



NCR Printer Flash Utility

Owner's Guide

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Atlanta, Georgia, USA

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Preface

Audience

This book is written for hardware installer/service personnel, system integrators, and field engineers.

Note

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Revision Record

Issue	Date	Remarks
A	Jun 2019	First Issue
B	May 2020	<ul style="list-style-type: none">• Added Error Codes for TseFlash.com• Added 7709-F305• Added procedures for firmware flashing using IBM USB Download
C	Mar 2021	Updated the LED behavior for USB firmware flashing, from "flashing red" to "solid red"
D	Sep 2023	<ul style="list-style-type: none">• Added printer model 7199-7X03/7X04• Converted to the Guild template
E	Sep 2024	Converted to Voyix template
F	Feb 2025	Updated based on FlashUtility V10.79

NCR Printer Flash Utility

The NCR Printer Flash Utility is an application used to flash or update the firmware and font files to the printer. The Flash Utility is available in the following versions:

- Graphical User Interface (GUI)
- Windows Command Line

The GUI version can also be used to create a Firmware folder in a USB thumb drive that allows the 7199 and 7169 to be upgraded from the thumb drive.

The following are firmwares that can be loaded to the printer:

- Boot Firmware or Initial Program Load (IPL) Firmware
- Main Firmware
- Single-Byte Character Set (SBCS) Font
- Double-Byte Character Set (DBCS) Font for Receipt printing
- Double-Byte Character Set (DBCS) Font for Slip printing
- Table
- Printer Configuration Table
- Combined File 1 (IPL + Main FW)—for future enhancement
- Combined File 2 (ALL File)—for future enhancement

 **Note**

Take note of the following limitations:

- In case two similar models are connected to terminal during the downloading process, some unexpected behavior may occur.
- In case a wrong model is selected, IPL and Main Firmware file downloads are protected. This protection is available on NCR 7199 Series printer or newer. Please note that other firmware files (SBCS, DBCS, and others) do not have the same protection.
- For CLI, the download type parameter `/a` supports `*.sfn` and `*.dfn` file extensions. Ensure that the firmware is correct before using the download type parameter `/a`.

This document provides procedures for using the Flash Utility in updating the firmware of the following NCR Voyix printers:

- 7199
- 7169
- 7709-F305
- 7199-7x03/7x04

 **Note**

Some sections of the Flash Utility also apply to the legacy printers found in the *Device Model* drop-down list.

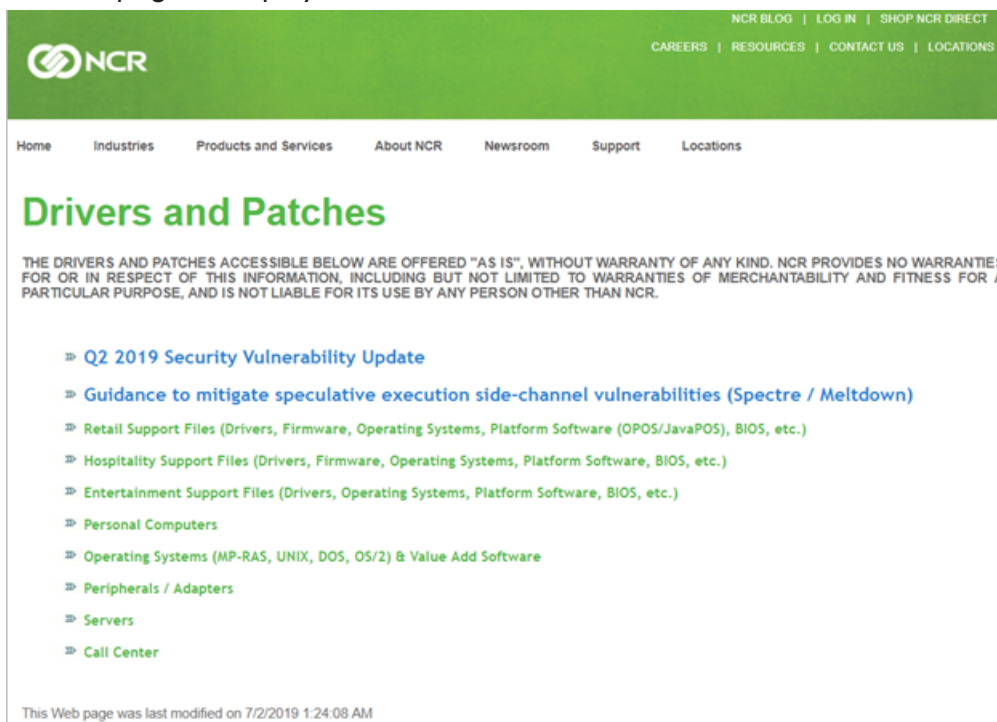
Downloading the Flash Utility

The NCR Printer Flash Utility can be downloaded from the NCR Voyix Support page. The zipped folder includes the following files:

- help.bat
- TseFlash.com
- TseFlash.exe
- VersionInfo.txt

To download the NCR Printer Flash Utility files, follow these steps:

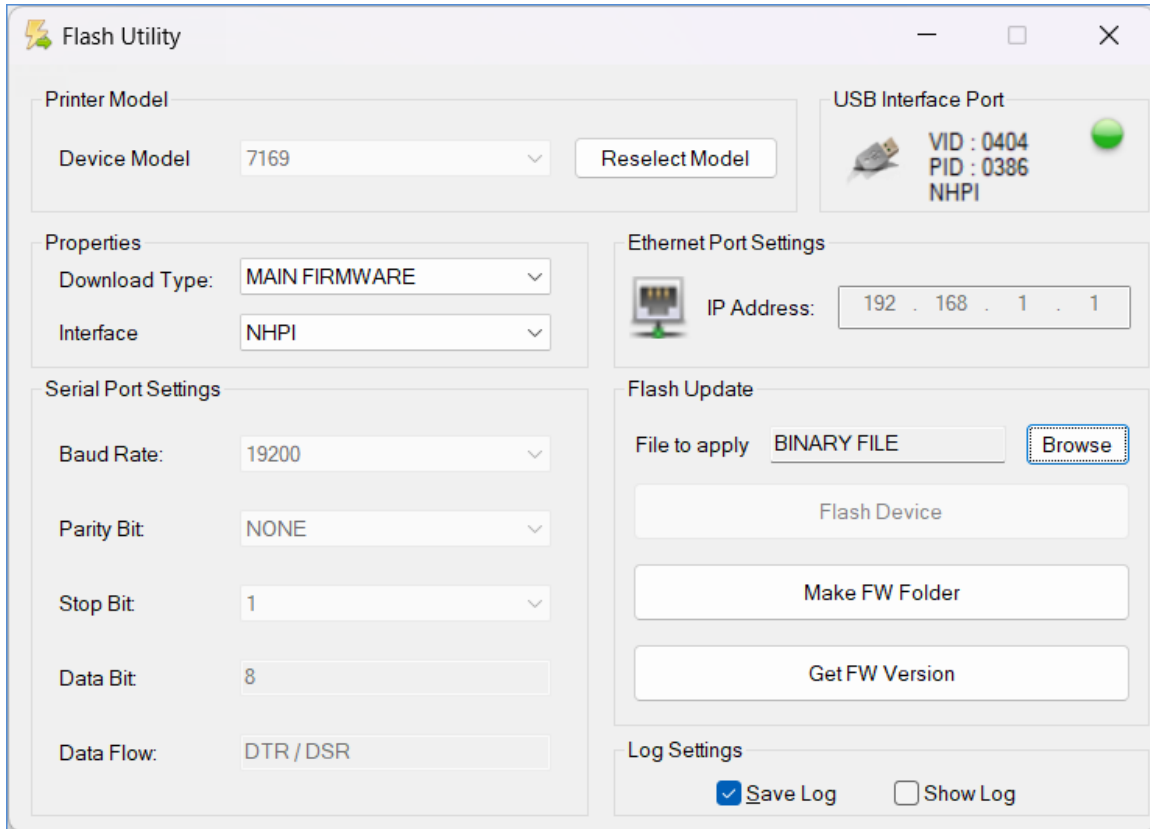
1. Go to https://www5.ncr.com/support/support_drivers_patches.asp. The *Drivers and Patches* page is displayed.



2. Select **Retail Support Files**→**NCR RealPOS and SelfServ Peripherals**→**Printers**.
3. From the list of printers, select a printer model. The list of printer firmware versions and printer utilities are displayed.
4. Select **Flash Utility**.
5. Unzip and save the downloaded files.

Flash Utility GUI version

To start the Flash Utility GUI application, double-click the **TseFlash.exe** file. The application displays the Flash Utility main window.



The following table describes the NCR Printer Flash Utility main window.

Item	Description
Printer Model	Specifies the printer model connected to the terminal
Properties	<p>Specifies the following settings:</p> <ul style="list-style-type: none"> Type of firmware to be flashed to the printer. For more information, refer to "Firmware Types" on page 12. Type of connection interface used to connect the printer to the terminal. For more information, refer to "Interface Options" on page 13.

Item	Description
Serial Port Settings	Provides settings to configure the serial port of the RS-232 interface with the printer
USB Interface Port	Displays the interface port settings such as the Vendor ID, Product ID, and the type of connection interface used
Ethernet Port Settings	Specifies the IP Address of the printer
Flash Update	<p>Provides the following options:</p> <ul style="list-style-type: none"> • Flash to the printer the firmware settings from specified firmware files • Create a firmware folder that contains all firmware files (for NCR 7169 and NCR 7199 Series printers only). For more information, refer to "Creating firmware folder" on page 51. • Get the firmware version of the connected printer. For more information, refer to "Getting the firmware version using GUI" on page 26.
Log Settings	Provides options to save a log file or to show the log on the right pane of the application window. For more information, refer to " Enabling logs " on page 28.

Firmware Types

The table below lists the types of firmware to flash or download to the printer.

Download Type	Description	Remarks
IPL Firmware	Boot firmware	
Main Firmware	Main printer firmware	
SBCS Font	Single-byte font	
DBCS Font	Double-byte font for receipt printing	
SDBCS Font	Double-byte font for slip printing	Not available for some printer models
Table	Control table	Not available for some legacy printer models
IMF File	Combined file of IPL+MFW. This is applicable in 4610 emulation flashing only.	Not available for some printer models
Printer Configuration Table	Sets the printer configuration and individually resets tallies	Not available for some legacy printer models

Interface Options

The table below lists the interface options to connect the printer to the terminal.

