

## Advanced Printer Driver Ver.4

# Status API Manual

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### Overview

Explains about Status API.

### Using Status API

Explains how to establish a development environment, get ASB statuses, and how to handle the ASB statuses.

### Using the MICR/Scanner

Explains how to use functions of the MICR/scanner using Status API.

### Reference for Win32

Describes available Status API and the syntax for each printer model.

### Reference for .NET

Describes information of Status API used in .NET environment.

### Generating Log Files

Describes the log function.

### Appendix

Describes information of each TM printer acquired by Status API.



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## ESC/POS® Command System

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## For Safety

### Key to Symbols

The symbols in this manual are identified by their level of importance, as defined below. Read the following carefully before handling the product.

**CAUTION**

Provides information that must be observed to avoid damage to your equipment or a malfunction.

**NOTE**

Provides important information and useful tips.

## Restriction of Use

When this product is used for applications requiring high reliability/safety such as transportation devices related to aviation, rail, marine, automotive etc.; disaster prevention devices; various safety devices etc; or functional/precision devices etc, you should use this product only after giving consideration to including fail-safes and redundancies into your design to maintain safety and total system reliability. Because this product was not intended for use in applications requiring extremely high reliability/safety such as aerospace equipment, main communication equipment, nuclear power control equipment, or medical equipment related to direct medical care etc, please make your own judgment on this product's suitability after a full evaluation.

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## About this Manual

### Aim of the Manual

This manual is aimed at development engineer and provides necessary information for developing an application using the Status API.

### Manual Content

The manual is made up of the following sections:

|           |                                        |
|-----------|----------------------------------------|
| Chapter 1 | <a href="#">Overview</a>               |
| Chapter 2 | <a href="#">Using Status API</a>       |
| Chapter 3 | <a href="#">Using the MICR/Scanner</a> |
| Chapter 4 | <a href="#">Reference for Win32</a>    |
| Chapter 5 | <a href="#">Reference for .NET</a>     |
| Chapter 6 | <a href="#">Generating Log Files</a>   |
| Appendix  | <a href="#">Model Information</a>      |

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# Overview

Status API is a status monitor API for Epson's TM printers. Advanced functions for monitoring TM printers can be embedded in applications with print functions.

## Manual organization

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### Install Manual

Descriptions of the procedures from installing the APD to performing test print, adding printer drivers, and the silent install which is an automated APD installation.

---

### TM Printer Manual

Descriptions of how to use the APD and its functions.

---

### Printer Specification

Descriptions of the specifications of each printer driver.

---

### TM-C100 Manual

Descriptions of how to use the TM-C100 printer driver and its functions.

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### Customer Display Manual

Descriptions of how to use the Customer Display printer driver and its functions.

---

### Status API Manual

This manual. Descriptions of how to get the status of the TM printer from the user application by using the Status API.

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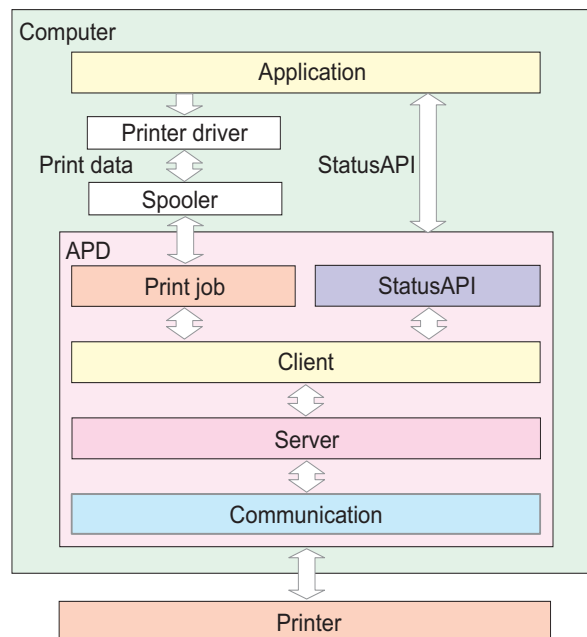
### Devmode API / PRINTERINFO Manual

Descriptions of how to configure some printer functions on your application using the Devmode API. Descriptions of the PRINTERINFO Function of Windows.

