

# **USB** Mass Production Tool

# **Parameter Editor**

# **User Manual**

### v1.1

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### A. Setting up "F1.ini" File with ParamEdt

The main purpose of this file is, allowing you to enter customised information, such as Manufacture Name and Product Name of your choice. Some of this information will show when plugging in the device to a computer, others may store in the registry.

### A1. Setting "F1-PS223X" Page

### You must set up a correct "F1.ini" file before proceed with F1 production process.

**Step 1** Start the parameter editing software "ParamEdt-F1.exe" by double clicking it. (file name may be different)

|                                | version of the           Editor                 |        |      |
|--------------------------------|---|--------|------|
| Tick if you are using : PS2231 |   |        | Load |
| FC1 - FC2 : 0x                 |   |        |      |
| Mode :                         |   |        |      |
| CDROM Size :                   | MBytes  |        |      |
| -Firmware Group                |   |        |      |
| 🗖 Do ISP                       |   |        |      |
| Burner :                       |   | Select |      |
| Firmware :                     |   | Select |      |
| Verified firmware :            | ĺ   | Select |      |
| -Advance                       |   |        |      |
| HID PID :                      | (ex. 0xEC51)                                    |        |      |
| Number of retries :            | (Limit :3-255)<br>(Empty : use default 6)       |        | Save |
| 🔲 AES Enable                   | (Empty : use detault 0)                         |        | Save |
| 🔲 Lock Partition               |   |        | Gare |
| Default Password :             | (MAX :16 bytes)<br>(Empty : use default "1234") |        |      |
| Customize Setting :            |   | Select |      |

Load an old "F1.ini" file.

Save This function is only available when you made changes to an old (existing) file and you want to save the new contents using the same old file name.

**Save As** When you are creating a new file or if you made changes to an old file, but you want to save it using different file name.

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**Step 2** Thick the box if you are using PS223X controller, select the controller you are using, then continue with step 3, otherwise, if you are not using the PS223X controller, do not tick this box and go to section A2.

| Parameters Editor F1 - 1.0.16.0        |  |  |  |  |  |
|--|--|--|--|--|--|
| F1-PS223X F1-1 F1-2                    | Controller Special                     |  |  |  |  |
| ✓ Tick if you are using :<br>FC1 FC2 : | PS2231    Load Default  PS2231  PS2232 |  |  |  |  |

**Step 3** If you wish to use default "Manufacture Name" & "Product Name", then tick the "Load Default" box, otherwise, do not tick.

| Parameters Editor F1 - 1.0.15.3  |                |  |  |  |
|----------------------------------|----------------|--|--|--|
| F1-PS223X F1-1 F1-2 Controller   | Special        |  |  |  |
| ✓ Tick if you are using : PS2231 | V Load Default |  |  |  |
| FC1 - FC2 : 0x FF                |                |  |  |  |
| Mode :                           | •              |  |  |  |

**Step 4** Select the correct firmware type. The firmware type will be notified by Phison when providing the firmware file, if you have any question, please check with Phison's engineer or FAE.



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**Step 5** Select the mode that you want to create. If you are not too sure or have problem selecting the correct mode, please check with Phison's engineer or FAE.

| Parameters Editor F1 - 1     | .0.15.3             |        |
|------------------------------|---------------------|--------|
| F1-PS223X F1-1 F1-2          | Controller Special  |        |
| 🔽 Tick if you are using : PS | 2231 🔽 Load Default |        |
| FC1 - FC2 :                  | 0x FF - 1 -         |        |
| Mode :                       | <b>•</b>            |        |
| CDROM Size :                 | 4 MBytes            |        |
| Firmware Group               |                     |        |
| 🖂 Do ISP                     | 10                  |        |
| Burner :                     | 14                  | Select |

*Note* : The availability of mode will depend on firmware, certain modes can only support by specific firmware.

**Step 6** For <u>Mode 21</u>, you can decide the capacity of the CD-Rom partition, simply enter the size you want for the CD-Rom partition.

| Parameters  | Editor F1 - 1.     | 0.15.3              |  |
|-------------|--------------------|---------------------|--|
| F1-PS223X   | F1-1 F1-2          | Controller Special  |  |
| 🔽 Tick if y | ou are using : PS2 | 2231 🔽 Load Default |  |
| FC1 - F     | C2 :               | 0x FF . 1 💌         |  |
| Mode :      |                    | 21 -                |  |
| CDROI       | M Size :           | MBytes              |  |

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- Step 7 PS2231 is a flash type controller, meaning that you can upgrade the firmware any time you want, however by default, the controller itself does not have a default firmware, so if you are using the controller for the first time, then you must load the firmware to the controller. The firmware loading process is call "ISP". Please tick the "ISP" box if you
  - (a) are using the PS2231 controller for the first time

OR

(b) if you have replaced the flash memory

OR

(c) you want to change or upgrade the existing firmware.

| 🗸 Do ISP            |        |
|---------------------|--------|
| Bumer :             | Select |
| Firmware :          | Select |
| Verified firmware : | Select |