Interface	Interface Settings
LAN	Requires the printer IP Address. For more information, refer to " Printing a diagnostic form (offline) " on page 60.
NHPI	No configurable interface settings
PRTR	No configurable interface settings
COM	<p>The following settings are configurable:</p> <ul style="list-style-type: none">• COM Port Number• Baud Rate• Parity Bit• Stop Bit <p>For more information, refer to "Printing a diagnostic form (offline)" on page 60.</p>
IBM USB	<p>No configurable interface settings</p> <p>Note This interface is available for some specific legacy printers only.</p>

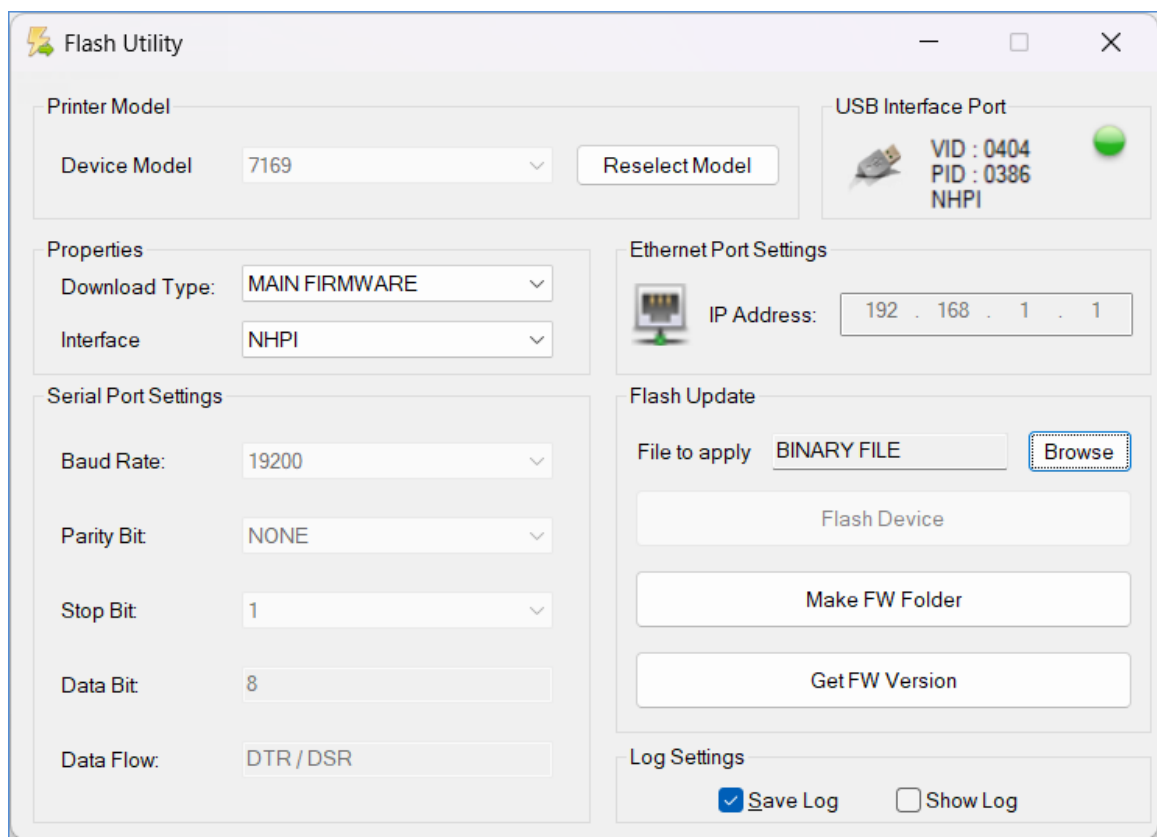
Using the Flash Utility GUI version

Note

Before updating the Printer Firmware, the firmware files must be prepared and the printer must be set up. For more information, refer to "[Prerequisites](#)" on page 49.

To update the printer firmware using the GUI version, follow these steps:

1. Double-click the **TseFlash.exe** file. The application displays the Flash Utility main window.



2. From the *Device Model* drop-down list, select the printer model and select **Select Model**.

Note

After selecting the printer model, the *Select Model* button turns into *Reselect Model*. To select another printer model, select **Reselect Model**.

3. From the *Download Type* drop-down list, select the type of firmware to flash or download to the printer.

Download Type	Description	Remarks
IPL Firmware	Boot firmware	
Main Firmware	Main printer firmware	
SBCS Font	Single-byte font	
DBCS Font	Double-byte font for receipt printing	
SDBCS Font	Double-byte font for slip printing	Not available for some printer models
Table	Control table	Not available for some legacy printer models
IMF File	Combined file of IPL+MFW. This is applicable in 4610 emulation flashing only.	Not available for some printer models
Printer Configuration Table	Sets the printer configuration and individually resets tallies	Not available for some legacy printer models

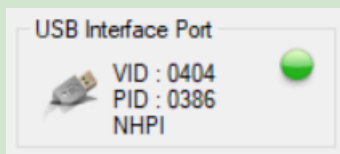
4. From the *Interface* drop-down list, select the interface. The interface settings are enabled depending on the selected interface.

Interface	Interface Settings
LAN	Requires the printer IP Address. For information on obtaining the IP Address, refer to "Printing a diagnostic form (offline)" on page 60.
NHPI	No configurable interface settings
PRTR	No configurable interface settings
COM	<p>The following settings are configurable:</p> <ul style="list-style-type: none"> • COM Port Number • Baud Rate • Parity Bit • Stop Bit <p>For information on obtaining the COM Port Number, refer to "Obtaining the COM port number" on page 57.</p> <p>For information on obtaining the baud rate, parity bit, and stop bit, refer to "Printing a diagnostic form (offline)" on page 60.</p>
IBM USB	<p>No configurable interface settings</p> <div style="background-color: #e0f2e0; padding: 5px; border-radius: 5px;"> <p>Note This interface is available for some specific legacy printers only.</p> </div>

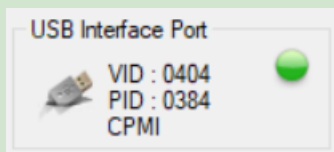
 **Note**

To determine the interface used by the printer, refer to the *USB Interface Port* information panel on the upper-right part of the main window. It displays details about the Vendor (VID), Product ID (PID), and the type of connection.

The following image displays the NHPI interface as the detected interface after the printer communication cable is connected to the terminal. It also shows the VID and the PID of the connected printer.



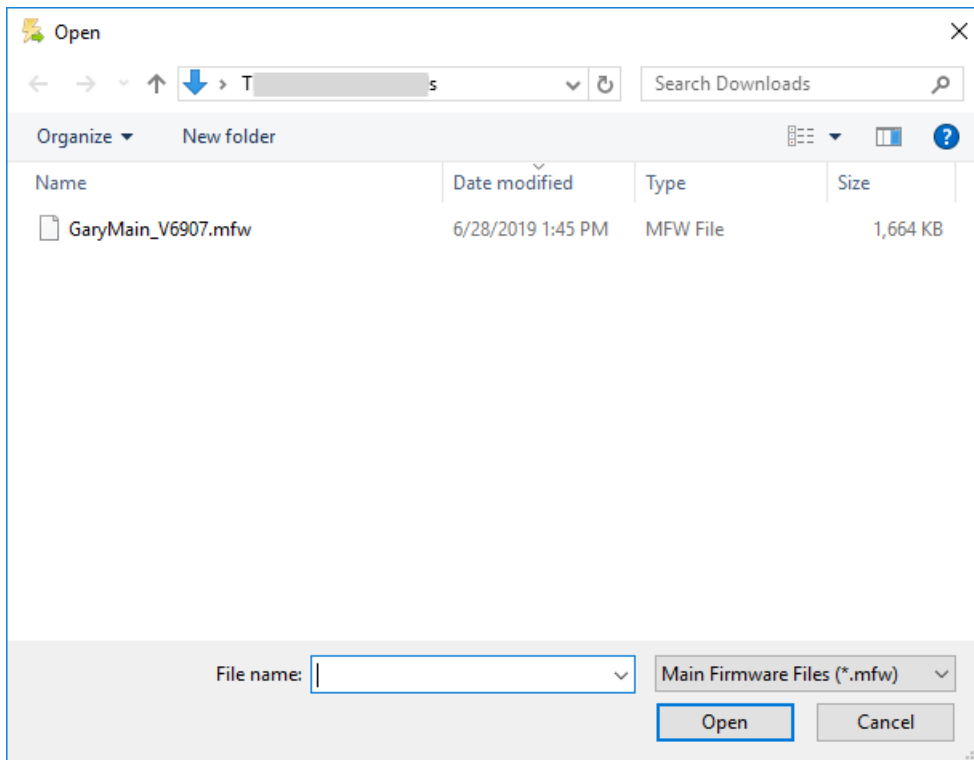
The following image displays the CPMI interface, which is used when the printer is connected in IPL mode. For more information, refer to "[IPL mode](#)" on page 22.



5. From the Flash Update, select **Browse** and locate the binary file to load.

Note

The *Open* window displays only the firmware file that corresponds to the selected Download Type. For example, if the Download Type is set to *MAIN FIRMWARE*, only the *.mfw* file is displayed.



The following table shows the different download types and their corresponding file extensions.

Download Type	File Extensions
IPL Firmware	.ipl
Main Firmware	.mfw
SBCS Font	.sfn
DBCS Font	.dfn
SDBCS Font	.dfn

Download Type	File Extensions
Table	.tbl
Printer Configuration Table	.cfg
IMF File	.imf

6. Select the binary file and select **Open**.
7. Select **Flash Device**.



Note

If the printer is unable to be flashed due to corruption, try putting the printer into IPL Mode. For more information, refer to "[IPL mode](#)" on page 22.

Online mode

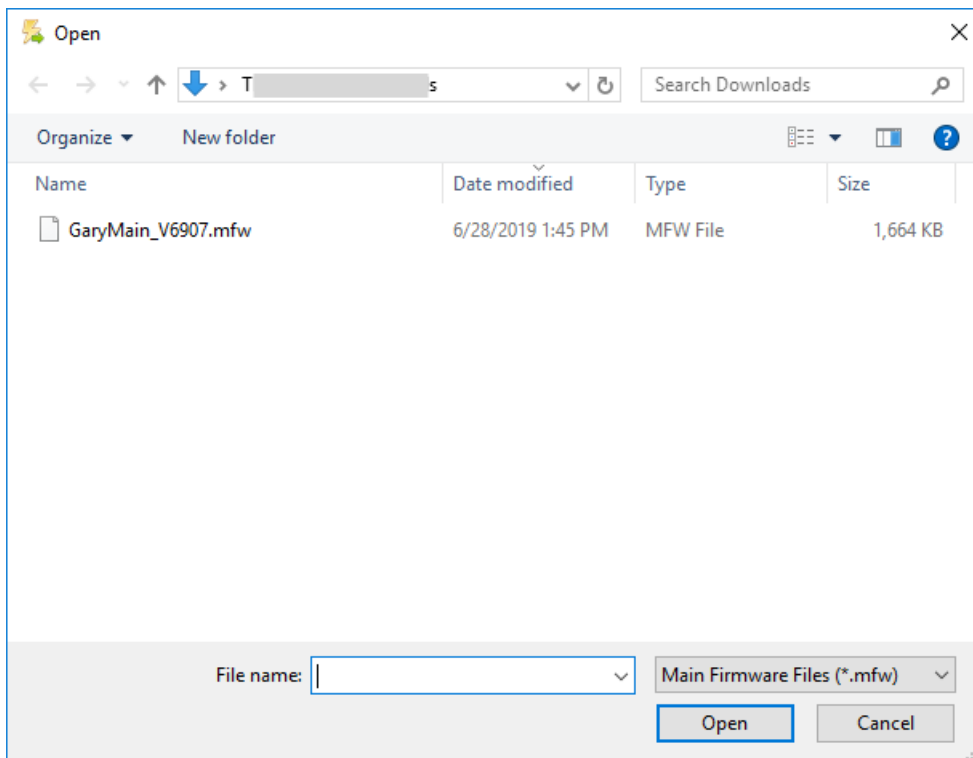
This mode is available in NCR 7199, 7199-7x03/7x04, and 7169 printers only.

To update the printer firmware in online mode, follow these steps:

1. Connect the printer to the terminal. For more information, refer to "[Connecting the printer to the terminal](#)" on page 62.
2. From the *Flash Update* panel, select **Browse** and locate the binary file to load.

Note

The *Open* window displays only the firmware file that corresponds to the selected download type. For example, if the download type is set to *MAIN FIRMWARE*, only the *.mfw* file is displayed.



The following table shows the different download types and their corresponding file extensions.

Download Type	File Extensions
IPL Firmware	.ipl
Main Firmware	.mfw
SBCS Font	.sfn
DBCS Font	.dfn
SDBCS Font	.dfn
Table	.tbl
Printer Configuration Table	.cfg
IMF File	.imf

3. Select the binary file and select **Open**.
4. Select **Flash Device**. The application starts flashing the firmware to the connected printer and displays the progress window. The printer LED also blinks while firmware flashing is still in progress. After the application has successfully configured the new settings, it reboots the printer, displays a notification, and prints a diagnostic form.

