LV080B, PM25LV016B

**SAIFUN:** SA25F005, SA25F010, SA25F020, SA25F040, SA25F080, SA25F160, SA25F320

**SPANSION:** S25FL004A, S25FL008A, S25FL016A, S25FL032A, S25FL064A

**SST:** SST25VF512, SST25VF512A, SST25VF010, SST25VF010A, SST25VF020, SST25VF020A, SST25VF040, SST25VF040A, SST25VF040B, SST25VF080B, SST25VF016B, SST25VF032B, SST25VF064C

**ST:** M25P05A, M25P10A, M25PE10, M25P20, M25PE20, M25P40, M25PE40, M25P80, M25PE80, M25PX80, M25P16, M25PE16, M25PX16, M25P32, M25PX32, M25P64, M25PX64, M25P128

**WINBOND:** W25P10, W25X10, W25X10A, W25X10AL, W25X10L, W25P20, W25X20, W25X20A, W25X20AL, W25X20L, W25P40, W25X40, W25X40A, W25X40AL, W25X40L, W25P80, W25X80, W25X80A, W25X80AL, W25X80L, W25P16, W25X16, W25P32, W25X32, W25X64

### \*\*\*\*\*24

#### **EEPROM**\*\*\*\*\*

**ATMEL:** AT24C01, AT24C01A, AT24C01B, AT24C02, AT24C02A, AT24C02B, AT24C04, AT24C04A, AT24C04B, AT24C08, AT24C08A, AT24C08B, AT24C16, AT24C16A, AT24C16B, AT24C32, AT24C32A, AT24C32B, AT24C64, AT24C64A, AT24C64B, AT24C128, AT24C128A, AT24C128B, AT24C256, AT24C256A, AT24C256B, AT24C512, AT24C512A, AT24C512B, AT24C1024, AT24C1024A, AT24C1024B

**CATALYST:** CAT24C01, CAT24WC01, CAT24C02, CAT24WC02, CAT24C04, CAT24WC04, CAT24C08, CAT24WC08, CAT24C16, CAT24WC16, CAT24C32, CAT24WC32, CAT24C64, CAT24WC64, CAT24C128, CAT24WC128, CAT24C256, CAT24WC256, CAT24C512, CAT24WC512, CAT24C1024, CAT24WC1024

**COMMON:** 24C00 3V, 24C00 5V, 24C01 3V, 24C01 5V, 24C02 3V, 24C02 5V, 24C04 3V, 24C04 5V, 24C08 3V, 24C08 5V, 24C16 3V, 24C16 5V, 24C32 3V, 24C32 5V, 24C64 3V, 24C64 5V, 24C128 3V, 24C128 5V, 24C256 3V, 24C256 5V, 24C512 3V, 24C512 5V, 24C1024 3V, 24C1024 5V

**FAIRCHILD:** FM24C01L, FM24C02L, FM24C03L, FM24C04L, FM24C05L, FM24C08L, FM24C09L, FM24C16L, FM24C17L, FM24C32L, FM24C64L, FM24C128L, FM24C256L, FM24C512L, FM24C1024L

**HOLTEK:** HT24C01, HT24LC01, HT24C02, HT24LC02, HT24C04, HT24LC04, HT24C08, HT24LC08, HT24C16, HT24LC16,

HT24C32, HT24LC32, HT24C64, HT24LC64, HT24C128, HT24LC128, HT24C256, HT24LC256, HT24C512, HT24C1024

**ISSI:** IS24C01, IS24C02, IS24C04, IS24C08, IS24C16, IS24C32, IS24C64, IS24C128, IS24C256, IS24C512, IS24C1024

**MICROCHIP:** 24AA00, 24C00, 24LC00, 24AA01, 24AA014, 24C01C, 24LC014, 24LC01B, 24AA02, 24LC02B, 24AA024, 24AA025, 24AA04, 24C02C, 24LC024, 24LC025, 24LC04B, 24AA08, 24LC08B, 24AA16, 24LC16B, 24AA32, 24LC32, 24AA64, 24FC64, 24LC64, 24AA128, 24FC128, 24LC128, 24AA256, 24FC256, 24LC256, 24AA512, 24FC512, 24LC512, 24AA1024