## Status API Summary

### Status API System

Status API receives signals from the TM printer and always maintains the most recent status of the printer. The application can acquire the most recent information when necessary.



#### CAUTION

- In Terminal Service / Citrix XenApp environment, Status API cannot be used.
- Status API cannot be used when using the TM-C100 printer via the standard TCP/IP port.

### Glossary

| Term                | Explanation                                                                                                                                                                                                       |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| APD                 | Advanced Printer Driver: Windows printer driver for TM printers. Unlike general Windows printer drivers, Status API is simultaneously installed to monitor the printer status.                                    |
| ASB Status          | Auto Status Back: This is a function of the TM printer. This is a status automatically sent from the printer when the printer status changes (opening or closing the cover, out of paper, print completed, etc.). |
| Maintenance Counter | TM printer internal counter recording the operating status of the printer, i.e. operating count of the auto cutter, printer running time, etc.                                                                    |

## Information that can be Acquired from the TM Printer

| Term                | Explanation                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ASB Status          | Information required for the print application, i.e. print completed, offline, out of paper, cover open, power off, error generated, etc. This information is automatically sent to the Status API.                                                                                                                                                                                     |
| Ink ASB Status      | Ink related information, such as Ink level (not an indicator of ink level, but is a notification that the ink cartridge needs to be replaced because the ink level is low.), ink cartridge existence, that is necessary for a print application for an inkjet printer. In the same way as the ASB Status, this information is automatically sent to the Status API from the TM printer. |
| Maintenance Counter | Acquires information, i.e number of feed paper lines, operating count of the auto cutter, running time, etc.<br>This is used for printer management applications. There are counters that can be reset from Status API and there are integral counters that cannot be reset.                                                                                                            |

**CAUTION**

According to the printer model, these functions may not be installed.  
Refer to ["Model Information" on page 261](#) for details.

## Development Language

### Win32

- Visual Basic 6.0
- Visual C++

### .NET

- Visual Basic .NET
- Visual C#

**CAUTION**

#### .NET Framework Version

Conforming to the APD environment. Refer to "Install Manual".

If you use Status API .NET Wrapper in Windows XP, install .NET Framework 2.0 or later before installing APD.





# Using Status API

This chapter explains the architecture of the application development environment using Status API, the acquisition methods of ASB Status, and the procedures of the ASB Status. Refer to ["Reference for Win32" on page 41](#) for other functions.

## *Install and Uninstall*

Status API is installed/uninstalled at the same time as APD (Advanced Printer Driver) is installed/uninstalled. Refer to the "Install Manual" for details.

## *Architecture of the Development Environment*

The architecture of the application development environment using Status API differs according to the development tool.

---

### Visual Basic

The following are examples of the development environment architecture using Visual Basic.

- 1** Copy StatusAPI.bas in the folder where the sample program is installed (default is C:\Program Files\EPSON\EPSON Advanced Printer Driver 4\Sample\US\Src\VB6\SingleFunction\Program09") and paste it into the operating folder used when developing applications.
- 2** Start Microsoft Visual Basic and open the project screen.
- 3** Select (Add a standard module) from (Project) in the menu bar.
- 4** The add standard module screen appears. Select the (Existing file) tab and specify "StatusAPI.bas" copied from the sample program in Procedure 1. Click the (Open) button.  
"StatusAPI.bas" is added the project explorer.
- 5** Select (Reference settings) from (Project) in the menu bar.
- 6** The reference settings screen appears. Place a check by "Microsoft DAO 3.6 Object Library" from the (Reference library file) and click the (OK).

---

## C++

The following are examples of the development environment architecture using C++.