IPL mode

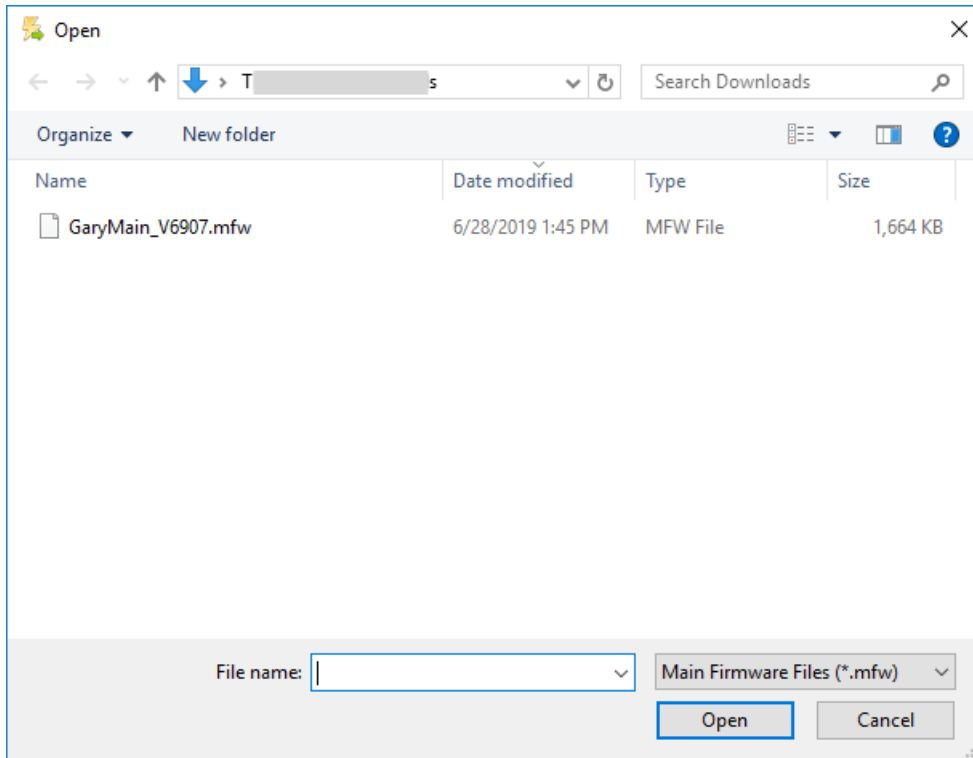
The IPL mode is used when the main firmware of the printer is missing or corrupted, or when the printer encounters an unrecoverable error that requires reflashing of firmware. All printers (except NCR 7169 and NCR 7199 Series) automatically perform downloading in IPL Mode.

To update the printer firmware in IPL mode, follow these steps:

1. Open the receipt cover and disconnect the power cable.
2. While pressing down the paper feed button, reconnect the power cable. The green LED blinks fast, indicating that the printer is now in IPL mode.
3. Connect the printer to the terminal. For more information, refer to "[Connecting the printer to the terminal](#)" on page 62.
4. From the Flash Update, select **Browse** and locate the binary file to load.

Note

The *Open* window displays only the firmware file that corresponds to the selected Download Type. For example, if the Download Type is set to *MAIN FIRMWARE*, only the `.mfw` file is displayed.



The following table shows the different download types and their corresponding file extensions.

Download Type	File Extensions
IPL Firmware	.ipl
Main Firmware	.mfw
SBCS Font	.sfn
DBCS Font	.dfn
SDBCS Font	.dfn
Table	.tbl
Printer Configuration Table	.cfg
IMF File	.imf

5. Select the binary file and select **Open**.

6. Select **Flash Device**. The application starts flashing the firmware to the connected printer and displays the progress window. The printer LED also blinks while firmware flashing is still in progress. After the application has successfully configured the new settings, it reboots the printer, displays a notification, and prints a diagnostic form.

IBM USB Download

Note

This option is applicable to 7167-6321-9001 and 7168-23X3/22X3/1223 printers only.

To update the printer firmware using IBM USB communication, follow these steps:

1. Connect the printer to the terminal and set the following:

- Select **IMF FILE** for the *Download Type*.
- Select **IBM USB** for the *Interface*.

Note

For more information, refer to "[Connecting the printer to the terminal](#)" on page 62.

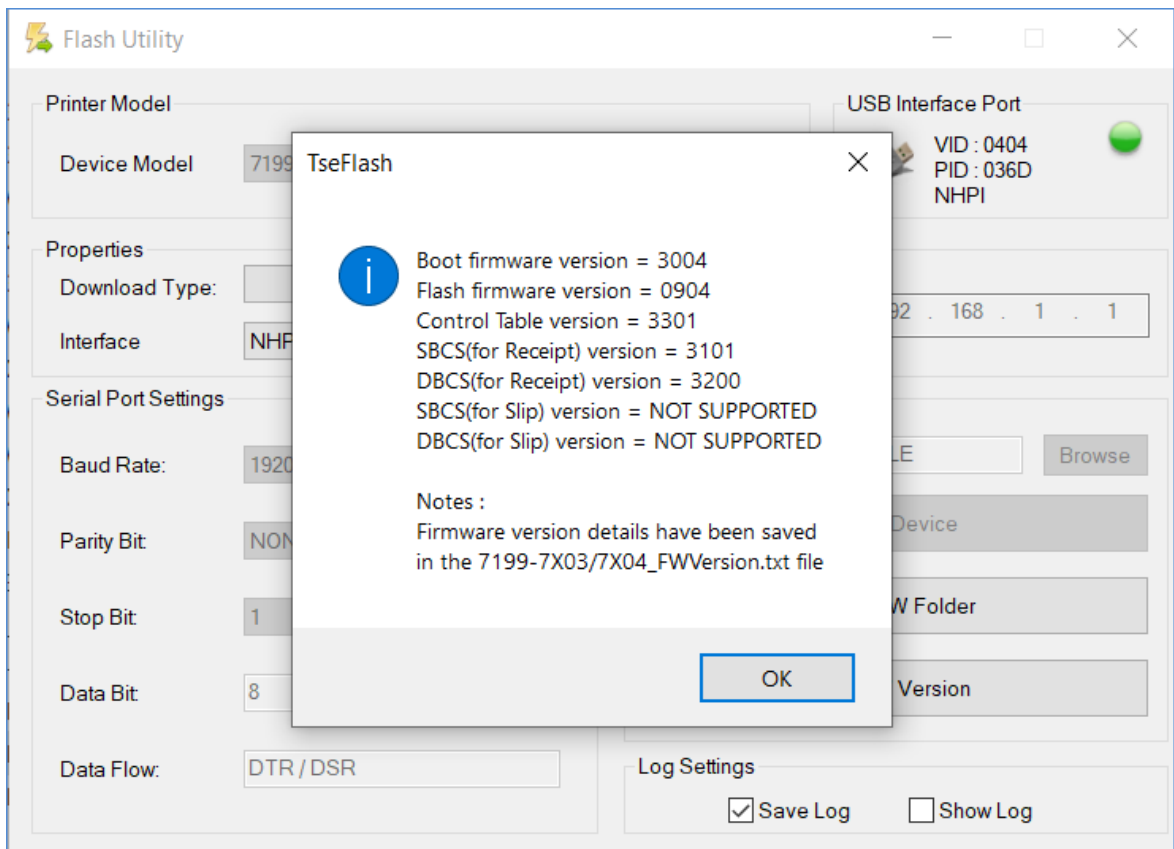
2. From the *Flash Update* panel, select **Browse** and locate the `.imf` file to load.
3. Select the `.imf` file and select **Open**.
4. Select **Flash Device**. The application starts flashing the firmware to the connected printer and displays the progress window. The printer LED also blinks while firmware flashing is still in progress. After the application has successfully configured the new settings, it reboots the printer, displays a notification, and prints a diagnostic form.

Getting the firmware version using GUI

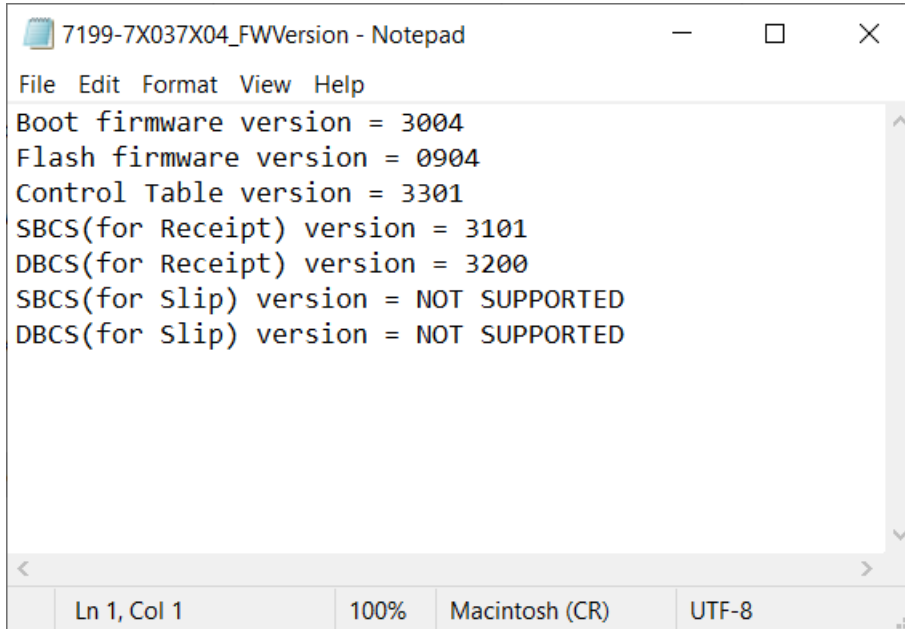
The Flash Utility GUI version enables users to get the current firmware version details of the printer and save these details in a `.txt` file.

To get the firmware version details, do the following:

- From the *Flash Update* section of the main window, select **Get FW Version**. The application displays the firmware version details and provides the file name of the `.txt` file.