**NSC:** NSC24C02, NSC24C02L, NSC24C64

**RAMTRON:** FM24C04A, FM24CL04, FM24C16A, FM24CL16, FM24C64, FM24CL64, FM24C256, FM24CL256, FM24C512

**ROHM:** BR24C01, BR24L01, BR24C02, BR24L02, BR24C04, BR24L04, BR24C08, BR24L08, BR24C16, BR24L16, BR24C32, BR24L32, BR24C64, BR24L64

**ST:** ST24C01, ST24C02, ST24C04, ST24C08, ST24C16, ST24C32, ST24C64

**XICOR:** X24C01, X24C02, X24C04, X24C08, X24C16

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**EEPROM**\*\*\*\*\*

**AKM:** AK93C45AV, AK93C55AV, AK93C65AV, AK93C75AV

**ATC:** ATC93C46, ATC93LC46(16bit), ATC93LC46(16bit)-SOP8, ATC93LC46(8bit), ATC93LC46(8bit)-SOP8, ATC93C56, ATC93LC56(16bit), ATC93LC56(16bit)-SOP8, ATC93LC56(8bit), ATC93LC56(8bit)-SOP8, ATC93C66, ATC93LC66(16bit), ATC93LC66(16bit)-SOP8, ATC93LC66(8bit), ATC93LC66(8bit)-SOP8

**ATMEL:** AT93C46(16bit), AT93C46(16bit)-SOP8, AT93C46(8bit), AT93C46(8bit)-SOP8, AT93C46A, AT93C56(16bit), AT93C56(16bit)-SOP8, AT93C56(8bit), AT93C56(8bit)-SOP8, AT93C57(16bit), AT93C57(16bit)-SOP8, AT93C57(8bit), AT93C57(8bit)-SOP8, AT93C66(16bit), AT93C66(16bit)-SOP8, AT93C66(8bit), AT93C66(8bit)-SOP8, AT93C86(16bit), AT93C86(16bit)-SOP8, AT93C86(8bit), AT93C86(8bit)-SOP8

**CATALYST:** CAT93C46(16bit), CAT93C46(8bit), CAT93C46A, CAT93C46I, CAT93C56(16bit), CAT93C56(8bit), CAT93C56A, CAT93C57(16bit), CAT93C57(16bit)-SOP8, CAT93C66(16bit), CAT93C66(8bit), CAT93C66A, CAT93C86(16bit), CAT93C86(8bit)

**COMMON:** 93C46(16bit), 93C46(8bit), 93C56(16bit), 93C56(8bit), 93C66(16bit), 93C66(8bit), 93C86(16bit), 93C86(8bit)

**EXEL:** XL93C06, XL93C46, XL93CS46, XL93LC46, XL93C56, XL93LC56, XL93C66, XL93LC66

**FAIRCHILD:** FM93C06AM8(16bit), FM93C06AM8(8bit), FM93C06M8, FM93C06N, FM93C46AM8(16bit), FM93C46AM8(8bit), FM93C46AN(16bit), FM93C46AN(8bit), FM93CS46(16bit), FM93C56AN(16bit), FM93C56AN(8bit), FM93CS56(16bit), FM93C66AM8(16bit), FM93C66AM8(8bit), FM93C66AN(16bit), FM93C66AN(8bit), FM93C66B, FM93C66M8(16bit), FM93C66MT8(16bit), FM93C66N(16bit), FM93CS66(16bit), FM93C86AM8(16bit), FM93C86AM8(8bit), FM93C86AN(16bit), FM93C86AN(8bit)