Step 8 If you have not ticked the "Do ISP" box in step 7, then please go to step 12 directly. Otherwise, please select the correct burner file, the burner file name is in the format of "BNXXX.bin"

| 開啓                              |            | ? 赵                  |
|---------------------------------|------------|----------------------|
| 搜尋位置([):<br>國BN206<br>國 FF0110A | ► v1.91.00 | ₽                    |
| 檔案名稱(M):<br>檔案類型(T):            |            | 開啓( <u>0</u> )<br>取消 |

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Step 9 Select the correct firmware file. The firmware file name is in the format of "FFXXXXX.bin".

| 開啓       |                      |   |     | ? 🗙   |
|----------|----------------------|---|-----|-------|
| 搜尋位置(l): | 🗁 v1.91.00           | • | 🕁 🔁 | r 📰 🕈 |
| BN206    |                      |   |     |       |
| 檔案名稱(N): | FF0110A              |   |     | 開啓(0) |
| 檔案類型(I): | Binary Files (*.bin) | • |     | 取消    |
|          | □ 以唯讀方式開啓(R)         |   |     |       |

**Step 10** Select the correct firmware for verification use. This should be the same file as the firmware you have selected in step 9.

| 開啓                | 2 🔀                     |
|-------------------|-------------------------|
| 搜尋位置①:            | 🔁 v1.91.00 💌 🗢 🛍 🗮 🕶    |
| BN206             |                         |
| FF0110A           |                         |
|                   |                         |
|                   |                         |
|                   |                         |
| 檔案名稱(N):          | FF0110A 開啓(O)           |
| 檔案類型( <u>T</u> ): | Binary Files (*.bin) 取消 |
|                   | □ 以唯讀方式開啓( <u>R</u> )   |

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Step 11 Once you have correctly selected the above 3 files, it should like the following.

| Firmware Group      |   |        |
|---------------------|---|--------|
|                     |   |        |
| Burner :            | D:\AP Released\Testing Program\USB 2K\BN206.BIN   | Select |
| Firmware :          | D:\AP Released\Testing Program\USB 2K\FF0110A.BIN | Select |
| Verified firmware : | D:\AP Released\Testing Program\USB 2K\FF0110A.BIN | Select |

**Step 12** The following only apply to firmware type **FF-03**, if you are not using FF-03 type firmware, please go to section A2 directly.

Step 13 Enter the HID PID number. Leave it blank to use Phison's default HID PID.

| (ex. 0xEC51)                                    |
|---|
| (Limit :3-255)<br>(Empty : use default 6)       |
|   |
|   |
| (MAX :16 bytes)<br>(Empty : use default "1234") |
| Select  |
|   |

Step 14 Enter the retry number for security software; so when the retry number is reached, the device will get formatted and the data gets destroyed. The default value is set to 6 times.

| HID PID :           | (ex. 0xEC51)                                    |
|---------------------|---|
| Number of retries : | (Limit :3-255)<br>(Empty : use default 6)       |
| AES Enable          |   |
| Lock Partition      |   |
| Default Password :  | (MAX :16 bytes)<br>(Empty : use default "1234") |
| Customize Setting : | Select  |

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Step 15 If you want to enable AES function, please tick the "AES Enable" box.

| HID PID :           | (ex. 0xEC51)                                    |        |
|---------------------|---|--------|
| Number of retries : | (Limit :3-255)<br>(Empty : use default 6)       |        |
| AES Enable          |   |        |
| Lock Partition      |   |        |
| Default Password :  | (MAX :16 bytes)<br>(Empty : use default "1234") |        |
| Customize Setting : |   | Select |

Step 16 For mode 7 and mode 21, you can lock the secure (private) partition by default.If you wish to do so, please tick the "Lock Partition" box and enter a default password.

| Advance             | <br>  |        |
|---------------------|---|--------|
| HID PID :           | (ex. 0xEC51)                                    |        |
| Number of retries : | (Limit :3-255)<br>(Empty : use default 6)       |        |
| AES Enable          |   |        |
| 🔽 Lock Partition    |   |        |
| Default Password :  | (MAX :16 bytes)<br>(Empty : use default "1234") |        |
| Customize Setting : |   | Select |
|                     |   |        |

Step 17 Customize setting is for Phison use only. Please leave it blank.

| Advance             |   |
|---------------------|---|
| HID PID :           | (ex. 0xEC51)                                    |
| Number of retries : | (Limit :3-255)<br>(Empty : use default 6)       |
| AES Enable          |   |
| 🔽 Lock Partition    |   |
| Default Password :  | (MAX :16 bytes)<br>(Empty : use default "1234") |
| Customize Setting : | Select  |
|                     |   |