The generated file follows the name format [printer model]_FWVersion.txt. The .txt file is saved in the same location as the TseFlash.exe file. Below is an example of a generated file containing firmware version details.



```
7199-7X037X04_FWVersion - Notepad
File Edit Format View Help
Boot firmware version = 3004
Flash firmware version = 0904
Control Table version = 3301
SBCS(for Receipt) version = 3101
DBCS(for Receipt) version = 3200
SBCS(for Slip) version = NOT SUPPORTED
DBCS(for Slip) version = NOT SUPPORTED
Ln 1, Col 1 100% Macintosh (CR) UTF-8
```

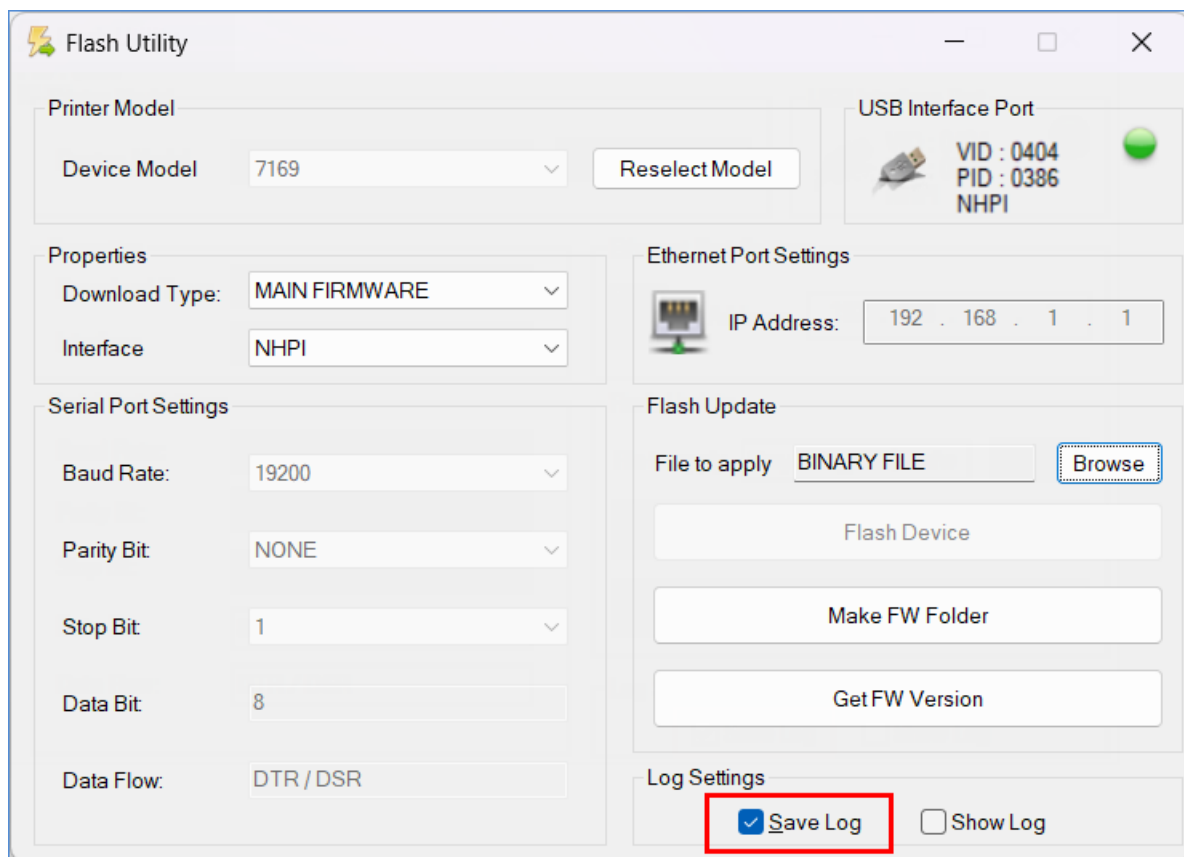
Enabling logs

It is recommended to keep a log file that records all application activities. This log file can be used when troubleshooting the printer or the application.

Application logs can either be saved in the application folder or shown in the right panel of the application main window.

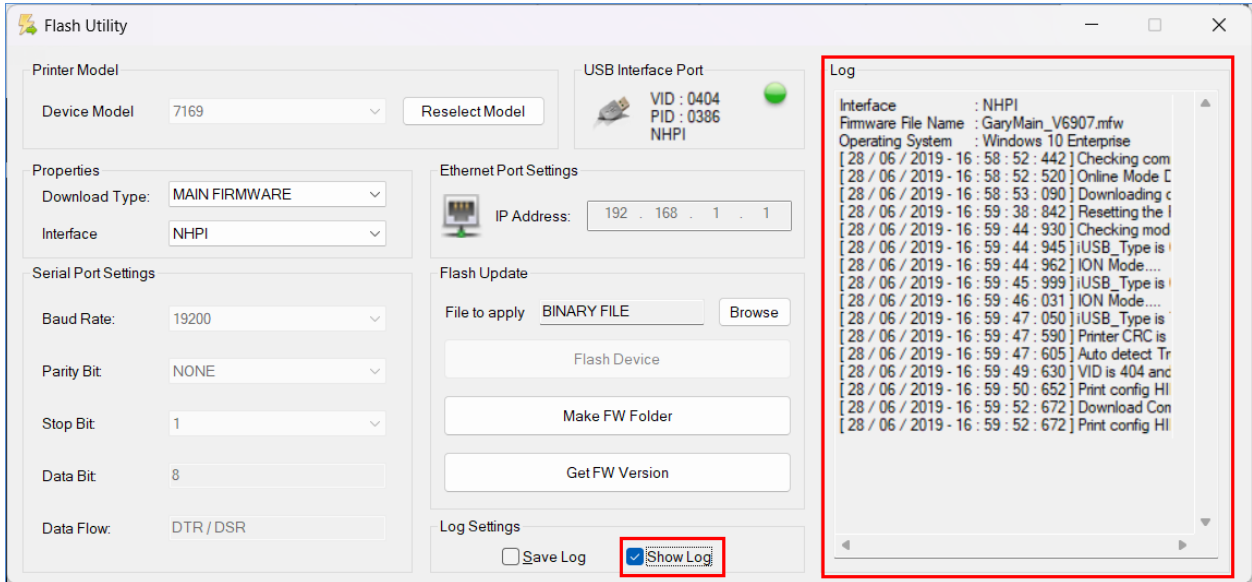
Saving logs

To save an application log file, select the check box for the **Save Log** option. The application saves a `FLASH_UTILITY_LOG.txt` file in the application folder.



Showing logs

To show logs on the main window, select the checkbox for the **Show Log** option. The application displays the logs on the right panel of the main window.



Flash Utility Windows Command Line version

The Windows Command Line version of the Flash Utility is provided to allow batch mode operation in Windows XP and higher operating systems.



Note

The Printer Flash Utility requires the `TseFlash.exe` file to be in the same directory. `TseFlash.com` is just a shell that sends the command line options to `TseFlash.exe` to process.

For information on updating the printer firmware using the command line, refer to "[Using the Windows Command Line version](#)" on the next page.

Using the Windows Command Line version

Note

Before updating the Printer Firmware, the firmware files must be prepared and the printer must be set up. For more information, refer to "[Prerequisites](#)" on page 49.

To update the printer firmware in command line mode, follow these steps:

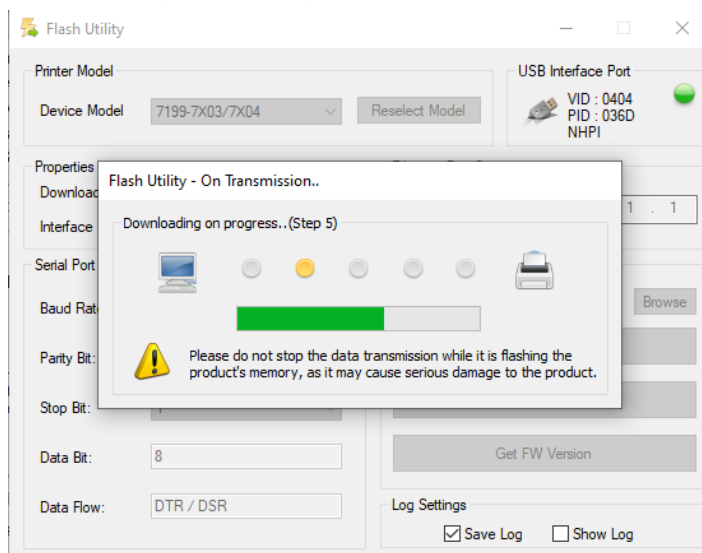
1. Open the **Command Prompt** window.
2. Enter the following command format:

```
TseFlash/[model]/[download type]/[COM]/[parameter]/  
[file]/[print(opt)]/[status(opt)]/[ErrorTimeout(opt)]
```

Example

```
TseFlash /7169 /i /COM1 /115200 /none /1 /7169_  
IPL_V2901.ipl /noskip /noprint
```

This command displays the GUI interface and a progress bar indicator. The same GUI interface is displayed when the program is ran through the GUI Windows GUI Printer Firmware Update Utility.



3. Select **Flash Device**. The application starts to flash the firmware to the connected printer and displays the progress window. The printer LED also blinks while firmware flashing is still in progress. After the application has successfully configured the new settings, it reboots the printer, displays a notification, and prints a diagnostic form.

Note

If you type **TseFlash.com** without any parameter, the following is displayed, describing the parameter usage.

```
C:\Users\ca185074\Downloads\V10.79A\V10.79A>TseFlash.com
*-----*
*                                     *
*           TseFlash Console           *
*                                     *
*           Version 5.2(#10.78)        *
*                                     *
*-----*
Error: Usage: No Parameters attempt to be sent to TseFlash.EXE!
TseFlash [model] [download type] [COM] [parameter] [file] [print(opt)] [status(opt)] [ErrorTimeOut(opt)]

[model]--> Selections for the model:
[7167] [7167-X115] [7167-X035] [7167-5XX1/6XX1/7XX1] [7167-8011-9001] [7167-6321-9001] [7168] [7168-23X3/22X3/1223]
[7168-5XX3/6XX3] [7197] [7197-5XX1/6XX1/7XX1/9XX1] [7198] [7649-F301] [K8] [K590] [7401-K592] [7402-K592] [7342-F306]
[7346-F306] [734X-F307/7125] [734X-F309] [SSC06-1ST/2ST] [7199] [K8_REFRESH] [7169] [7709-F305] [7199-7X03/7X04]
]

[download type]--> Selections for the download type:
/f - Download IMF program for [7168-23X3/22X3/1223], 7167-6321-9001, 7169
/m - Download firmware main program.
/i - Download firmware IPL program.
/l - Download firmware IPL LAN program for 7197-5XX1/6XX1/7XX1/9XX1
/a - Download ANK font or combined ANK & CP932 font
    for 7167, 7167-X115, 7167-X035, 7167-5XX1/6XX1/7XX1, 7167-8011-9001,
    7168, 7168-5XX3/6XX3, 7197, 7198, K590, 7401-K592, 7402-K592,
    7342-F306, 7346-F306
/s - Download ASIAN font for 7197, K590, 7401-K592, 7402-K592, 7342-F306,7346-F306
/rs - Download Receipt ASIAN Font for 7167 & Receipt 2 Byte for 7168,
    7168-5XX3/6XX3, 7198, 7167-5xx1/6xx1/7xx1, 7167-8011-9001
/ss - Download Slip ASIAN font for 7167 & Slip 2 Byte for 7168,
    7168-5XX3/6XX3, 7167-5xx1/6xx1/7xx1, 7167-8011-9001
/sb - Download SBCS font for 734X-F307/7125, 734X-F309, 7649-F301,
    7197-5XX1/6XX1/7XX1/9XX1, K8, SSC06-1ST/2ST, 7199, K8_REFRESH, 7169, 7709-F305, 7199-7X03/7X04
/db - Download DBCS font for 734X-F307/7125, 734X-F309, 7649-F301,
    7197-5XX1/6XX1/7XX1/9XX1, SSC06-1ST/2ST, 7199, 7199-7X03/7X04, 7169, 7709-F305
/sdb - Download SDBCS font for 7169
/t - Download Table file for SSC06-1ST/2ST, 7199, 7199-7X03/7X04, 7169, 7709-F305
/c - Printer Configuration Table file for 7199, 7199-7X03/7X04, 7169 (CPMI is not supported)
/e - Generate firmware version file, the output file will save same as TseFlash.exe location
    Supported printer:
    [7167] [7167-X115] [7167-5XX1/6XX1/7XX1] [7167-8011-9001] [7167-6321-9001] [7168] [7168-23X3/22X3/1223] [
    7168-5XX3/6XX3] [7197]
    [7197-5XX1/6XX1/7XX1/9XX1] [7198] [K590] [7401-K592] [7402-K592] [7342-F306] [7346-F306] [734X-F307/7125]
    [734X-F309] [SSC06-1ST/2ST] [7199] [7169] [7709-F305] [7199-7X03/7X04]
```



```

[com] --> Selections for the Interface, CPMI, IBMUSB, HID (Only K8 & K8_REFRESH), LAN, WIFI, NHPI, PRTR:
/COMX      Where X is any valid integer within 1-50.
/CPMI      CPMI Interface.
/IBMUSB    4690 USB(HID) Interface.
/LAN       Ethernet Interface.
/WIFI      Wireless Interface.
/NHPI      Only for 7199, 7199-7X03/7X04 & 7169 printers
/PRTR      Only for 7199, 7199-7X03/7X04 & 7169 printers
/HID       Only for K8 & K8_REFRESH printers.

[parameter]--> Selections for interface parameter (Only for RS232 and Ethernet interface):
For RS232 Only: Please key in the Baud Rate, Parity and Stop Bit
- Baud Rate Selection: /[115200] | [57600] | [38400] | [19200] | [9600] | [4800] | [2400] | [1200]
- Parity Selection: /[none] | [even] | [odd]
- Stop Bit Selection: /[1] | [2]
For WiFi / Ethernet Only: Please key in the IP Address
- IP Address Selection:/[xxx.xxx.xxx.xxx]
- xxx is a number from 0 to 255
For CPMI, IBMUSB and HID is ignore

[file]--> Selections for the filename:
Any valid binary file with extension *.mfw | *.sfn | *.dfn | *.ipl | *.lan | *.bin (Only for K8 & K8_REFRESH) |
*.tbl (Only for SSC06-1ST/2ST, 7199, 7199-7X03/7X04, 7169, 7709-F305) | *.cfg (Only for 7199, 7199-7X03/7X04 & 7169
)

[print(opt)]--> Selections for the print (Optional Parameter):
/print      (default) Print printer configuration form.
/noprint    Bypass printing printer configuration form.

[status(opt)]--> Optional for Return Status (Optional Parameter):
/noretstat  (default) Utility will not return status code.
/retstat    Utility will return status code.

[ErrorTimeout(opt)]--> Failsafe: Max Time Allowed for Called Exe (Optional Parameter):
(ONLY USED BY TseFlash.COM)
/ErrorTimeOut=xxx      (Default = 800. Minimum=120 ) xxx is number of Seconds - limit 3600.

Information : Please use RS232 Interface, when switching from ION <=> NON ION

Press any key to continue . . .

