

October 13th, 2004  
NEC Electronics Corporation

## **NEC Electronics Product Information**

### **for $\mu$ PD720133**

Dear NEC Electronics Engineering Supporters,

We will inform you about the product information as attached document described more details.

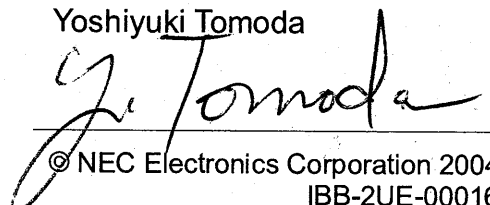
If you need more information, please contact your local NEC Electronics Sales Office.

Yours sincerely,

NEC Electronics Corporation  
The 2nd Systems Operations Unit  
PC Peripheral Systems Division  
USB Technical Marketing &  
Application Engineering

Department Manager

Yoshiyuki Tomoda



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IBB-2UE-00016

|                                                                                       |                                                                                                                                                                                              |
|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Secured Solution Information<br>for NEC's USB 2.0 to IDE bridge device :<br>uPD720133 | IBB-2UE-00016                                                                                                                                                                                |
|                                                                                       | October 13th 2004                                                                                                                                                                            |
|                                                                                       | Yoshiyuki Tomoda, Department Manager<br>USB Technical Marketing &<br>Application Engineering<br>PC Peripheral Systems Division<br>2nd Systems Operations Unit<br>NEC Electronics Corporation |

CP(N)

## 1. Contents

This trial release of the uPD720133's solution includes security feature. It provides a password lock to the IDE device of the HDD. The information of the HDD is protected even if the HDD is removed from the "USB2.0 to IDE Bridge" system.

## 2. Deliverable

**In this deliverable, a security patch program and its application software are provided.**

The Trial version application uses NEC's vendor ID during installation.

- Secure patch           secure.epd           1,152Byte
- Installer Execution file: install.exe   299,908Byte
- Installer Data file:   install.cab   217,445Byte

## 3. Usage

Hardware composition:

GPIO5 and GPIO6 are short-circuited.

The execution of this application is rather simple. Verification can be done on the application board ET-0182.

Patch Setting:

Vendor ID is 0x0409.

The function of GPIO (SCSI Command), **SCSI Through ATA and Removable** are chosen.

**The Secured Firmware Patch is "secure.epd".**

For application's usage method, please refer to the attached sheet.

#### 4. OEM

Customer will need to evaluate and confirm the released application. The options on the application should be set according to their product's requirement. The parameters in the application that need to be set include Product's Vendor ID, Device ID, Bit assigns of the used GPIO. It is also necessary to customize product's Agreement document, icon and copyright.

1. Sets Bit assign Level of used GPIO.
2. Sets Product's Vendor ID and Device ID.
3. Customize of product's Agreement document, icon and copyright.

#### 5. Flow of OEM

The following approach (flow) are recommended:

1. **Customer needs to verify the operation of trial version application on their system.**
2. **Customer needs to agree and consent to a document which include the following contents:**

- Nothing in the application shall be construed as conferring any right or license under any copyrights, patents, trademarks or other intellectual property rights of NEC Electronics Corporation or any third party. NEC Electronics Corporation assumes no responsibility for infringement of copyrights, patents, trademarks or other intellectual property rights of a third party by or arising from the use of information.

- The use of this application in the customer's equipment for design, development or any other purpose shall be undertaken under the full responsibility of the customer. NEC Electronics Corporation assumes no responsibility for any losses incurred by the customer or third parties arising from the use of this information.

etc.