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### A2. Setting "F1-1" Page

| Parameters Editor F1 - 1.0.15.                              |                           |                       |                                   | _ 🗆 🗵   |
|---|---------------------------|-----------------------|-----------------------------------|---------|
|   | troller Special           |                       |                                   | 1       |
| Customer Data   |                           |                       |                                   |         |
| □ Load Default<br>VID □ (ex: 0x0D7D)                        | Manufacturer:<br>Product: |                       | (max. 8 Bytes)<br>(max. 16 Bytes) | Load    |
| VID         (ex: 0x0D7D)           PID         (ex: 0x1400) | Inquiry Revision:         | PMAP                  | (max. 10 Bytes)<br>(max. 4 Bytes) |         |
| - Configuration:  | Public I                  | lrea                  |                                   |         |
| flash detect<br>Auto detect                                 | Volum                     | e Label:              |                                   |         |
| Device count :  |                           |                       |                                   |         |
| Flash :   | MBytes Sou                | rce Image             | Select                            |         |
| Flash count:  |                           |                       | NETECT                            |         |
| – Serial Number (SN)  | Privacy                   | Area<br>Volume Label: |                                   |         |
| Start SN : (0-)   | T IIVau j                 |                       |                                   |         |
|   | UoS 🗔 (ननन                | rce Image2            |                                   | Save    |
| PC Number:  |                           |                       | Select                            | Pave    |
| Hidden size :   | (Min) Preform             | at                    |                                   | Save As |
| Mode:   | (1.111)                   | format                |                                   |         |
| Mode:   |                           |                       |                                   |         |
|   |                           |                       |                                   |         |
|   |                           |                       |                                   |         |
|   |                           |                       |                                   |         |
|   |                           |                       |                                   |         |

**Step 1** You will see the main screen window as show above. Enter the customised information and necessary values in each box.

| Customer D | )ata         |                   |      |                 |
|------------|--------------|-------------------|------|-----------------|
| 🗖 Load D   |              | Manufacturer:     |      | (max. 8 Bytes)  |
| VID        | (ex: 0x0D7D) | Product:          |      | (max. 16 Bytes) |
| PID        | (ex: 0x1400) | Inquiry Revision: | PMAP | (max. 4 Bytes)  |

Load Default

Tick the "Load Default" box if you want to use the default Manufacture name and Product Name. (refer to appendix)

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| VID              | Vendor ID (4 digits long)<br>Enter a 4 digits Hexadecimal value.<br>(must type "0x" before typing the VID)  |
|------------------|---|
|                  | The VID is a registered ID, which is given by USB-IF organization. In order to obtain a VID for a company, the company must register with USB-IF organization and pay an annual fee to the organization to maintain this VID. |
|                  | If you do not have a VID for your company, just leave it blank,<br>and Phison's VID will apply.   |
| PID              | Product ID (4 digits long) Enter a 4 digits Hexadecimal value. (must type "0x" before typing the PID)   |
|                  | You can define your own PID for each of the product line, as<br>long as you have your own VID. If you do not have your<br>own VID, and you are using Phison's VID, then the PID<br>cannot be changed.                         |
| Manufacturer     | Manufacturer Name (maximum 8 characters)<br>You can enter a manufacturer name here or leave it blank.<br>Please note, "spaces" are count as 1 character.  |
| Product          | <b>Product Name</b> (maximum 16 characters)<br>You can enter a product name of your choice.<br>Please note, "spaces" are count as 1 character.  |
| Inquiry Revision | Inquiry Revision (maximum 4 digits)<br>Please do not modify this value, unless for special use.<br>Please leave it as default value "PMAP".   |

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### Step 2 Enter flash memory information.

| flash detect   |        |
|----------------|--------|
| 🔽 Auto detect  |        |
| Device count : |        |
| Flash :        | MBytes |
| Flash count:   |        |

- Auto Detect Select auto detect to allow MPTool to automatically detect the flash capacity. We recommend you use the "Auto Detect" function during production.
- **Device Count** Enter number of devices (or drives) appeared in "My Computer".
- **Flash** Enter the capacity of a single flash memory used.

**Flash Count** Enter the number of flash memory pieces used.

- Step 3Setting Serial Number.Phison's USB product all had an unique 12 digits serial number.Serial Number Example : AABCDDEEFFFF
  - **AA** Customer Code, given by Phison and cannot be changed.
  - **B** Year in hexadecimals, from computer date. (2007 = 7)
  - **C** Month in hexadecimals, from computer date. (September = 9, October = A)
  - **DD** Day in hexadecimals, from computer date.  $(9^{th} = 09, 10^{th} = 0A)$
  - **EE** Computer (PC) number in hexadecimals. For each production PC, please assign a number.
  - **FFFF** Serial number in hexadecimals.

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| -Serial Number (SN) | ·         |
|---------------------|-----------|
| Start SN :          | (0-)      |
| End SN :            | (-0xFFFF) |
| PC Number:          |           |

**Start Serial Number** Set the starting serial number. You can leave it blank, and the program will use the next serial number from last production.

**End Serial Number** Set the ending serial number. We recommend just leave it blank.

### **PC Number** Set the PC number for each production PC.

### **Step 4** Other settings.

| Hidden size : | (Min)  |
|---------------|--|
| Mode:         | ▼<br>3<br>4<br>7<br>8<br>10<br>12<br>14<br>▼ |

**Hidden Size** Set the capacity for hidden area. If you do not need this function, simply leave it blank.

PS : for PS2135 & PS2231 FF-03 firmware, you must enter a size for hidden area, if you do not need the hidden area, please enter "Min", to use the minimum capacity (16KB).

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Mode Set mode. (Please refer to appendix for different mode description) When mode 7 or mode 8 is selected. Extra partition information will appear.

| Mode:                 | 2 -          | ]       |
|-----------------------|--------------|---------|
| Partition Size:       | Max          | MBytes  |
| 1 private removable + | 1 public ren | novable |

You will need to set the "**Public Partition**" size; default value is set to its maximum capability, and the remaining capacity is dedicated to "Secure Partition".