- 1** Start Microsoft Visual C++ and open the project screen.
- 2** Copy EpsStmApi.h from the folder installed with APD and paste the file into the operating folder used when developing applications (folder created by the project).
- 3** Open the Source File. Define EpsStmApi.h using the #include directive.  
Definition Methods: *#include "EpsStmApi.h"*

## Types of Status API Functions

Status API has the following functions. Refer to [“Reference for Win32” on page 41](#) for details regarding the functions. The supported functions differ according to the printer model. Refer to [“Reference for Win32” on page 41](#) for details regarding each model.

| Application                                     | Function                  | Description                                                                                                                                                                                                                                |
|-------------------------------------------------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Starting/Closing Status API                     | BiOpenMonPrinter          | Calls the specified printer to use Status API.                                                                                                                                                                                             |
|                                                 | BiCloseMonPrinter         | Closes Status API.                                                                                                                                                                                                                         |
| Acquiring ASB Status                            | BiGetStatus               | Acquires the ASB status from Status API when required by the application.                                                                                                                                                                  |
|                                                 | BiSetStatusBackFunction   | Provides notification regarding the call of the callback function notifying the application when the ASB status of Status API changes.                                                                                                     |
|                                                 | BiSetStatusBackFunctionEx | Provides notification regarding the call of the callback function notifying the application when the ASB status of Status API changes. Also acquires the port number.                                                                      |
|                                                 | BiSetStatusBackWnd        | Generates a button click event when the ASB status of Status API changes.                                                                                                                                                                  |
|                                                 | BiCancelStatusBack        | Cancels the auto status notification function. This function is applicable to BiSetStatusBackFunction, BiSetStatusBackFunctionEx, and BiSetStatusBackWnd.                                                                                  |
| Acquiring and resetting the maintenance counter | BiGetCounter              | Acquires the maintenance counter value of the printer.                                                                                                                                                                                     |
|                                                 | BiResetCounter            | Resets the maintenance counter of the printer.                                                                                                                                                                                             |
| Acquiring the printer information               | BiGetPrnCapability        | Acquires printer information, i.e. firmware, etc.                                                                                                                                                                                          |
| Drawer control                                  | BiOpenDrawer              | Opens the drawer.                                                                                                                                                                                                                          |
| Recovery from a recoverable error               | BiCancelError             | After the cause of the error, i.e. paper jam, etc., is removed, the printer's auto cutter is recovered from the error status using this function. The status is recovered to print standby without turning the printer's power off and on. |
| Printer reset                                   | BiResetPrinter            | Resets the parallel / USB / ethernet interface printers. Cannot reset serial interface printers.                                                                                                                                           |
| Power off preprocess                            | BiPowerOff                | Updates the maintenance counter.                                                                                                                                                                                                           |

| Application               | Function         | Description                                                                                         |
|---------------------------|------------------|-----------------------------------------------------------------------------------------------------|
| Command definition file   | BiSendDataFile   | Defines the command definition file created separately to the printer. The command is not executed. |
|                           | BiDirectSendRead | Sends the command of the defined command definition file to the printer and executes the command.   |
| Sends the ESC/POS command | BiDirectIO       | Can transmit ESC/POS commands to the printer and receive data from the printer.                     |
|                           | BiDirectIOEx     | Can send and receive the ESC/POS commands. Does not add the ASB suppress command.                   |

## Acquiring ASB Status

The method and function to acquire ASB status from the application are as follows.

| Timing                                    | Status API                |
|-------------------------------------------|---------------------------|
| Acquires when required by the application | BiGetStatus               |
| The ASB status is acquired as follows     | BiSetStatusBackFunction   |
|                                           | BiSetStatusBackFunctionEx |
|                                           | BiSetStatusBackWnd        |

The ASB status is acquired as follows.

- Confirms whether the printer can print in advance.
- Confirms that printing has completed successfully. Confirms with “ASB\_PRINT\_SUCCESS” (constant) of the macro definition.
- ASB status monitors the main printer conditions, i.e. out-of-paper, cover open, printer connection status, etc. Therefore, it is recommended that the printer is continually monitored, even when not printing.

Refer to ["ASB Status" on page 25](#) regarding acquired ASB status.