3. **The customer presents to sales customize demand document <Appendix 1>.**
4. **Customization of application.**
5. **The customize product is exhibited to customer.**

#### 6. Note

- **Support OS is Windows98SE, Windows 2000/XP.**  
**Windows98SE driver is NEC Electronics release driver only.**
- **If the HDD is set as removable disk. HDD cannot format as NTFS, and with not more than one partition.**

Customization Request

**The following customizations of PC Application are required:**

|                        |  |
|------------------------|--|
| <b>Company Name</b>    |  |
| <b>Department Name</b> |  |
| <b>Name</b>            |  |

|                                     |                                                                                              |
|-------------------------------------|----------------------------------------------------------------------------------------------|
|                                     | <b>Request</b>                                                                               |
| <b>Customer ' s Vendor ID</b>       | <b>0x</b>                                                                                    |
| <b>Customer ' s Device ID</b>       | <b>0x</b>                                                                                    |
| <b>GPIO Assign connect to GPIO6</b> | <b>GPIO7 GPIO5</b>                                                                           |
| <b>GPIO Active Level</b>            | <b>LOW-Active HIGH-Active</b>                                                                |
| <b>Use consent document</b>         | <b>Please attach the file of rtf form.</b>                                                   |
| <b>Copyright Description</b>        |                                                                                              |
| <b>Icon</b>                         | <b>Change    Not Change</b><br><b>Please attach of an icon file at the selection change.</b> |

**Note**

|  |
|--|
|  |
|--|

# Application Secure Tool

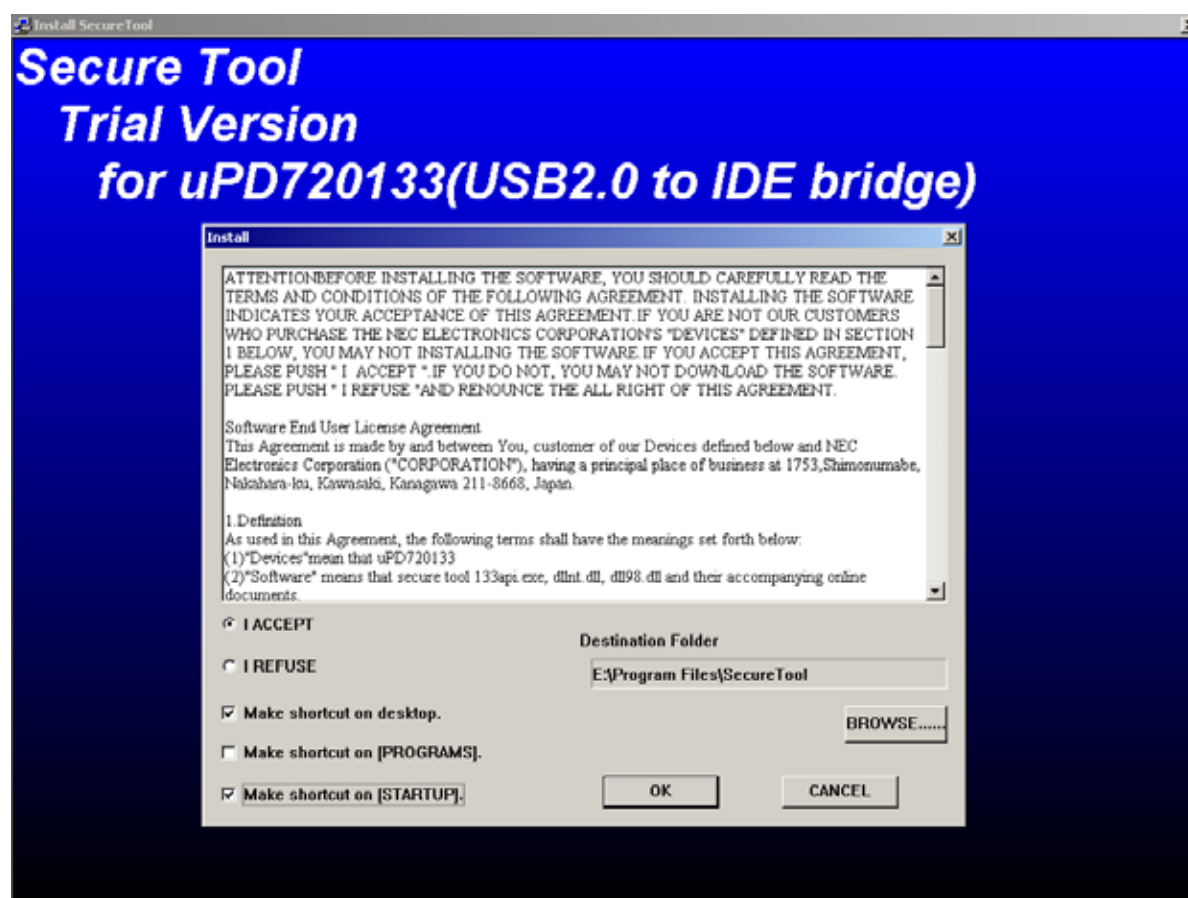
- 1. Introduction 2**
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## 1. Introduction