**HOLTEK:** HT93LC46A(16bit), HT93LC46A(8bit), HT93LC56A(16bit), HT93LC56A(8bit), HT93LC66A(16bit), HT93LC66A(8bit)

**ICT:** ICT93C46(16bit), ICT93C46(8bit), ICT93C56(16bit), ICT93C56(8bit), ICT93C66(16bit), ICT93C66(8bit)

**ISSI:** IS93C46(16bit), IS93C56(16bit), IS93C66(16bit)

**MICROCHIP:** 93C06(16bit), 93C06(16bit)-SOP8, 93AA46(16bit), 93AA46(8bit), 93AA46(8bit)-SOP8, 93C46(16bit), 93C46(16bit)-SOP8, 93C46A, 93C46B, 93LC46(16bit), 93LC46(16bit)-SOP8, 93LC46(8bit), 93LC46(8bit)-SOP8, 93LC46A, 93LC46B, 93LC46B-SOP8, 93AA56(16bit), 93AA56(8bit), 93AA56(8bit)-SOP8, 93C56(16bit), 93C56(16bit)-SOP8, 93C56(8bit), 93C56(8bit)-SOP8, 93C56A, 93C56A-SOP8, 93C56B, 93C56B-SOP8, 93LC56(16bit), 93LC56(16bit)-SOP8, 93LC56(8bit), 93LC56(8bit)-SOP8, 93LC56A, 93LC56B, 93LC56B-SOP8, 93AA66(16bit), 93AA66(8bit), 93AA66(8bit)-SOP8, 93C66(16bit), 93C66(16bit)-SOP8, 93C66(8bit), 93C66(8bit)-SOP8, 93C66A, 93C66A-SOP8, 93C66B, 93C66B-SOP8, 93LC66(16bit), 93LC66(16bit)-SOP8, 93LC66(8bit), 93LC66(8bit)-SOP8, 93LC66A, 93LC66B, 93LC66B-SOP8, 93AA76(16bit), 93AA76(8bit), 93C76(16bit), 93C76(8bit), 93LC76(16bit), 93LC76(8bit), 93LC76A, 93LC76B, 93AA86(16bit), 93AA86(8bit), 93C86(16bit), 93C86(8bit), 93LC86(16bit), 93LC86(8bit), 93LC86A, 93LC86B

**NSC:** NSC93C06, NSC93C06-SOP8, NSC93CS06, NSC93C46, NSC93CS46, NSC93C56, NSC93CS56, NSC93S56, NSC93C66, NSC93CS66, NSC93C86

**ROHM:** BR93LC46, BR93LC46RF, BR93LC56, BR93LC56RF, BR93LC66, BR93LC66RF

**ST:** ST93C06, M93S46, M93S46-SOP8, M93S46-T8, M93S46R, M93S46R-SOP8, M93S46W, M93S46W-SOP8, ST93C46, M93S56, M93S56-SOP8, M93S56R, M93S56R-SOP8, M93S56W, M93S56W-SOP8, ST93C56, M93S66, M93S66-SOP8, M93S66R, M93S66R-SOP8, M93S66W, M93S66W-SOP8, ST93C66

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**EEPROM**\*\*\*\*\*

**ATMEL:** AT25010, AT25020, AT25040, AT25080, AT25160, AT25320, AT25640, AT25128, AT25256, AT25512

**CATALYST:** CAT25C01, CAT25C01P, CAT25C01S, CAT25C01U, CAT25C02P, CAT25C02S, CAT25C02U, CAT25C03P, CAT25C03S, CAT25C03U, CAT25C04P, CAT25C04S, CAT25C04U, CAT25C05P, CAT25C05S, CAT25C05U, CAT25C08P, CAT25C08S, CAT25C08U, CAT25C09P, CAT25C09S, CAT25C09U, CAT25C16P, CAT25C16S, CAT25C16U, CAT25C17P, CAT25C17S, CAT25C17U, CAT25C32P, CAT25C32S, CAT25C33P, CAT25C33S, CAT25C64P, CAT25C64S, CAT25C65P, CAT25C65S, CAT25C128P, CAT25C128S, CAT25C256P, CAT25C256S