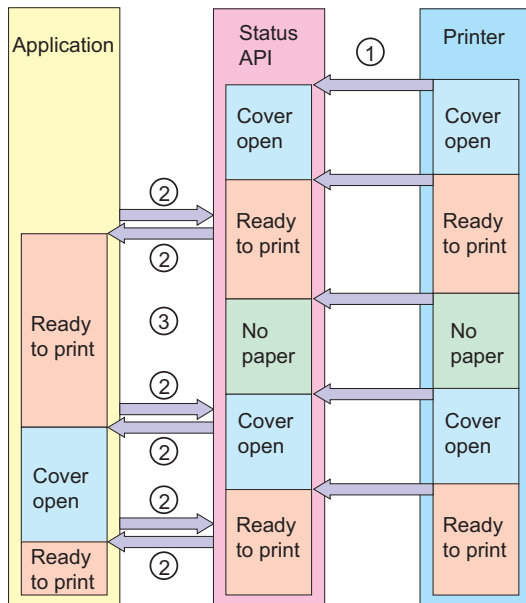


Status API has to be started using BiOpenMonPrinter and the printer needs to be opened when acquiring ASB status.

## BiGetStatus

BiGetStatus acquires ASB status when required by the user (or application).

Example: The following diagram explains the flow of Status API and ASB status using BiGetStatus.



- [1] The printer automatically sends the ASB status to Status API using the ASB function each time the status changes. Status API stores the most recent ASB status.
- [2] The application calls BiGetStatus when required by ASB status. Status API sends the stored ASB status to the application.
- [3] Status API does not send the ASB status even if the ASB status of the printer changes when there is no request from the application.

Refer to ["BiGetStatus" on page 79](#) regarding the syntax of BiGetStatus.

## BiSetStatusBackFunction

BiSetStatusBackFunction is an API that automatically allows the application to acquire the most recent ASB status by using the callback function.

Calling BiCancelStatusBack cancels the ASB status notification from Status API using the callback function. Refer to "[BiCancelStatusBack](#)" on page 87 for details.

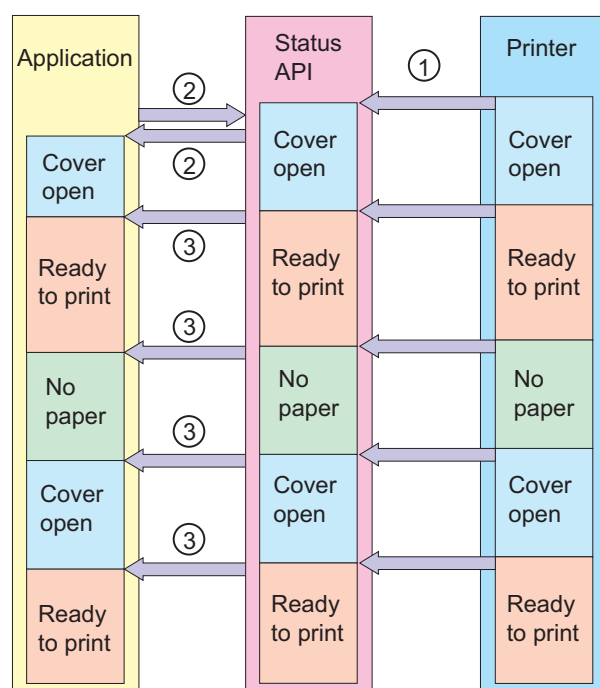
### CAUTION

This is unavailable when the development environment is Visual Basic.

### NOTE

BiSetStatusBackFunctionEx can recognize from which printer the callback is, in addition to the function of BiSetStatusBackFunction.

Example: The following diagram explains the flow of Status API and ASB status using BiSetStatusBackFunction.



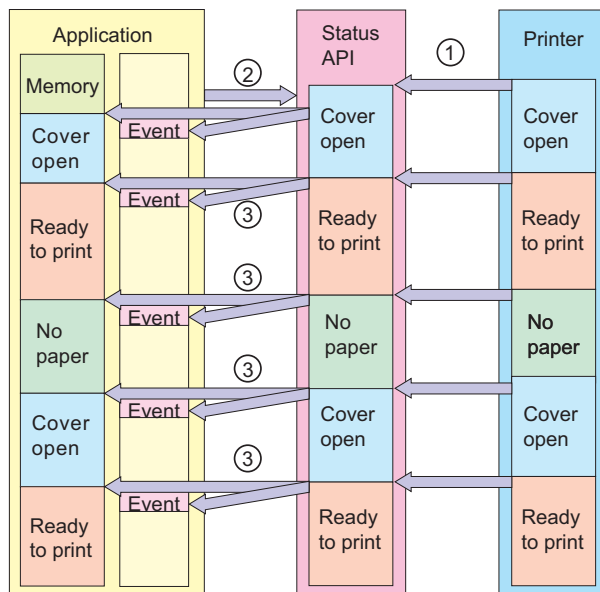
- [1] The printer automatically sends the ASB status to Status API using the ASB function each time the status changes.
- [2] BiSetStatusBuckFunction registers the callback function.
- [3] Status API calls the callback function and notifies the application of the most recent ASB status each time the ASB status of the printer changes.