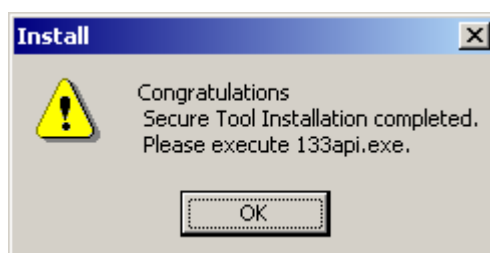
This application executes password lock or password unlock for HDD Security.

## 2. Installing Unplug Tool

When execution a device at the time of connection, Please check to make shortcut on [STASRTUP]. It performs automatically upon the next PC startup.



Please click Secure Tool after completing installation.



## 3. Running Secure Tool

- This application is displayed on the right-hand side of taskbar after execution.



Disconnected Icon

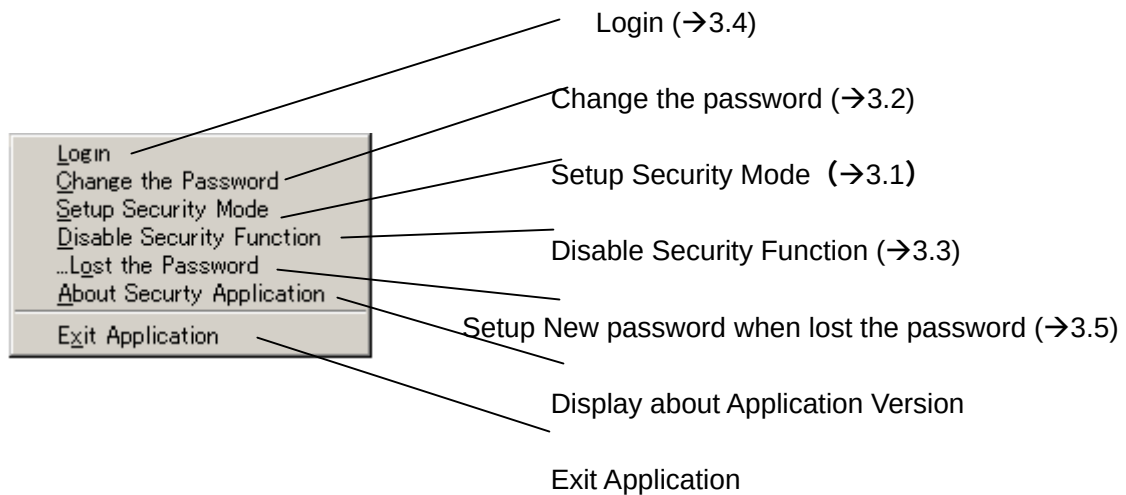


Locked Icon



Unlocked Icon

- Following Menu is displayed when taskbar application clicked. And Security function can be performed.



- Don't open two or more dialogs of each menu.
- When Security is effective and there is a device for security, Login will not be allowed. If the left click of the task tray icon is executed, Login dialog will be displayed.
- If HDD security is set as high mode, the data will not be erased when the user lost his/her password. (If the HDD security is not set to the Maximum mode, the data must be erased at the time of Password Lost.)

### 3.1 Security Setup

Setup User Password and Master Password to device (include uPD720133).  
Master Password functioned as a spare password in case the user forgot his/her Password.  
The setup of Master Password is optional. When the "Setup the Master Password" is checked,  
the following dialog is displayed :



The image shows a Windows-style dialog box titled "Setup Security Mode". It contains the following elements:

- A label "User Password:" followed by a text input field containing four asterisks (\*\*\*\*).
- A label "Please retype:" followed by a text input field containing four asterisks (\*\*\*\*).
- Two buttons: "OK" and "Cancel".
- A checkbox labeled "Setup the Master Password" which is currently unchecked.
- A label "New Master Password:" followed by a text input field containing four asterisks (\*\*\*\*).
- A label "Please retype:" followed by a text input field containing four asterisks (\*\*\*\*).