PS : When you select different modes, a short description of the mode's characteristic will shown as circled in RED above.

**Step 5** Set Volume Labels.

Maximum 11 characters in **capital letter**. Spaces are also count as 1 character. Please set the volume label for both public partition and secure partition (mode 4 / mode 7 / mode 8 only).

| Public Area<br>Volume Label: | PUBLIC |        |
|------------------------------|--------|--------|
| Source Image                 |        | Select |
| Privacy Area                 |        |        |
| Privacy Volume Label:        | SECURE |        |
| Source Image2                |        | Select |

PS: Please disregard "Source Image" function, it is for Phison internal use only, if this function will apply, Phison will inform separately of how to use this function.

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### **Step 6** Preformat (low-level-format).

Normally pretest (preformat) is carried out automatically by firmware with the brand new flash memory used. However, in some cases, pretest may be necessary. There are two ways to do pretest, one is by hardware, and the other is using the software.

Simply tick the "Preformat" box to do pretest (low-level-format) during testing.



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### A3. Setting "F1-2" Page

| Parameters Editor F1 - 1.0.15.3        |        |                 |
|--|--------|-----------------|
| F1-PS223X F1-1 F1-2 Controller Special |        |                 |
| Source/Image files<br>Floppy:          |        |                 |
| HDD:                                   | Select | Load            |
| I I                                    | Select |                 |
| CD-ROM:                                | Select |                 |
| Public Source folder:                  | Select |                 |
| Privacy Source folder:                 | Select |                 |
| Hidden Area Image:                     | Select |                 |
|  |        | Save<br>Save As |
|  |        |                 |

**Step 1** Source file or image files.

These settings are related to mode. When you select a mode, only the appropriate boxes will become active, others will be marked out.

| Source/Image files<br>Floppy: | Select |
|-------------------------------|--------|
| HDD:                          | Select |
| CD-ROM:                       | Select |
| Public Source folder:         | Select |
| Privacy Source folder:        | Select |

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| Floppy                | Active when mode 4 is selected.<br>Choose the floppy image file.   |
|-----------------------|--|
| HDD                   | Active when mode 14 is selected.<br>Choose the HDD image file.   |
| CD-ROM                | Active when mode 14 or mode 21 is selected.<br>Choose the CD-ROM image file.   |
| Public Source Folder  | Active when mode 3 / 7 / 8 is selected.<br>Put all the data which you wish to copy on to the<br>public partition in a folder, then type/select the<br>location of the data folder. (eg: C:\Data1\)<br><b>PS : Do not enter the file name, just the location</b><br>of the folder.      |
| Privacy Source Folder | Active when mode $4/7/8/14/21$ is selected.<br>Put all the data which you wish to copy on to the secure (private) partition in a folder, then type/select the location of the data folder. (eg: C:\Data2\)<br><b>PS : Do not enter the file name, just the location of the folder.</b> |
| Hidden Area Image     | If a hidden area will be created and data will be<br>loaded into the hidden area, then choose the image<br>file for hidden area.   |

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### A4. Setting "Controller" Page

| Parameters Editor F1 - 1.0.15.3        | 🛛 🔀     |
|--|---------|
| F1-PS223X F1-1 F1-2 Controller Special |         |
| IC Type                                |         |
| ⊙ PS2232 ○ PS2136                      | Load    |
| C PS2231 C PS2134                      |         |
| - Used MP Tools                        |         |
| ✓ Last Version                         |         |
| Select                                 |         |
|  |         |
|  |         |
|  |         |
|  |         |
|  | Save    |
|  | Save As |
|  |         |
|  |         |
|  |         |
|  |         |
|  | 1       |
|  |         |

This section is designed and reserved for future function; basically you can ignore this page and simply tick the "Last Version" box.

Do not worry about if the controller you are using is not listed. If it is not listed, ignore it or select any controller. However, if the controller that you are using is listed, please select the right controller.

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# A5. Setting "Special" Page

# This section is designed for special function use. Phison will inform separately how to enter the function here, if some special function will apply.

### All Pictures In This Manual Are For Reference Use Only. - 17 -

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### B. Setting up "F2.ini" File with ParamEdt

The main purpose of this file is, to compare the information entered and the information stored in the device, and make sure the stored information were correct. The information entered here should be the information expected after F1 production.

### B1. Setting "F2-PS223X" Page

### You must set up a correct "F2.ini" file before proceed with F2 production process.

**Step 1** Start the parameter editing software "ParamEdt-F2.exe" by double clicking it.

| (file name may | be different) |
|----------------|---------------|
|----------------|---------------|

| Parameters Editor F2 1.0.15.3                         |   |         |
|---|---|---------|
| F2-PS223X F2-1 F2-2 Control                           | Ler   Sp. Version of the<br>Editor                        |         |
| FC1 - FC2 : 0x<br>Mode :<br>CDROM Size :              | - 🔽<br>MBytes   |         |
| Advance<br>HID PID :<br>Number of retries :           | (ex. 0xEC51)<br>(Limit :3-255)<br>(Empty : use default 6) |         |
| Lock Partition Default Password : Customize Setting : | (MAX :16 bytes)<br>(Empty : use default "1234")           | Select  |
|   |   | Save As |
|   |   |         |
|   |   |         |

Load an old "F2.ini" file.