**COMMON:** 25010, 25020, 25040, 25080, 25160, 25320, 25640, 25128, 25256, 25512

**MICROCHIP:** 25AA040, 25C040, 25LC040, 25AA080, 25C080, 25LC080, 25AA160, 25C160, 25LC160, 25AA320, 25C320, 25LC320, 25AA640, 25C640, 25LC640

**RAMTRON:** FM25C160, FM25640, FM25CL64

**ST:** ST25C01, ST25W01, ST25C02, ST25W02, ST25C04, ST25W04, ST25C08, ST25W08, ST25C16, ST25W16

**TI:** TI2532, TI2532A, TI2564

**XICOR:** XC25010, XC25020, XC25040, XC25080, XC25160, XC25320, XC25640, XC25128, XC25256, XC25512

# EZP2010 high-speed programmer manual software setup

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No need to install, please run the \*.exe programm.

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# EZP2010 high-speed programmer manual

## driver setup

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There are tow usb device driver files: EZP2010.inf and EZP2010.sys.

The step of usb driver setup is same as other usb devices.

---

---

# EZP2010 high-speed programmer manual

## system requirements

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### **System software requirements:**

Windows 2000,Windows XP,Windows Vista,Windows 7.

### **System hardware requirements:**

USB1.0 interface.

CD-ROM.

64MB RAM.

10MB harddisk space.

---

# EZP2010 high-speed programmer manual

## select chip

---



Select Chip

Search...

Type: SPI FLASH

Manu: EON

Chip: EN25F80

Capacity: 1MB

User can select chip mode from "Type", "Manu" and "Chip" combobox.  
User can click "Search" to select chip mode too.

---



# EZP2010 high-speed programmer manual

## software UI

File (F) Edit (E) Programmer (P) Firmware (W) Language (L) Help (H)

Load Save Fill Swap Auto Erase Prog Read Verify Detect Ver Update Help About

Select Chip

Search...

Type: SPI FLASH

Manu: EON

Chip: EN25F80

Capacity: 1MB

78%

Writing...

USB Link OK!

ADDR	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	ASCII
000000	FF	FB	90	04	00	00	00	00	00	00	00	00	00	02	00	00	.....
000010	00	00	00	00	00	4A	79	61	63	E7	8C	AB	C9	6E	2C	AC	.....Jyac.....n..
000020	7C	F1	9D	79	96	65	20	30	20	25	1E	E0	7F	DE	8A	FB	....y.e.0.....
000030	30	DC	0D	40	E0	56	16	C6	47	F7	B9	E1	02	16	1C	0C	0..@.V..G.....
000040	74	AE	1C	0C	5D	E8	B8	4E	EE	80	09	E9	BC	17	04	16	t...].N.....
000050	89	4F	C8	45	3B	92	FB	E7	3F	AB	91	5F	FF	FF	FF	FF	.O.E;...?.._
000060	FF	F1	01	45	7F	A9	80	40	27	FF	FF	41	00	E0	BD	4E	...E...@...A...N
000070	77	E7	38	98	0E	07	0F	3E	A1	8C	40	08	00	9C	93	81	w.8...>...@
000080	F7	4C	83	6C	BF	07	20	E7	1D	67	E1	70	88	C1	12	18	.L.l...g.p...
000090	BE	BB	9B	98	41	04	EE	E2	F2	F7	77	80	00	6E	69	5C	...A...w.ni\
0000A0	E2	18	41	15	DE	22	19	8A	E8	A3	77	53	3D	4F	3C	F3	..A.....wS=O<.
0000B0	15	FF	FF	FF	FF	FF	FF	FB	98	2B	07	65	FF	76	1F	26	.....e.v...
0000C0	FF	FF	F3	0C	1C	07	64	D4	F3	CF	E7	9E	78	8E	00	E0	.....d.....x...
0000D0	EC	98	7B	80	AD	22	08	04	94	9C	82	DB	01	93	87	54	.....T
0000E0	32	6F	73	C3	CA	F9	F2	93	E4	FD	C9	7E	FF	7F	45	4F	2os.....EO
0000F0	AB	FF	FF	FF	F2	7F	FF	FF	FF	37	FD	1B	FF	FF	EA	2B	.....7.....
000100	FF	85	15	9A	40	00	01	05	26	EC	95	80	44	9A	22	93	...@.....D.....
000110	F2	5F	D6	55	FE	3D	6F	D7	E5	F9	B9	65	8B	E4	FE	C9	.._U.=o...e....
000120	FB	FF	FF	F4	66	E9	39	FF	FF	FF	53	7F	CD	FF	FF	F8	...f.9...S.....
000130	81	BF	EA	50	41	6A	92	20	00	11	29	C9	6D	C9	26	99	...PAj...m.....
000140	71	A4	2A	6E	7F	CF	2E	5D	48	96	4F	D6	3F	D7	E1	F5	q..n...]H.O?...?
000150	A7	F4	FD	5B	FF	FF	AF	E8	3F	FF	FF	FA	B7	FD	BF	FF	...[...?.....
000160	FF	1F	FF	D4	37	FF	6F	76	6D	B0	01	28	B5	05	B6	D5	...7.ovm.....
000170	04	11	2E	55	B3	4B	7B	DE	4F	F2	D6	FD	17	CC	1F	AF	...U.K..O.....