Refer to "[BiSetStatusBackFunction](#)" on page 82 regarding the syntax of BiSetStatusBackFunction.

## BiSetStatusBackWnd

BiSetStatusBackWnd is an API that acquires the most recent ASB status by registering the window handle of the application screen button and memory address storing the status. Calling BiCancelStatusBack cancels the ASB status notification from Status API using the button click event. Refer to "[BiCancelStatusBack](#)" on page 87 for details.

Example: The following diagram explains the flow of Status API and ASB status using BiSetStatusBackWnd.



- [1] The printer automatically sends the ASB status to Status API using the ASB function each time the status changes. Status API stores the most recent ASB status.
- [2] When BiSetStatusBackWnd registers the window handle of the application screen button and memory address storing the status, Status API sets the data to the specified address and sends a button click event.
- [3] Status API sets the most recent ASB status of the printer to the specified memory and sends a button click event each time the ASB status of the printer changes.

Refer to "[BiSetStatusBackWnd](#)" on page 86 regarding the syntax of BiSetStatusBackWnd.



## Status API Errors and Response

Status API errors are errors when notifying ASB status and errors generated when calling Status API. The following explains the details of the errors and responses. Refer to the following and respond to the application errors.

### ASB Status

The following are errors returned when ASB status is acquired. The details differ according to the printer model. Refer to ["Model Information" on page 261](#) for details.

| Macro Definition<br>(Constant) | Cause                                                                                                                                    | Response                                                                                                     |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| ASB_NO_RESPONSE                | The power to the printer is not turned ON.<br>The communication cable is not connected.<br>The specified printer name/port is different. | Confirm the status and ports of the printer, i.e. cables, etc.                                               |
| ASB_PRINT_SUCCESS              | Notifies that printing has completed successfully. There is nothing else that is notified.                                               | -                                                                                                            |
| ASB_DRAWER_KICK                | The drawer is open.                                                                                                                      | There is no problem if the drawer has been left open intentionally.                                          |
| ASB_OFF_LINE                   | An error causing the printer to go offline was generated.                                                                                | Eliminate the cause of the printer to go offline.                                                            |
| ASB_COVER_OPEN                 | The cover is open.                                                                                                                       | Close the printer's cover.                                                                                   |
| ASB_PAPER_FEED                 | Paper is being fed.                                                                                                                      | There is no problem if the paper is being fed.                                                               |
| ASB_WAIT_ON_LINE               | Waiting for getting back into online.                                                                                                    | -                                                                                                            |
| ASB_PANEL_SWITCH               | The printer's panel switch is being pressed.                                                                                             | There is no problem if a switch on the printer's panel is being pressed.                                     |
| ASB_MECHANICAL_ERR             | A mechanical error was generated, i.e. home position detection error, etc.                                                               | Eliminate the cause of the error and restart the printer or send an error recovery command (BiCancelError).* |
| ASB_AUTOCUTTER_ERR             | An auto cutter error was generated.                                                                                                      | Eliminate the cause of the error and restart the printer or send an error recovery command (BiCancelError).* |