Save This function is only available when you made changes to an old (existing) file and you want to save the new contents using the same old file name.

**Save As** When you are creating a new file or if you made changes to an old file, but you want to save it using different file name.

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**Step 2** Thick the box if the device is using PS2231 controller, and continue with step 3, otherwise, if it is not using the PS2231 controller, do not tick this box and go to section B2.

| Parameters Editor F2    | 2 - 1.0.15.3               |  |
|-------------------------|----------------------------|--|
| F2-PS223X F2-1 H        | F2-2 Controller Special    |  |
| ✓ Tick if you are usin. | g : PS2231] 🔽 Load Default |  |
| FC1 - FC2 :             | 0x FF -                    |  |
| Mode :                  |                            |  |
| CDROM Size :            | MBytes                     |  |

**Step 3** If the default "Manufacture Name" & "Product Name" is expected, then tick the "Load Default" box, otherwise do not tick.

| Parameters Editor F2 -    | 1.0.15.3              |
|---------------------------|-----------------------|
| F2-PS223X F2-1 F2-        | 2 Controller Special  |
| ▼ Tick if you are using : | PS2231 I Load Default |
| FC1 - FC2 :               | 0x FF -               |
| Mode :                    |                       |
| CDROM Size :              | MBytes                |

**Step 4** Select the expected firmware type.

| Parameters Edito  | r F2 - 1.0.15.3               |
|-------------------|-------------------------------|
| F2-PS223X F2-1    | F2-2 Controller Special       |
| ▼ Tick if you are | using : PS2231 🔽 Load Default |
| FC1 - FC2 :       | 0x FF -                       |
| Mode :            |                               |
| CDROM Size        |                               |

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**Step 5** Select the expected mode that the final product should have. If you are not too sure or have problem selecting the correct mode, please check with Phison's engineer or FAE.

| Parameters Editor F2 - 1    | 1.0.15.3                    |  |
|-----------------------------|-----------------------------|--|
| F2-PS223X F2-1 F2-2         | Controller Special          |  |
| ▼ Tick if you are using : P | S2231 🔽 Load Default        |  |
| FC1 - FC2 :                 | 0x FF - 1 -                 |  |
| Mode :                      |                             |  |
| CDROM Size :                | MBytes                      |  |
| - Advance                   | 6<br>10                     |  |
| HID PID :                   | 10<br>12<br>14 (ex. 0xEC51) |  |

*Note* : The availability of mode will depend on firmware, certain modes can only support by specific firmware.

**Step 6** For <u>Mode 21</u> only, enter the expected size for the CD-Rom partition.

| Parameters Editor F2 - 1.0      | .15.3                |  |
|---------------------------------|----------------------|--|
| F2-PS223X F2-1 F2-2             | Controller   Special |  |
| ✓ Tick if you are using : PS22: | 31 🔽 Load Default    |  |
| FC1 - FC2 :                     | 0x FF - 1 -          |  |
| Mode :                          | 21 -                 |  |
| CDROM Size :                    | MBytes               |  |

**Step 7** The following only apply to firmware type **FF-03**, if you are not using FF-03 type firmware, please go to section B2 directly.

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**Step 8** Enter the expected HID PID number. Leave it blank if you do not want to check this value.

| HID PID :           | (ex. 0xEC51)                                    |        |
|---------------------|---|--------|
| Number of retries : | (Limit :3-255)<br>(Empty : use default 6)       |        |
| 🔲 AES Enable        |   |        |
| Lock Partition      |   |        |
| Default Password :  | (MAX :16 bytes)<br>(Empty : use default "1234") |        |
| Customize Setting : |   | Select |

Step 9 Enter the expected retry number for security software; so when the retry number is reached, the device will get formatted and the data gets destroyed. The default value is set to 6 times.

| HID PID :           | (ex. 0xEC51)                                    |
|---------------------|---|
| Number of retries : | (Limit :3-255)<br>(Empty : use default 6)       |
| AES Enable          |   |
| Lock Partition      |   |
| Default Password :  | (MAX :16 bytes)<br>(Empty : use default "1234") |
| Customize Setting : | Select  |

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Step 10 If the finish product should have AES function, please tick the "AES Enable" box.

| HID PID :           | (ex. 0xEC51)                                    |        |
|---------------------|---|--------|
| Number of retries : | (Limit :3-255)<br>(Empty : use default 6)       |        |
| AES Enable          |   |        |
| Lock Partition      |   |        |
| Default Password :  | (MAX :16 bytes)<br>(Empty : use default "1234") |        |
| Customize Setting : |   | Select |

**Step 11** For mode 7 and mode 21, if the secure (private) partition should be locked by default, then please tick the "Lock Partition" box and enter the default password.

| HID PID :           | (ex. 0xEC51)                                    |        |
|---------------------|---|--------|
| Number of retries : | (Limit :3-255)<br>(Empty : use default 6)       |        |
| AES Enable          | () :  |        |
| 🔽 Lock Partition    |   |        |
| Default Password :  | (MAX :16 bytes)<br>(Empty : use default "1234") |        |
| Customize Setting : |   | Select |