1. Open File: Load data to buffer from file.
2. Save File: Save data to file from buffer.
3. Buffer Fill: Fill buffer to specified datas.
4. Byte Swap: Swap the bytes in the buffer.
5. Auto: Erase, write and verify.
6. Erase: Erase chip.
7. Write: Write data to chip from buffer.
8. Read: Read data to buffer from chip.
9. Verify: Compare the data in chip to the data in buffer.
10. Detect: Detect chip mode.
11. Version: Read firmware version.
12. Update: Update firmware.
13. Help: Open the user manual.
14. About: View the version information of software.

# EZP2010 high-speed programmer manual

## edit

---

---

User can change data in buffer.

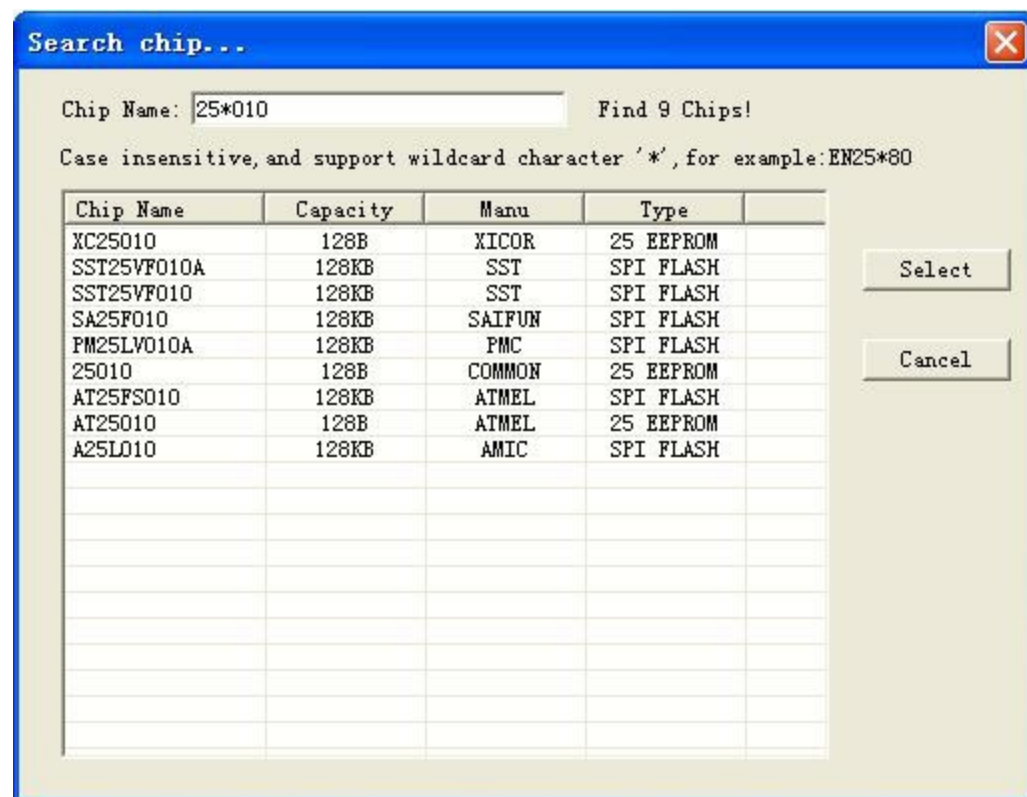
---

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# EZP2010 high-speed programmer manual

## search chip

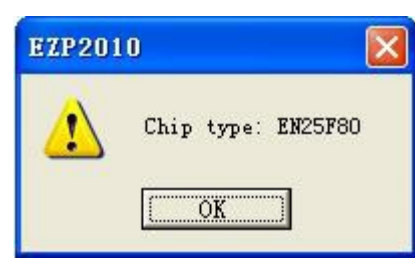


Click "Search", then pop the above dialog, enter the keyword, the matched chips will be listed in the listbox.