```

***** TseFlash Console Version 4.6 (#10.66) *****

Error: Usage: No Parameters attempt to be sent to TseFlash.EXE!

TseFlash [model] [download type] [COM] [parameter] [file]
[print(opt)] [status(opt)] [ErrorTimeout(opt)]

[model]--> Selections for the model:

[7167] [7167-X115] [7167-X035] [7167-5XX1/6XX1/7XX1] [7167-8011-9001] [7167-6321-9001] [7168] [7168-23X3/22X3/1223] [7168-5XX3/6XX3] [7197] [7197-5XX1/6XX1/7XX1/9XX1] [7198] [7649-F301] [K8] [K590] [7401-K592] [7402-K592] [7342-F306] [7346-F306] [734X-F307/7125] [734X-F309] [SSC06-1ST/2ST] [7199] [K8_REFRESH] [7169] [7709-F305] [7199-7X03/7X04]

[download type]--> Selections for the download type:

Confidential and proprietary information of NCR Voyix.
Use and disclose solely pursuant to company instructions.

/f - Download IMF program for [7168-23X3/22X3/1223], 7167-6321-9001, 7169

/m - Download firmware main program.

/i - Download firmware IPL program.

/l - Download firmware IPL LAN program for 7197-5XX1/6XX1/7XX1/9XX1

/a - Download ANK font or combined ANK & CP932 font for 7167, 7167-X115, 7167-X035, 7167-5XX1/6XX1/7XX1, 7167-8011-9001, 7168, 7168-5XX3/6XX3, 7197, 7198, K590, 7401-K592, 7402-K592, 7342-F306, 7346-F306

/s - Download ASIAN font for 7197, K590, 7401-K592, 7402-K592, 7342-F306, 7346-F306

/rs - Download Receipt ASIAN Font for 7167 & Receipt 2 Byte for 7168, 7168-5XX3/6XX3, 7198, 7167-5xx1/6xx1/7xx1, 7167-8011-9001

/ss - Download Slip ASIAN font for 7167 & Slip 2 Byte for 7168, 7168-5XX3/6XX3, 7167-5xx1/6xx1/7xx1, 7167-8011-9001

/sb - Download SBCS font for 734X-F307/7125, 734X-F309, 7649-F301, 7197-5XX1/6XX1/7XX1/9XX1, K8, SSC06-1ST/2ST, 7199, 7199-7X03/7X04, K8_REFRESH, 7169, 7709-F305

/db - Download DBCS font for 734X-F307/7125, 734X-F309, 7649-F301, 7197-5XX1/6XX1/7XX1/9XX1, SSC06-1ST/2ST, 7199, 7199-7X03/7X04, 7169, 7709-F305

/sdb - Download SDBCS font for 7169

/t - Download Table file for SSC06-1ST/2ST, 7199, 7199-7X03/7X04, 7169, 7709-F305

/c - Printer Configuration Table file for 7199, 7199-7X03/7X04, 7169 (CPMI is not supported)

/e - Generate firmware version file, the output file will save same as TseFlash.exe location

Supported printer:

[7167] [7167-X115] [7167-5XX1/6XX1/7XX1] [7167-8011-9001]
[7167-6321-9001] [7168] [7168-23X3/22X3/1223] [7168-
5XX3/6XX3] [7197]

[7197-5XX1/6XX1/7XX1/9XX1] [7198] [K590] [7401-K592] [7402-
K592] [7342-F306] [7346-F306] [734X-F307/7125] [734X-F309]
[SSCO6-1ST/2ST] [7199] [7169] [7709-F305] [7199-7X03/7X04]

[com] --> Selections for the Interface, CPMI, IBMUSB, HID
(Only K8 & K8_REFRESH), LAN, WIFI, NHPI, PRTR:

/COMX Where X is any valid integer within 1-50.

/CPMI CPMI Interface.

/IBMUSB 4690 USB(HID) Interface.

/LAN Ethernet Interface.

/WIFI Wireless Interface.

/NHPI Only for 7199, 7199-7X03/7X04 & 7169 printers

/PRTR Only for 7199, 7199-7X03/7X04 & 7169 printers

/HID Only for K8 & K8_REFRESH printers.

[parameter]--> Selections for interface parameter (Only for
RS232 and Ethernet interface):

For RS232 Only: Please key in the Baud Rate, Parity and
Stop Bit

- Baud Rate Selection: /[115200] | [57600] | [38400] |
[19200] | [9600] | [4800] | [2400] | [1200]

- Parity Selection: /[none] | [even] | [odd]

- Stop Bit Selection: /[1] | [2]

For WiFi / Ethernet Only: Please key in the IP Address

- IP Address Selection:/[xxx.xxx.xxx.xxx]

- xxx is a number from 0 to 255

For CPMI, IBMUSB and HID is ignore

[file]--> Selections for the filename:

Any valid binary file with extension *.mfw | *.sfn | *.dfn
| *.ipl | *.lan | *.bin (Only for K8 & K8_REFRESH) | *.tbl
(Only for SSC06-1ST/2ST, 7199, 7199-7X03/7X04, 7169, 7709-
F305) | *.cfg (Only for 7199 & 7169)

[print(opt)]--> Selections for the print (Optional
Parameter):

/print (default) Print printer configuration form.

/noprint Bypass printing printer configuration form.

[status(opt)]--> Optional for Return Status (Optional
Parameter):

/noretstat (default) Utility will not return status code.

/retstat Utility will return status code.

[ErrorTimeOut(opt)]--> Failsafe: Max Time Allowed for
Called Exe (Optional Parameter):

(ONLY USED BY TseFlash.COM)

/ErrorTimeOut=xxx (Default = 800. Minimum=120) xxx is
number of Seconds - limit 3600.

Information : Please use RS232 Interface, when switching
from ION <=> NON ION

Press any key to continue . . .

Error Codes

TseFlash.com supports the following return error codes.

Error Code	Definition
0	Download successfully completed or Get firmware version process successfully completed
101	Cannot erase a sector
102	Cannot select a sector
103	Timeout while sending data block
104	Cannot acknowledge printer Note Please check the interface settings.
105	Different CRC detected
106	Cannot recalculate CRC
107	Unable to open file
108	Insufficient memory for data buffer
109	Communication interface busy
110	Cannot switch printer to flash download mode
111	Cannot reset printer
112	Unrecognized download type set
113	Illegal COM port set
114	Illegal parity set
115	Illegal baud rate set
116	Illegal stop bit set
117	Unable to get serial port handle

Error Code	Definition
118	Unable to set serial port properties
119	Too few / many command line parameters
120	Invalid binary data file
121	/? Detected
122	Unable to update window text
123	Unable to show progress bar
124	Data file error
125	Insufficient memory
126	Unrecognized product model set
127	Application was terminated by Exit button
128	Unable to get printer actual baud rate
129	Mismatch between download type and file selected
130	Unable to get printer model number <div style="background-color: #e0f2e0; padding: 5px; border-radius: 5px;"> <p>Note Please check the printer connection.</p> </div>
131	Download was cancelled due to the download file not support for this printer
132	Invalid parameter for skipping/non-skipping model number
133	Invalid parameter for printing/non-printing printer
134	Initial/Boot file extension mismatch
135	Initial/Boot file length exceeded 32KB
136	Initial/Boot file information incorrect
137	Error setting Park II download mode

Error Code	Definition
138	No printer is detected through USB Interface
139	Can not reconnect as CPMI Device
140	Can not reconnect through USB interface
141	The Printer model does not match the selected model
142	No printer is detected through Parallel Interface
143	No printer is detected through Communication Port <div style="background-color: #e1f5fe; padding: 5px; border: 1px solid #ccc; margin-top: 10px;"> <p>Note The baud rate setting could also be incorrect.</p> </div>
144	Clear the download area fail
145	Download Fail
146	Upload file fail
147	Can not Open FTP server
148	Can not connect to FTP server
149	Select Sector acknowledge fail
150	Insufficient file size
151	CRC acknowledge fail
152	CRC is not correct
154	Can not get printer IP address
155	Can not get MAC Address
156	Socket Open Failed
157	Socket Data Sending Failed
158	Cannot Get Printer Firmware Version

Error Code	Definition
200	Invalid parameter for Model Number
201	Invalid parameter for Download Type
202	Invalid parameter for Interface Type
203	Invalid parameter for IP Address
204	Invalid parameter for Baud Rate
205	Invalid parameter for Parity
206	Invalid parameter for Stop Bits
207	Invalid File Name
208	Invalid parameter for Check Model option
209	Invalid parameter for Print option
210	No enough arguments
211	The selected model is not correct
212	Parameter is error, please check the Print option, Status option or Errortimeout option!
401	Cannot Swap IBM USB Firmware
402	IBM USB Swap Memory Command Rejected
501	CPMI Device not found
503	Error to get PRTR Handle
504	Please Make Sure Printer is in Online Mode
505	Illegal Parameter
506	File Size Mismatch
507	Wrong Firmware File
508	Fail writing into flash memory

Error Code	Definition
509	CRC mismatch
510	Unable to scan device
511	Unable to open device
259	Terminated after reach ErrorTimeOut parameter

Getting the firmware version using Windows Command Line

Firmware version details can also be retrieved using the Windows Command Line version of the Flash Utility. The following example shows the command line used when getting firmware version details:

```
TseFlash.com /7199 /e /PRTR /skip /noprint
```

Updating printer using USB thumb drive

Before updating the printer firmware using a USB thumb drive, it is necessary to prepare all firmware files and store them inside specific folders. For more information, refer to:

- "[Downloading Firmware Files](#)" on page 50, and
- "[Creating firmware folder](#)" on page 51.