Step 12 Customize setting is for Phison use only. Please leave it blank.

| -Advance            |                                       |            |
|---------------------|---------------------------------------|------------|
| HID PID :           | (ex. 0xEC51)                          |            |
| Number of retries : | (Limit :3-255)<br>(Empty : use defau  | dt 6)      |
| AES Enable          |                                       |            |
| 🔽 Lock Partition    |                                       |            |
| Default Password :  | (MAX :16 bytes)<br>(Empty : use defau | lt "1234") |
| Customize Setting : |                                       | Select     |

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### B2. Setting "F2-1" Page

| Customer Data       Manufacturer:       (max. 8 Bytes)         VID       (ex: 0x0D7D)       Product:       (max. 16 Bytes)         PID       (ex: 0x1400)       Inquiry Revision:       PMAP       (max. 4 Bytes)         Firmware Version       (ex: 1.05.10)       FC1:       0x FF         Firmware Released Date       Year       Month       Day       PC2:       0x 1         Configuration:       flash detect       Source Image       Select       Select       Save         Hidden size :       (Min)       Privacy Volume Label:       USB DISK CD       Save As         Mode:       Image       Select       Save As | Parameters Editor F2 - 1.0.15.3<br>F2-PS223X F2-1 F2-2 Controller Specie | a   |                 | 1 🔀 |
|--|--|---|-----------------|-----|
| Firmware Released Date     Year     Month     Day     FC1: Ux FF       Firmware Released Date     Year     Month     Day     FC2: 0x 1       Configuration:  | Load Default     Manufacturer:       VID     (ex: 0x0D7D)   Product:     | ,<br>   | (max. 16 Bytes) |     |
| Flash count:     Select       Hidden size :     KBytes<br>(Min)       Mode:     Source Image2  | Firmware Released Date Year Configuration: flash detect                  | Month Day           Month         Day           Volume Label: |                 |     |
| Mode: Source Image2  | Flash count:<br>Hidden size : KBytes                                     |   |                 |     |
|  |  | Source Image2   | Save A          |     |

**Step 1** You will see the main screen window as show above. Enter the expected information (value) in each box. You can leave it blank if you do not wish to compare these information.

| Customer D | ata          |                   |      |                 |
|------------|--------------|-------------------|------|-----------------|
| 🗖 Load De  |              | Manufacturer:     |      | (max. 8 Bytes)  |
| VID        | (ex: 0x0D7D) | Product:          |      | (max. 16 Bytes) |
| PID        | (ex: 0x1400) | Inquiry Revision: | PMAP | (max. 4 Bytes)  |

### Load Default

Tick the "Load Default" box if you expect the default Manufacture Name and Product Name will be used. (refer to appendix)

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| VID             | Vendor ID (4 digits long)<br>Enter a 4 digits Hexadecimal value.<br>(must type " <b>0</b> x" before typing the VID)  |
|-----------------|--|
| PID             | <b>Product ID</b> (4 digits long)  |
|                 | Enter a 4 digits Hexadecimal value.  |
|                 | (must type " <b>0x</b> " before typing the PID)  |
| Manufacturer    | Manufacturer Name (maximum 8 characters)<br>Enter expected manufacturer name here or leave it blank if<br>you don't want to check the manufacture name. Please note,<br>"spaces" are count as 1 character. |
| Product         | Product Name (maximum 16 characters)   |
|                 | Enter expected product name here or leave it blank if you  |
|                 | don't want to check the product name. Please note, "spaces"  |
|                 | are count as 1 character.  |
| Inquiry Revisio | n Inquiry Revision (maximum 4 digits)  |

Enter expected inquiry revision. Default value="PMAP".

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### **Step 2** Enter firmware information.

| Firmware Version       |        | (ex: 1.05.10) |     | FC1 : | 0x FF |
|------------------------|--------|---------------|-----|-------|-------|
| Firmware Released Date | Year 🗌 | Month         | Day | FC2 : | 0x 1  |

### **Firmware Version**

Enter the expected firmware version. You can leave it blank, if you do not wish to check this information.

### **Firmware Release Date**

Enter the firmware date. Firmware date can be obtained by checking with Phison's engineer or FAE, or simply click "Get Info." button from the main program of the MPTool (F1 or F2), and read back this information. You can leave it blank, if you do not wish to check this information.



- Year : Enter the last digit of the year. (eg: 2007, just enter 7)
- Month : Enter month.
- Day : Enter day.

### FC1 – FC2

Enter the expected firmware type values for FC1 & FC2. You can leave it blank, if you do not wish to check this information.

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Step 3 Enter the expected flash memory information.

| Configuration: —— |        |
|-------------------|--------|
| flash detect      |        |
| 🗸 Auto detect     |        |
| Flash :           | MBytes |
| Flash count:      | _      |

- Auto Detect Select auto detect to allow MPTool to automatically detect the flash capacity. We recommend you use the "Auto Detect" function during production.
- **Flash** Enter the capacity of a single flash memory used.