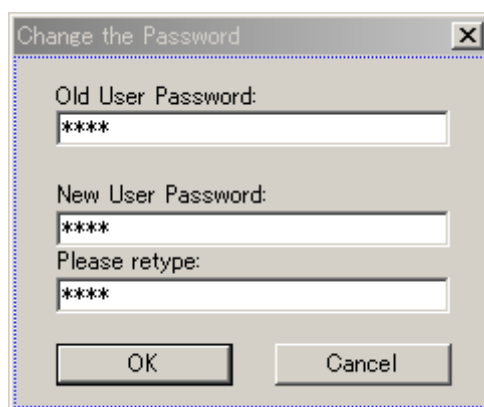
Master Password is not set up if the "Setup Master Password" is not checked.

This function operates in the state where a password is not effective.

### 3.2 Password Change

Change User Password to device (include uPD720133).

The following dialog is displayed in this operation. It prompt the user to enter the old password as well as the new password for confirmation.



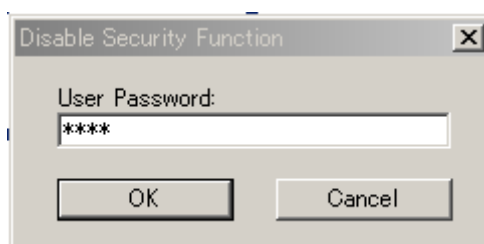
A dialog box titled "Change the Password" with a close button (X) in the top right corner. It contains three text input fields, each with "\*\*\*\*" as a placeholder. The first field is labeled "Old User Password:", the second is labeled "New User Password:", and the third is labeled "Please retype:". At the bottom, there are two buttons: "OK" and "Cancel".

This function operates in the state where a password is effective.

### 3.3 Security Disable

Disable Security Function to device (include uPD720133).

The following dialog is displayed in this operation. User needs to enter the password to disable the security function.

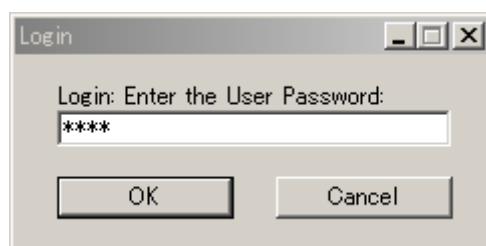


A dialog box titled "Disable Security Function" with a close button (X) in the top right corner. It contains one text input field with "\*\*\*\*" as a placeholder, labeled "User Password:". At the bottom, there are two buttons: "OK" and "Cancel".

### 3.4 Login

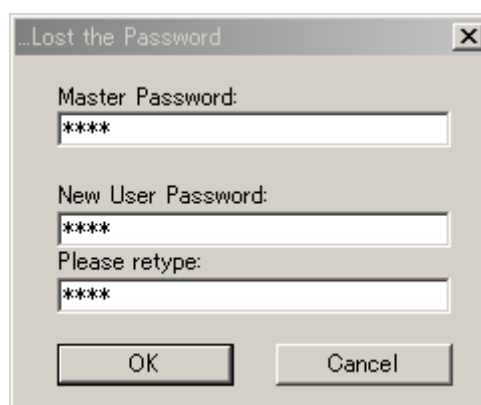
Unlock Security Function to device (include uPD720133).

The following dialog is displayed in this operation. User needs to enter the password to unlocked the security function.



### 3.5 Security Lost

When User Password is Lost, user can used Master Password Login to re-setup a new user Password .



## 4. Note

- Support OS is Windows98SE, Windows 2000/XP.  
Windows98SE driver is NEC Electronics release driver only.
- When the HDD is set as removable disk, the HDD cannot format as NTFS, and cannot have more than one partition.

End