When using the USB Thumb Drive option, observe the following guidelines:

- The printer flash utility figures out the latest folder by checking the root folder name based on the timestamp.
- The printer flash utility updates the firmware files in the following order:
IPL→ MAIN→ SBCS→ DBCS→ TABLE
- If a firmware file in a folder is in any of the following conditions, the printer flash utility does not update the firmware (ignores the firmware file) and proceeds to the next firmware folder:
 - No firmware file exists in the folder
 - Multiple files exist in the folder
 - The file format, ID, or extension is not correct
- To enable the functionality of the offline firmware update, any device connected to USB Type B must be disconnected. Otherwise, the printer enables the online mode even if the USB thumb drive is connected to USB Type A.
- If a device aside from the USB thumb drive is connected to USB Type A, the printer does not enable the offline firmware update mode.

To update the printer firmware using a USB thumb drive, follow these steps:

1. Disconnect the power cable and the communication cable from the printer.
2. Connect the USB thumb drive to the USB Type A port on the bottom of the printer.
3. Reconnect the power cable and turn on the printer.
 - The offline firmware updated mode is enabled, which is indicated with a green LED, and the firmware update automatically starts. It starts with the Main Firmware, then followed by the other ROM files (IPL→ SBCS→ TABLE→ MAIN→ DBCS).
 - When the firmware update starts, the LED turns Solid Red.
 - When the update is finished, the LED turns green and the printer prints a diagnostic form that also contains files that have been successfully updated. The printer then beeps to indicate that the update is complete.

 **Caution**

To avoid damage to the printer, do not remove the USB thumb drive or the AC power cable when the LED is still blinking.

4. Turn off the printer and remove the USB thumb drive.

Upgrading 7199 Series i Printers from Version 1.0 to 1.1

NCR 7199 Series i printers are categorized based on their installed main firmware version. The following table shows the NCR 7199 Series i phase versions and their corresponding firmware file versions.

Phase Version	Description
1.0	The MAIN firmware version is v99.11 or lower . Other firmware files are as follows: <ul style="list-style-type: none">• IPL—V20.01• SBCS—V21.03• DBCS—V22.01• TABLE—V23.02
1.1 (official release version)	The MAIN firmware is v99.15 or higher , which supports the Epson Emulation Mode. Other firmware files are as follows: <ul style="list-style-type: none">• IPL—V20.05• SBCS—V21.05• DBCS—V22.05• TABLE—V23.06

When the *NCR 7199 Series i* printer phase version is 1.0, the printer needs to be upgraded to phase version 1.1 by using any of the following options.

Firmware Update Option	Description
<p>"Batch file" on the next page</p>	<p>Enables printer upgrade through the UpGrade .bat file.</p> <p>Note The printer should be connected to the terminal.</p>
<p>"USB Thumb Drive" on page 47</p>	<p>Enables printer upgrade through a USB thumb drive connected to the USB Type A port of the printer.</p> <p>Note The printer must be disconnected from the terminal (offline mode).</p>

Batch file

The printer firmware files include a batch file (`UpGrade.bat`) that is used for upgrading the NCR 7199 Series printer phase version from 1.0 to 1.1. The batch file (found in the **Upgrade_10_to_11→Batch File** folder) contains the following information:

```
TseFlash/[model]/[download type]/[COM]/[parameter]/[file]/  
[print (opt)]/[status (opt)]/[ErrorTimeOut (opt)]
```

For NCR 7199 Series printer connected through the USB NHPI interface,

```
TseFlash 7199 i NHPI 7199_IPL_V2005.ipl noprint noretstat  
120  
TseFlash.com 7199 sb CPMI 7199_SBCS_V2108.sfn noprint  
noretstat 120  
TseFlash.com 7199 t CPMI 7199_Table_V2307.tbl noprint  
noretstat 120  
TseFlash.com 7199 m CPMI 7199_MAIN_V9924.mfw noprint  
noretstat 120  
TseFlash.com 7199 db NHPI 7199_DBCS_V2206.dfn print  
noretstat 120
```

To update the printer phase version using a batch file, follow these steps:

1. Download the printer firmware files. For more information, refer to "[Downloading Firmware Files](#)" on page 50.
2. Connect the printer communication cable to the terminal.
3. Edit the `UpGrade.bat` file based on the type of interface used to connect the printer to the terminal.
4. To start the upgrade, double-click the `UpGrade.bat` file. The upgrade automatically starts. When the upgrade is finished, the printer reboots and prints a diagnostic form.

Note

The new firmware versions are shown on the upper portion of the diagnostic form.

USB Thumb Drive

The printer firmware files include special firmware files for upgrading the NCR 7199 Series printer phase version from 1.0 to 1.1 using a USB thumb drive.

To update the NCR 7199 Series printer phase version using a USB thumb drive, follow these steps:

1. Download the printer firmware files. For more information, refer to "[Downloading Firmware Files](#)" on page 50.
2. To prepare the USB thumb drive, delete folders and files previously used for updating the printer firmware.
3. From the downloaded firmware files, copy the subfolders found in the **Upgrade_10_to_11→USB Drive** folder to the USB thumb drive.

20180510210000	File folder
Special_10to11	File folder

Note

The *yyyymmddhhmmss* folder name is based on the timestamp when the folder was first created.

4. Disconnect the power cable and the communication cable from the printer.
5. Connect the USB thumb drive to the USB Type A port on the bottom of the printer.
6. Reconnect the power cable and turn on the printer. The upgrade automatically starts with the *Special Main Firmware* and is indicated with a blinking LED. When the upgrade is finished, the printer reboots.

Caution

To avoid damage to the printer, do not remove the USB thumb drive when the LED is still blinking.

7. After the reboot, disconnect and reconnect the power cable to continue with the upgrade. The upgrade continues with the remaining firmware files and is indicated with a blinking LED. When the upgrade is finished, the printer reboots and prints a download result and a diagnostic form.

 **Caution**

To avoid damage to the printer, do not remove the USB thumb drive when the LED is still blinking.

8. Turn off the printer and remove the USB thumb drive.

Prerequisites

Before updating the printer firmware, follow these steps:

Procedure	Related Task/Information
1. Download the firmware files.	"Downloading Firmware Files" on the next page
2. Create a firmware folder for all firmware files.	<ul style="list-style-type: none"> • If using GUI or Windows Command Line to update firmware, save the firmware files into a directory folder. • If using a thumb drive to update firmware, refer to "Creating firmware folder" on page 51
3. Obtain the following information: <ul style="list-style-type: none"> • for COM interface—COM Port number; baud rate, data bits, stop bits, parity • for LAN interface—IP address 	<ul style="list-style-type: none"> • To obtain the COM Port number, refer to "Obtaining the COM port number" on page 57 • To obtain the baud rate, data bits, stop bits, parity, or the IP address, refer to "Printing a diagnostic form (offline)" on page 60.
4. Connect the printer to the terminal. <div data-bbox="284 1290 892 1527" style="background-color: #e0f2e0; padding: 10px; border: 1px solid #ccc;"> <p>Note This step is required for both GUI and Windows Command Line when using RS232, USB, or Ethernet. This step is not required when updating the firmware using a USB thumb drive.</p> </div>	"Connecting the printer to the terminal" on page 62

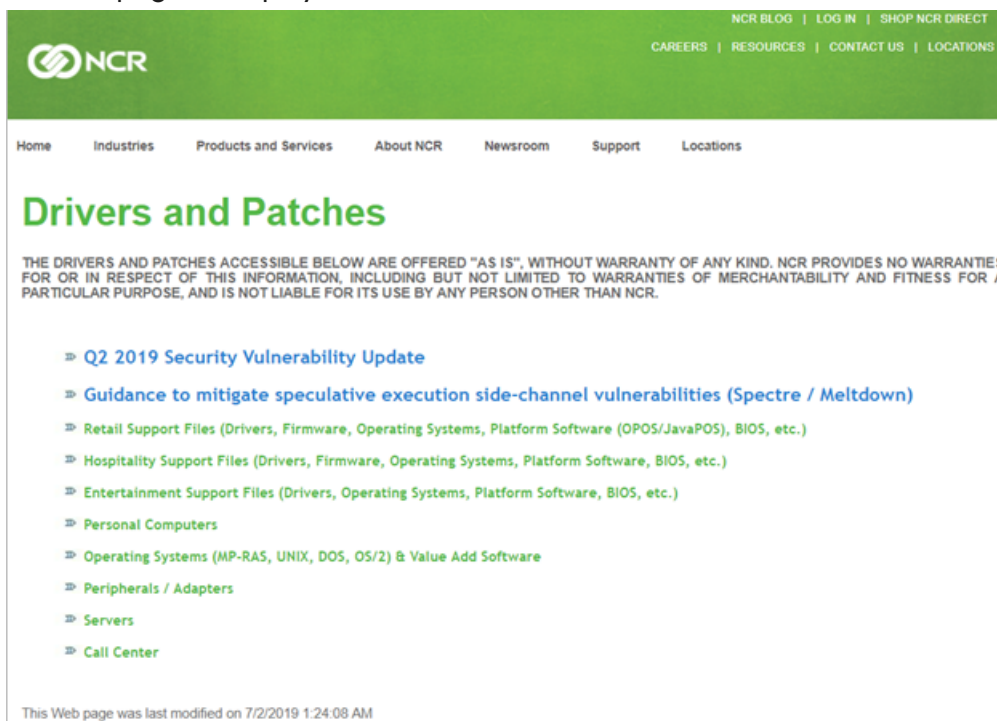
Downloading Firmware Files

The printer firmware files can be downloaded from the NCR Voyix Support page. The zipped firmware folder includes the following files:

- Individual firmware files and font files
- Upgrade files (for NCR 7199 Series only)

To download printer firmware files, follow these steps:

1. Go to https://www5.ncr.com/support/support_drivers_patches.asp. The *Drivers and Patches* page is displayed.



2. Select **Retail Support Files**→**NCR RealPOS and SelfServ Peripherals**→**Printers**.
3. From the list of printers, select a printer model. The list of printer firmware versions and printer utilities are displayed.
4. From the list of printer firmware, select a version to download.
5. Unzip and save the downloaded files.

Creating firmware folder

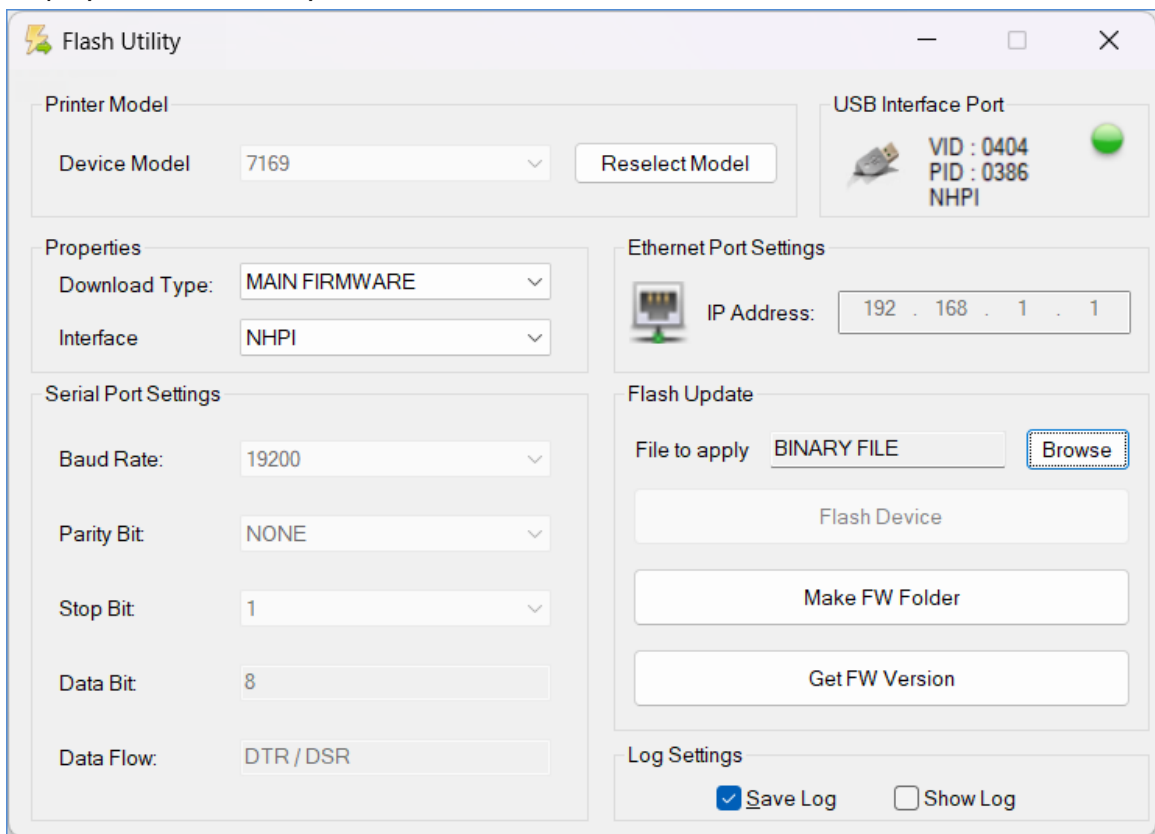
When updating the printer firmware using a USB thumb drive, it is necessary to store all firmware files inside specific folders.