**Step 4** Other settings.

| Hidden size : | (Min)  |
|---------------|--|
| Mode:         | ▼<br>3<br>4<br>7<br>8<br>10<br>12<br>14<br>▼ |

**Hidden Size** Set the expected capacity for hidden area. If you do not want to compare this function, simply leave it blank.

PS : for PS2135 & PS2231 FF-03 firmware, you must enter a size for hidden area, if you do not need the hidden area, please enter "Min", to use the minimum capacity (16KB).

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**Mode** Please select the expected mode.

When mode 7 or mode 8 is selected. Extra "Partition Size" information will appear.

| Mode:                                    |     |        |  |  |
|--|-----|--------|--|--|
| Partition Size:                          | Max | MBytes |  |  |
| 1 private removable + 1 public removable |     |        |  |  |

Enter the expected "**Public Partition**" size; default value is set to maximum capability, and the remaining capacity is dedicated to "Secure Partition".

PS : When you select different modes, a short description of the mode's characteristic will shown as circled in RED above.

**Step 5** Enter Expected Volume Labels.

Maximum 11 characters in **capital letter**. Spaces are also count as 1 character. Enter the volume label for both public partition and secure partition (mode 4 / mode 7 / mode 8 only).

| Public Area<br>Volume Label:          | PUBLIC   |        |
|---------------------------------------|----------|--------|
| Source Image                          |          | Select |
| Privacy Area<br>Privacy Volume Label: | SECURE   |        |
| Source Image2                         | Juncount |        |
|                                       |          | Select |

PS: Please disregard "Source Image" function, it is for Phison internal use only, if this function will apply, Phison will inform separately of how to use this function.

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### B3. Setting "F2-2" Page

|  |                 | $\mathbf{X}$ |
|--|-----------------|--------------|
| F2-PS223X F2-1 F2-2 Controller Special |                 |              |
| _Source/Image files                    |                 |              |
| Floppy:                                | Select Load     | 1            |
| HDD:                                   | Select          | -            |
| CD-ROM:                                | Select          |              |
| Public Source Folder:                  | Select          |              |
| Privacy Source Folder:                 | Select          |              |
| Hidden Area Image:                     | Select          |              |
|  | Save<br>Save As |              |

**Step 2** Source file or image files.

These settings are related to mode. When you select a mode, only the appropriate boxes will become active, others will be marked out.

| F2-PS223X F2-1 F2-2 Controller Special |        |
|--|--------|
| Source/Image files                     |        |
| Floppy:                                | Select |
| HDD:                                   | Select |
| CD-ROM:                                | Select |
| Public Source Folder:                  | Select |
| Privacy Source Folder:                 | Select |
| Hidden Area Image:                     | Select |

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| Floppy                | Active when mode 4 is selected.<br>Choose the expected floppy image file.   |
|-----------------------|---|
| HDD                   | Active when mode 14 is selected.<br>Choose the expected HDD image file.   |
| CD-ROM                | Active when mode 14 or mode 21 is selected.<br>Choose the expected CD-ROM image file.   |
| Public Source Folder  | Active when mode 3 / 7 / 8 is selected.<br>Put all the data which you expected in the public<br>partition into a folder, then type/select the location<br>of the data folder. (eg: C:\Data1\)<br><b>PS : Do not enter the file name, just the location<br/>of the folder.</b>     |
| Privacy Source Folder | Active when mode $4/7/8/14/21$ is selected.<br>Put all the data which you expected in the secure (private) partition into a folder, then type/select the location of the data folder. (eg: C:\Data2\)<br><b>PS : Do not enter the file name, just the location of the folder.</b> |
| Hidden Area Image     | If a hidden area exists and data were stored in the hidden area, then choose the image file for hidden area.  |

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### B4. Setting "Controller" Page

| Parameters Editor F2 - 1.0.15.3  |                 |
|--|-----------------|
| F2-PS223X     F2-1     F2-2     Controller     Special       IC Type     •     •     •     •       •     •     •     •     •       •     •     •     •     •       •     •     •     • | Load            |
| Used MP Tools  Last Version Select   |                 |
|  | Save<br>Save As |
|  |                 |

This section is designed and reserved for future function; basically you can ignore this page and simply tick the "Last Version" box.

Do not worry about if the controller you are using is not listed. If it is not listed, ignore it or select any controller. However, if the controller that you are using is listed, please select the right controller.

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### B5. Setting "Special" Page

| Parameters Editor F2 - 1.0.15.3                                | _ 🗆 🛛   |
|--|---------|
| F2-PS223X   F2-1   F2-2   Controller Special  <br>Special item | 1       |
|  | Load    |
|  |         |
|  |         |
|  |         |
|  |         |
|  | Save    |
|  | Save As |
|  |         |
|  |         |
|  |         |

This section is designed for special function use. Phison will inform separately how to enter the function here, if some special function will apply.