# EZP2010 high-speed programmer manual

## detect chip

---



Click "Detect", the software will pop a messagebox to show chip name.  
The programmer only can detect 25 series spi flash.

---

# EZP2010 high-speed programmer manual

## open file

---

---

Load data to buffer from a bin file or a hex file.

---

---

# EZP2010 high-speed programmer manual

## save file

---

---

Save data to a bin file from buffer.

---

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# EZP2010 high-speed programmer manual

## firmware update

---

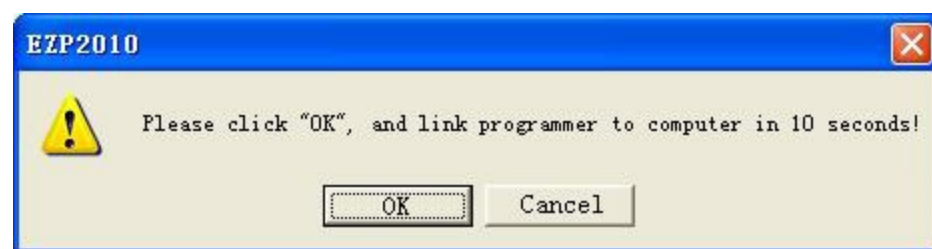
User can click "Update" button to update firmware.

Select the correct update file (\*.ezp), and the updating operation will complete in several seconds.

If the operation is successful, the software will pop the messagebox as below:



If the operation is unsuccessful, the software will pop the messagebox as below:

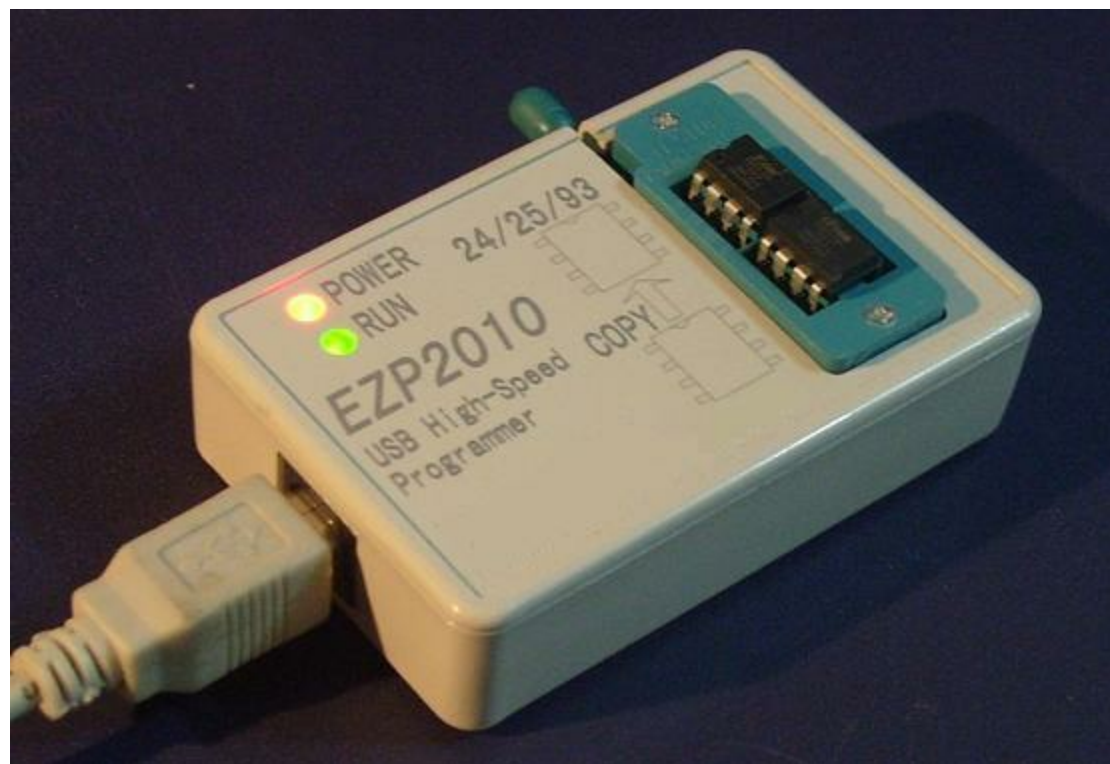


First remove the programmer from PC, then click "OK", and link the programmer to PC again.

# EZP2010 high-speed programmer manual

## off-line copy

---



The programmer can copy one chip to another chip.

When the programmer detects two chips on the socket, it will automatically start copying operation.

1. When off-line copying, the programmer can link to 5V power as well as link to PC.
2. The programmer can copy data to a 24 eeprom from another 24 eeprom.
3. The programmer can copy data to a 25 flash from another 25 flash.
4. The capacity of destination chip must be equal to source chip.



# EZP2010 high-speed programmer manual

## erase chip

---

One 25 flash must be erased before writing.

No need to erase one 24 eeprom before writing.

No need to erase one 93 eeprom before writing.

---

Read data to buffer from chip.

---

---

# EZP2010 high-speed programmer manual

## write chip

---

---

Write data to chip from buffer.

---

---

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## **EZP2010 high-speed programmer manual**

### **verify chip**

---

---

Compare the data in chip to the data in buffer.

It's necessary to execute the verify command after writing.

---

---

# EZP2010 high-speed programmer manual auto

---

---

Erase, write and verify.

---

---

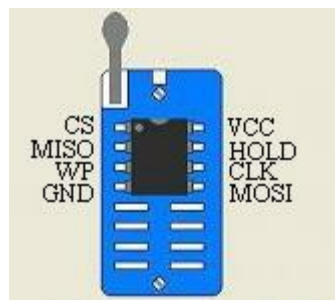
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### 1. Verify error.

- (1) User must select a correct chip mode before writing.
- (2) User must erase chip before writing if the chip is a 25 flash.
- (3) User must select a correct memory unit width if the chip is a 93 eeprom.
- (4) The chip may be bad.

### 2. Chip position when reading and writing.

- (1) If the programmer is linked to PC, the chip must be placed in the socket as below:



### 3. Automatically detect chip mode unsuccessful.

See the section "detect chip" in this document.

### 4. The simple SMD socket.



The simple SMD socket has two chip positions.

User can place SMD chip on any one of the two positions.

### 5. Read and write chips on the mainboard (ISP).

User can link programmer to mainboard to read and write bios chips.

User can link GND, CS, MISO, MOSI, CLK signals to mainboard.