| Macro Definition<br>(Constant) | Cause                                                                                            | Response                                                                              |
|--------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| ASB_UNRECOVER_ERR              | A print error was generated to the printer.                                                      | Immediately turn off the power to the printer.*                                       |
| ASB_AUTORECOVER_ERR            | The temperature of the head has increased.                                                       | If the temperature of the head decreases with time, the error automatically cancels.* |
| ASB_RECEIPT_NEAR_END           | There is only a limited amount of paper remaining.                                               | Place paper in the printer.                                                           |
| ASB_RECEIPT_END                | No paper.                                                                                        | Place paper in the printer.                                                           |
| ASB_SLIP_TOF                   | No paper is detected. This is not an error but indicating the printer status.                    | -                                                                                     |
| ASB_SLIP_BOF                   | No paper is detected. This is not an error but indicating the printer status.                    | -                                                                                     |
| ASB_SLIP_SELECTED              | This indicates whether the slip has been selected.                                               | -                                                                                     |
| ASB_PRINT_SLIP                 | The printer is waiting for the slip to be inserted or the slip is being copied/discharged.       | -                                                                                     |
| ASB_VALIDATION_SELECTED        | This indicates whether the validation has been selected.                                         | -                                                                                     |
| ASB_PRINT_VALIDATION           | The printer is waiting for the slip to be inserted or the validation is being copied/discharged. | -                                                                                     |
| ASB_VALIDATION_TOF             | No paper is detected. This is not an error but indicating the printer status.                    | -                                                                                     |
| ASB_VALIDATION_NO_PAPER        | No paper is detected by the validation detector.                                                 | -                                                                                     |

\* Refer to the detailed operating manuals of the various printers.



The macro definition is defined using the EPSStmApi.h or StatusAPI.bas file when the development environment is constructed.

## Status API Execution Error

The following are errors generated when Status API functions are called. The contents differ according to Status API function. Refer to ["Model Information" on page 261](#) for details.

| Macro Definition (Constant) | Cause                                                                                                                               | Response                                                                                                                                                  |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| ERR_TYPE                    | The parameters of nType differ.                                                                                                     | Specify the correct value.                                                                                                                                |
| ERR_OPENED                  | The specified printer is already opened.                                                                                            | As the printer is already opened, use the handle value or specify a different printer.                                                                    |
| ERR_NO_PRINTER              | The specified printer driver does not exist.                                                                                        | Confirm the name of the printer driver.                                                                                                                   |
| ERR_NO_TARGET               | The specified printer cannot be found.<br>An unspecified printer is connected.                                                      | Connect to the correct printer.                                                                                                                           |
| ERR_NO_MEMORY               | There is not enough memory.                                                                                                         | Add available memory.                                                                                                                                     |
| ERR_HANDLE                  | The handle value specified by the printer is incorrect.                                                                             | Confirm the handle value.                                                                                                                                 |
| ERR_TIMEOUT                 | This is a timeout error.                                                                                                            | If the error is continuously generated, confirm whether the printer is properly connected.                                                                |
| ERR_ACCESS                  | R/W cannot be performed on the printer.<br>(The power to the printer is not turned on or the cable is not properly connected, etc.) | Confirm the printer. (Printer power, cable connection, etc.)                                                                                              |
| ERR_PARAM                   | This is a parameter error.                                                                                                          | Review the syntax as the specified parameter is incorrect.                                                                                                |
| ERR_NOT_SUPPORT             | This is an unsupported model.                                                                                                       | Unsupported models cannot be used.                                                                                                                        |
| ERR_EXIST                   | The specified data already exists.                                                                                                  | Delete the already existing data.<br>Example:<br>When this error occurs during executing BiSetStatusBackXXX, retry it after executing BiCancelStatusBack. |
| ERR_EXEC_FUNCTION           | This function is unavailable as Status API is used by other applications.                                                           | Close the Status API used by other applications.                                                                                                          |
| ERR_PH_NOT_EXIST            | The PortHandler is not running, or a communication error between the client of PortHandler and the server.                          | Verify the connection between them, then restart the computer.                                                                                            |

| Macro Definition<br>(Constant) | Cause                                                       | Response                                                                                                        |
|--------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| ERR_SPL_NOT_EXIST              | The spooler service is not operating.                       | Confirm whether the Print Spooler is properly operating. (Control Panel - Management Tools - Service)           |
| ERR_RESET                      | This function is unavailable as the printer is being reset. | Recall after waiting a moment.                                                                                  |
| ERR_LOCKED                     | The printer is locked.                                      | Wait until the printer becomes unlocked, or execute BiUnlockPrinter in the program that is locking the printer. |



The macro definition is defined using the EPSStmApi.h or StatusAPI.bas file when the development environment is constructed.

## How to Use Shared Printers

When using shared printers, note the followings when developing an application.