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### C. Appendix

### C1. Default Values

| Mode | VID  | PID  | Manufacture<br>Name | Product Name | Label(s)    |
|------|------|------|---------------------|--------------|-------------|
| 3    | 13FE | XX00 | (empty)             | USB DISK 2.0 | USB DISK    |
| 4    | 13FE | XX20 | (empty)             | USB DISK Pro | UDISK PRO   |
| 7    | 13FE | XX21 | (empty)             | USB DISK Pro | UDISK PRO   |
| 8    | 13FE | XX23 | (empty)             | USB DISK Pro | UDISK PRO   |
| 14   | 13FE | XX24 | USB                 | DISK CD      | USB DISK CD |
| 21   | 13FE | XX27 | USB                 | DISK CD      | USB DISK CD |

### C2. Mode Description

| Mode 3 | Normal Pen Drive   | Total partition :   | 1 partition        |  |
|--------|--|---|--------------------|--|
|        | <ul> <li>No software</li> </ul>  |   |                    |  |
|        | - See 1 Removable drive in "   | 'My Computer".  |                    |  |
|        |  |   |                    |  |
| Mode 4 | Secure Pen Drive   | Total partition :   | 2 partitions       |  |
|        | — With security AP   |   |                    |  |
|        | — See 1 Floppy drive and 1 R   | emovable drive in "I                                      | My Computer".      |  |
|        | — If password exist, will lock   | the Removable driv  | e partition        |  |
|        |  |   |                    |  |
| Mode 7 | Secure Pen Drive   | Total partition :   | 2 partitions       |  |
|        | — With security AP   |   |                    |  |
|        | — See 2 Removable drives in  | — See 2 Removable drives in "My Computer".                |                    |  |
|        | <ul> <li>Customer can change the partition sizes by themselves.</li> </ul> |   |                    |  |
|        | — If password exist, will lock   | - If password exist, will lock first removable partition. |                    |  |
|        |  |   |                    |  |
| Mode 8 | Secure Pen Drive   | Total partition :   | 2 partitions       |  |
|        | — With security AP   |   |                    |  |
|        | - See only 1 Removable drive in "My Computer".                             |   |                    |  |
|        | <ul> <li>Customer can change the partition size by themselves.</li> </ul>  |   |                    |  |
|        | — If password exist, will lock the second removable partition.             |   |                    |  |
|        | — Secure(private) partition ca   | n only be access whe                                      | en password exist. |  |
|        |  |   |                    |  |

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| Mode 14 | CD Autorun  | Total partition :   | 3 partitions |  |
|---------|---|---|--------------|--|
|         | - Partition 1 CD-Rom  | partition   |              |  |
|         | — Partition 2 HDD par   | tition  |              |  |
|         | <ul> <li>Partition 3 Removab</li> </ul>                             | le partition  |              |  |
|         | — See partition 1 & 3 in  | n Windows 2000 / XP   |              |  |
|         | — See partition 2 & 3 in  | n Windows ME  |              |  |
|         | <ul> <li>Partition 1 &amp; 2 are read only partitions.</li> </ul>   |   |              |  |
|         | — Can only see two par  | <ul> <li>Can only see two partitions at the same time.</li> </ul> |              |  |
|         | <ul> <li>Autorun data are stored in partition 1 &amp; 2.</li> </ul> |   |              |  |
|         |   |   |              |  |
| Mode 21 | CD Autorun  | Total partition :   | 2 partitions |  |
|         | <ul> <li>Partition 1 CD-Rom partition</li> </ul>                    |   |              |  |
|         | <ul> <li>Partition 2 Removable partition</li> </ul>                 |   |              |  |

- Partition 2 Removable partition
- See partition 1 & 2 in Windows 2000 / XP
- Partition 1 is read only partition.
- Autorun data are stored in partition 1.
- Cannot autorun in Windows ME.

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### C3. Mode Graphical Description

|                                   | Mode 3      | Mode 4                          | Mode 7                          | Mode 8           |
|-----------------------------------|-------------|---------------------------------|---------------------------------|------------------|
| Partition                         | 1           | 2                               | 2                               | 2                |
| Security<br>Function              | No          | Yes                             | Yes                             | Yes              |
| Partition<br>Appearance           | Removable   | FDD<br>+<br>Removable           | Removable<br>+<br>Removable     | Removable        |
| Appearance<br>at the same<br>time | 1 partition | 2 partitions                    | 2 partitions                    | 1 partition      |
| Resize<br>Partition               | N/A         | No                              | Yes                             | Yes              |
| Diagrammatic                      | Public      | Secure<br>/<br>Public<br>Public | Secure<br>/<br>Public<br>Public | Secure<br>Public |

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|                                   | Mode 14   | Mode 21   |  |
|-----------------------------------|---|---|--|
| Partition                         | 3   | 2   |  |
| Security<br>Function              | Yes   | Yes   |  |
| Partition<br>Appearance           | CD & Removable<br>(2000/XP)<br>or<br>HDD & Removable<br>(98/ME) | CD & Removable (2000/XP)<br>or<br>Removable (98/ME) |  |
| Appearance<br>at the same<br>time | 2 partitions  | 1 or 2 partitions                                   |  |
| Resize<br>Partition               | No  | No  |  |
| Advantage                         | Can autorun in all Windows<br>OS.                               | No missing capacity.                                |  |
| Disadvantage                      | Need to explain to customer about missing capacity.             | Can only autorun in Windows<br>2000 / XP.           |  |
| Diagrammatic                      | CD<br>HDD<br>Public<br>/<br>Secure                              | CD<br>Public<br>/<br>Secure                         |  |