Note

This function is available for NCR 7169 and NCR 7199 Series printers only.

To create a firmware folder, follow these steps:

1. To start the Flash Utility application, double-click the **TseFlash.exe** file. The application displays the Flash Utility main window.



2. From the *Device Model* drop-down list, select the printer model and select **Select Model**.

Note

After selecting the printer model, the *Select Model* button turns into *Reselect Model*. To select another printer model, select **Reselect Model**.

3. From the *Flash Update* panel, select **Make FW Folder**. The application displays the *USB Memory FW File Utility* window.

The screenshot shows a window titled "7169 USB Memory FW File Utility" with a close button (X) in the top right corner. The window contains seven rows of input fields, each with a "Browse" button to its right. The rows are labeled: IPL, MAIN, SBCS, DBCS, TABLE, CONFIG, and SDBCS. At the bottom center of the window is a "Save FW Folder" button.

Note

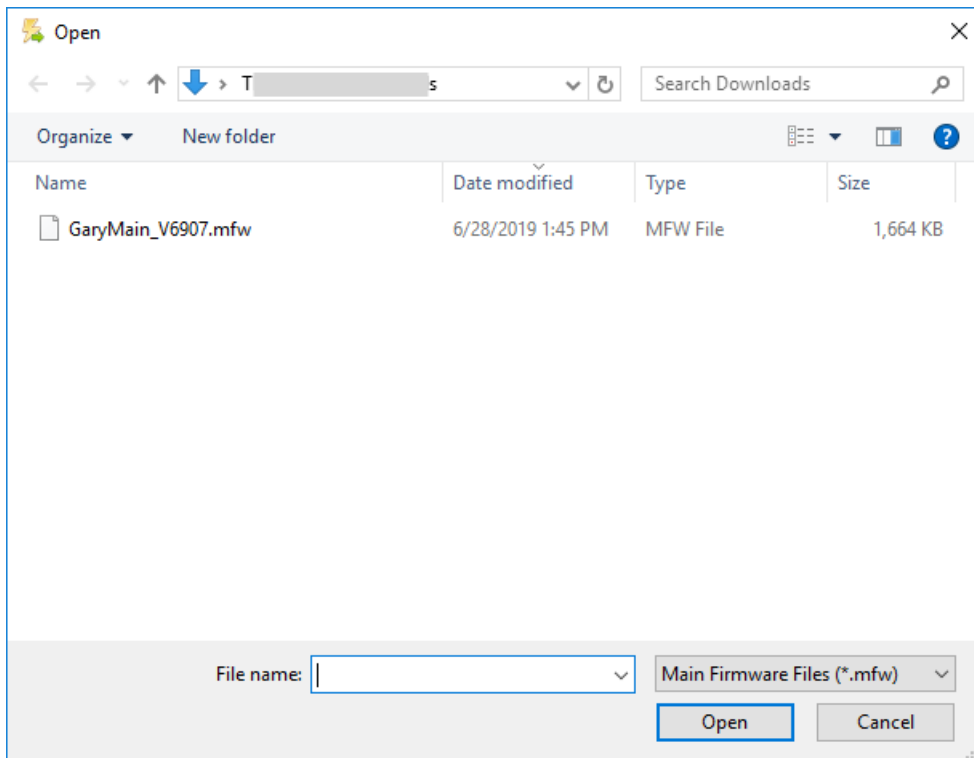
For *NCR 7199 Series i* printers with Main Firmware version v99.14 or lower, the printer version upgrade file option is included. Enabling the *1.0->1.1 FW Update* option disables the *CONFIG* option.

The screenshot shows a window titled "7199 USB Memory FW File Utility" with a close button (X) in the top right corner. The window contains eight rows of input fields, each with a "Browse" button to its right. The rows are labeled: IPL, MAIN, SBCS, DBCS, TABLE, CONFIG, 1.0->1.1, and 1.0->1.1. The "CONFIG" field is disabled (grayed out). At the bottom right of the window is a checked checkbox labeled "1.0->1.1 FW Update". At the bottom center of the window is a "Save FW Folder" button.

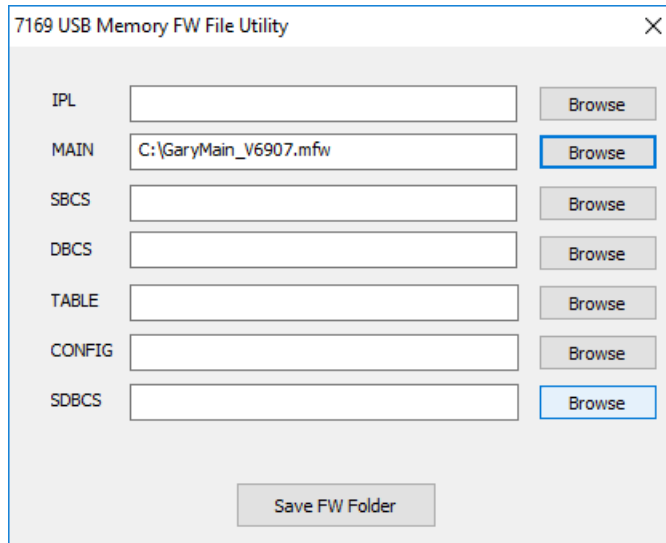
4. Locate the firmware files. Do these steps for all firmware files:
 - a. Select **Browse** and locate the firmware file to load.

 **Note**

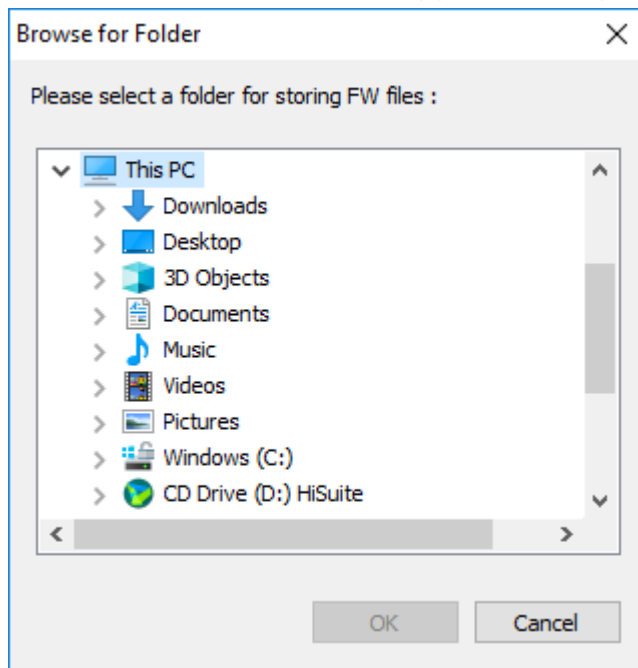
The *Open* window displays only the firmware file that corresponds to the selected firmware type. For example, if the *Browse* button for *MAIN* is selected, only the *.mfw* file is displayed.



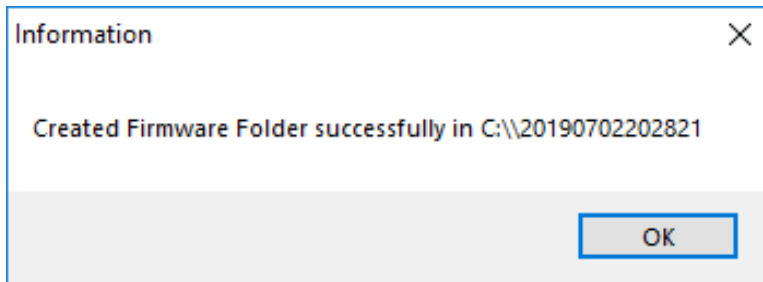
- b. Select the binary file and select **Open**. The firmware path is automatically displayed on the text box.



5. Select **Save FW Folder**. The application displays the *Browse for Folder* window.



- Select a location to save the firmware folder and select **OK**. The application creates a folder name based on the timestamp when the folder is created. The folder name format is *yyyymmddhhmmss*.



The following table shows the path and folder names for each firmware file.

Note

The example used is for the NCR 7169 printer.

Folder Names	Description
yyyymmddhhmmss\7169STD\IPL	Contains the IPL firmware file
yyyymmddhhmmss\7169STD\MAIN	Contains the main firmware file
yyyymmddhhmmss\7169STD\SBCS	Contains the Single-byte font file
yyyymmddhhmmss\7169STD\DBCS	Contains the Double-byte font file for receipt printing
yyyymmddhhmmss\7169STD\TABLE	Contains the Control Table file
yyyymmddhhmmss\7169STD\CONFIG	Contains the printer configuration file
yyyymmddhhmmss\7169STD\SDBCS	Contains the Double-byte font file for slip printing

The following table shows the timestamp details.

Format	Description
yyyy	Year (2016–2099)
mm	Month (01–12)
dd	Date (01–31)
hh	Hour (00–23)

Obtaining the COM port number

GUI version

When using the GUI version, the COM port number is shown on the upper right corner of the Flash Utility window.

Windows Command Line version




























When using the Windows Command Line version, the COM port number is obtained through the *Device Manager* window or through the *Edgeport Configuration Utility*.

Note

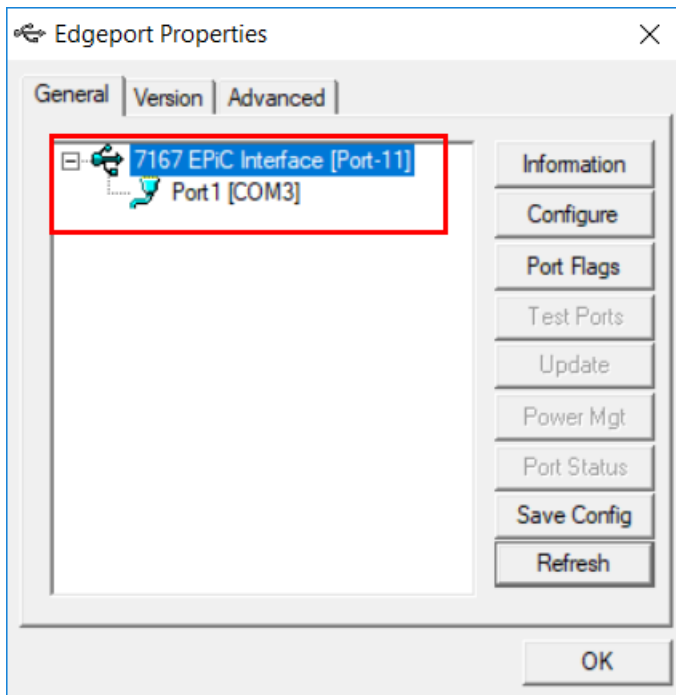
Ensure that the USB Virtual COM Port Driver or Edgeport Utility is installed. For more information, refer to your printer's Owner's Manual.

To view the COM Port number, do any of the following:

- Open **Device Manager** and expand **Ports (COM & LPT)**. The EPIC Port number is displayed.

- ▼  WPHAJ185096-WC1
 - >  Audio inputs and outputs
 - >  Batteries
 - >  Bluetooth
 - >  Cameras
 - >  Computer
 - >  Disk drives
 - >  Display adapters
 - >  Firmware
 - >  Human Interface Devices
 - >  IonMultiPortSerial
 - >  Keyboards
 - >  Memory technology devices
 - >  Mice and other pointing devices
 - >  Monitors
 - >  Network adapters
 - ▼  Ports (COM & LPT)
 -  EPIC Port (COM3)
 - >  Print queues
 - >  Processors
 - >  Security devices
 - >  Software components
 - >  Software devices
 - >  Sound, video and game controllers
 - >  Storage controllers
 - >  System devices
 - >  Universal Serial Bus controllers

- Open **Edgeport Configuration Utility**. The COM port number is then displayed.



Printing a diagnostic form (offline)

The Printer Diagnostic Form provides details about the printer that are required in the RS-232 and Ethernet interface. This form can be printed before the connection between the printer and the terminal is established.

To print the diagnostic form, follow these steps:

1. Open the receipt cover.
2. While pressing down the paper feed button, close the receipt cover. The diagnostic form is printed.

Note

The following sample image provides details required for the RS-232 and Ethernet connection configurations. The printer used is NCR 7169.

*** Diagnostics Form ***

Model number : 71xx-xxxx-xxxx
Serial number : 1234567890
Boot Firmware P/N : 497-0426492
Main Firmware P/N : 497-0426493
Firmware Revision
 Boot Firmware : V01.00 / 32CA
 Main Firmware : V01.00 / A04C
 SBCS Font : V01.00
 DBCS Font (Receipt) : V01.00
 DBCS Font (Slip) : V01.00
 Control Table : V01.00 / E166

Emulation
 Receipt Emulation : Native Mode
 Receipt Sync. : Disabled
 Default LPI : 7.52 LPI
 Carriage : Used as Print Cmd
 Asian Mode : Off
 Code Page : 437
 Special Font : Disabled
 Compress Pitch Font : Valid
 48 Character Mode : Disabled
 PDF417 Max Columns : 9 Columns
 Auto Reset : 20 Sec
 CompatibleTopMargin : Enabled
 Compat. TM Timeout : Disabled
 Compat. BarcodeLen : Disabled
 USU : Disabled
 Slip Print width : 82.2mm
 Platen waiting Time : No Extra Time
 Legacy Paper Jam : Paper Out¹
 Logo(s) Defined : No
 User Char(s) Defined: No

Hardware
 USB Type : ION(Epic)
 USB Speed : Full Speed
 Print Mode : High Speed
 Print Density : 0
 Power Supply : Term Pwr-High
 Standby Mode : Enabled
 PowerOff Mode : Disabled
 Knife : Enabled
 Paper width : 80mm
 Paper Low Detection : Disabled
 Color Paper : Monochrome
 Buzzer Tone : Middle
 LED : Auto
 MICR Dual Pass : Dual pass enable
 MICR : Enabled
 Check Flip : Enabled

Diagnostic Mode : OFF, Normal Mode

Interface (RS232C)

Baud Rate : 19200
 Data Bits : 8
 Stop Bits : 1
 Parity : None
 Flow Control : DTR/DSR
 Reception Errors : Print '?'
 DSR Signal : Enabled

It appears if RS232C I/F is installed.

Interface (Ethernet)

MAC address : xx:xx:xx:xx:xx:xx
 IP address : 192.168.1.1
 Subnet Mask : 255.255.255.0
 Default Gateway : 0.0.0.0
 TCP Port Number : 9100
 UDP Port Number : 3000
 RTC Protocol : TCP
 DHCP : Enabled
 DHCP request address: 192.168.2.1
 TCP max. connection : 1
 Physical LAN Speed : Auto
 Link Down Timeout : 120 min
 TCP Idle Timeout : 2 min
 SNMP Trap 1 : Disabled
 Trap 1 IP Address : 192.168.1.111
 SNMP Trap 2 : Disabled
 Trap 2 IP Address : 192.168.1.222

It appears if Ethernet card is installed.

Sensor Level	ON	OFF	TH	LED
Paper Low	: 3.3V,	0.0V,	1.7V,	0.5V
Paper Jam	: 3.2V,	0.6V,	1.4V,	0.5V
TOF	: 3.1V,	0.2V,	1.7V,	0.6V
BOF	: 3.2V,	0.3V,	1.8V,	0.7V

Tallies	User	Perm.
Hours ON	: 959	959
Flash cycles	: 5	5
Receipt Len.	: 482	482
Knife Cuts	: 12768	12768
Slip Lines	: 391	391
Slip Characters	: 4293	4293
MICR Reads	: 80	80
Knife Jams	: 2	2
Rcpt TCover open	: 71	71
Rcpt FCover Open	: 10	10
Head Overheat	: 0	0
Rcpt Paper Jams	: 2	2
Slip Cover Open	: 10	10
Flip Cover open	: 5	5
Slip Jam	: 1	1
Flip Jam	: 0	0
Carriage Jam	: 0	0
Shutter Jam	: 0	0
Sensor Calibration	: 5	5

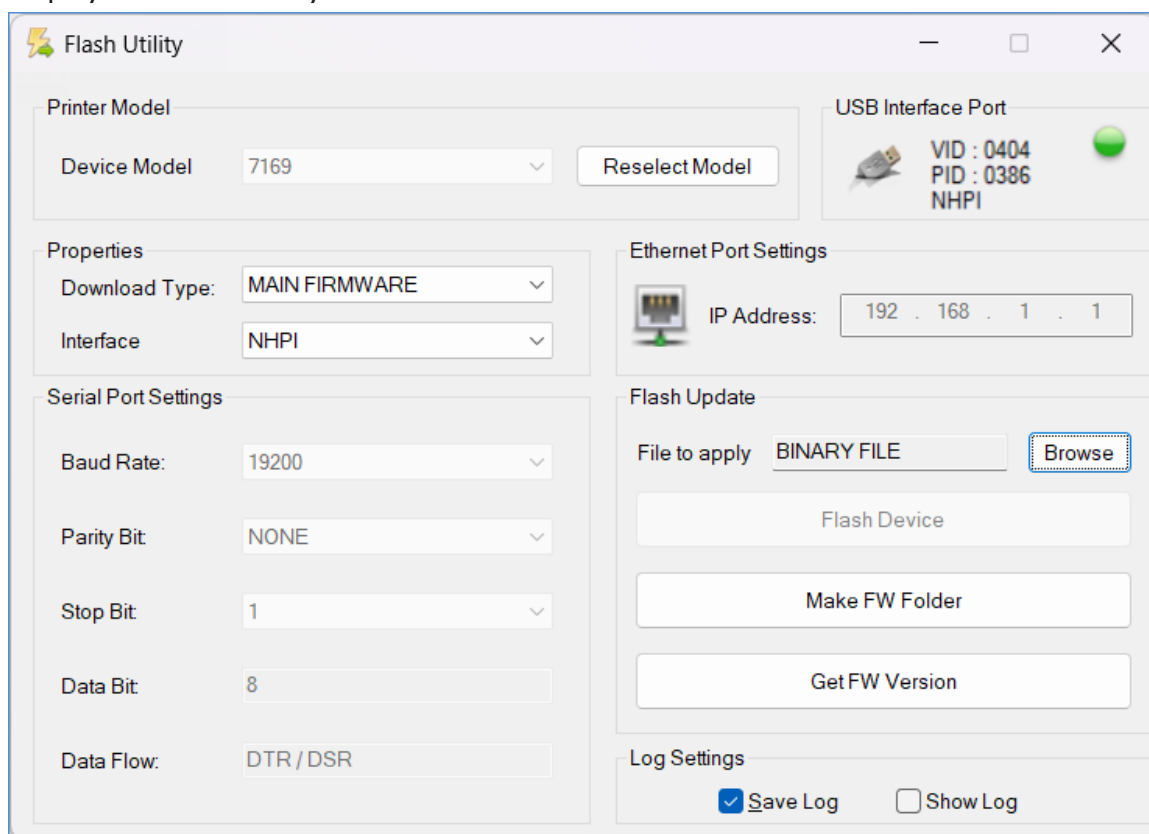
Thermal Head Usage Rate : 1 %

Dot Failure(Thermal Head): 0 dots
Dot Failure(Impact Head) : 0 dots

Connecting the printer to the terminal

To establish the connection between the printer and the terminal, follow these steps:

1. Connect the printer communication cable to the terminal.
2. To start the Flash Utility application, double-click the **TseFlash.exe** file. The application displays the Flash Utility main window.



3. From the *Device Model* drop-down list, select the printer model and select **Select Model**.

Note

After selecting the printer model, the *Select Model* button turns into *Reselect Model*. To select another printer model, select **Reselect Model**.

4. From the *Download Type* drop-down list, select the type of firmware to flash or download to the printer.

Download Type	Description	Remarks
IPL Firmware	Boot firmware	
Main Firmware	Main printer firmware	
SBCS Font	Single-byte font	
DBCS Font	Double-byte font for receipt printing	
SDBCS Font	Double-byte font for slip printing	Not available for some printer models
Table	Control table	
IMF File	Combined file of IPL+MFW. This is applicable in 4610 emulation flashing only.	Not available for some printer models
Printer Configuration Table	Sets the printer configuration and individually resets tallies	

5. From the *Interface* drop-down list, select the interface. The interface settings are enabled depending on the selected interface.

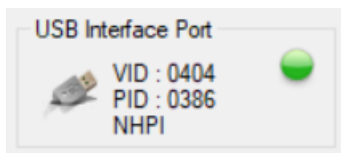
Interface	Interface Settings
LAN	Requires the terminal IP Address. For more information, refer to " Printing a diagnostic form (offline) " on page 60.
NHPI	No configurable interface settings
PRTR	No configurable interface settings

Interface	Interface Settings
COM	<p>The following settings are configurable:</p> <ul style="list-style-type: none"> • COM Port Number • Baud Rate • Parity Bit • Stop Bit <p>For more information, refer to "Printing a diagnostic form (offline)" on page 60.</p>
IBM USB	<p>No configurable interface settings</p> <div data-bbox="448 689 1417 801" style="background-color: #e1f5fe; padding: 5px; border-radius: 5px;"> <p>Note This interface is available for some specific legacy printers only.</p> </div>

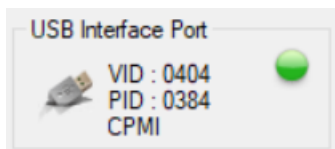
 **Note**

To determine the interface used by the printer, refer to the *USB Interface Port* information panel on the upper-right part of the main window. It displays details about the Vendor (VID), Product ID (PID), and the type of connection.

The following image displays the NHPI interface as the detected interface after the printer communication cable is connected to the terminal. It also shows the VID and the PID of the connected printer.



The following image displays the CPMI interface, which is used when the printer is connected in IPL mode. For more information, refer to "[IPL mode](#)" on page 22.



Disconnecting the printer from the terminal

To disconnect the printer from the terminal, follow this step:

- From the *Device Model* drop-down list, select **Reselect Model**.