- A whole process of accessing to the device shall be performed exclusively.
- Handling of BiLockPrinter error is necessary.
- Set a time of exclusive access to the printer as short as possible.

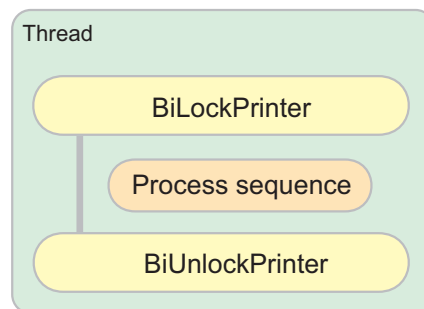
### CAUTION

When you set a firewall, add the port number 2291 to [Exception].

## Constructing the Exclusive Access

Exclusive control of a process sequence

Construct an application putting each of process sequences between BiLockPrinter and BiUnlockPrinter.



### NOTE

When you use only one API in your application, the exclusive access is not necessary.

Handling of BiLockPrinter error

When the printer is already accessed from another process, the BiLockPrinter returns an error (ERR\_LOCKED). Construct the application so that the error is handled and the BiLockPrinter is executed again after handling the error.

Shortening exclusive access time to the printer

While the printer is accessed exclusively, other processes cannot execute exclusive API and printing is disabled.

Therefore, set the exclusive access time as short as possible to improve the system performance.

---

## Program example

```
int nRet = BiLockPrinter(1, 1000);
if (nRet == SUCCESS) {
    //Locks the printer to allow exclusive access of the following API. Unlocks the printer when finished.
    BiSCNSetImageFormat(1, EPS_BI_SCN_JPEGNORMAL);
    BiSCNReadImage(1, 1, EPS_BI_SCN_CHECKPAPER, 0, 0, NULL, EPS_BI_SCN_NVMEMORY_NOTSAVE);
    //Unlocks the printer
    BiUnlockPrinter(1);
} else {
    //Error handling in case that the exclusive access is failed.
}
```

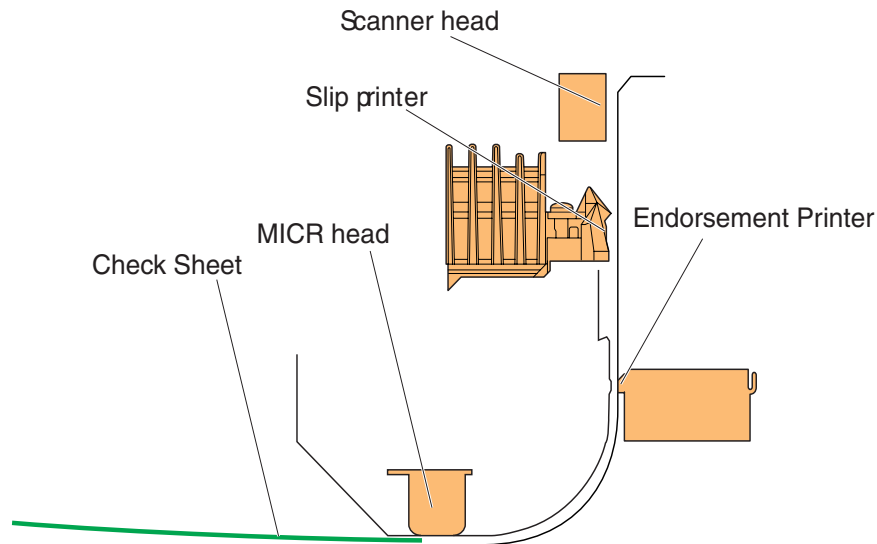
### When Using APD3.xx Application

The APD3.xx does not support the exclusive access to the printer and consequently your application that supports the APD3.xx do not have the function for the exclusive access . Therefore, when you use the existing application and do not use any other one, the exclusive access to the printer is available without modifying the application.

If any access from other processes is expected, modify the application to establish the exclusive access referring to [“Constructing the Exclusive Access” on page 29](#).

# Using the MICR/Scanner

This chapter describes the functions built into the MICR/Scanner using Status API.  
The following printer mechanism achieves the MICR/Scanner function.

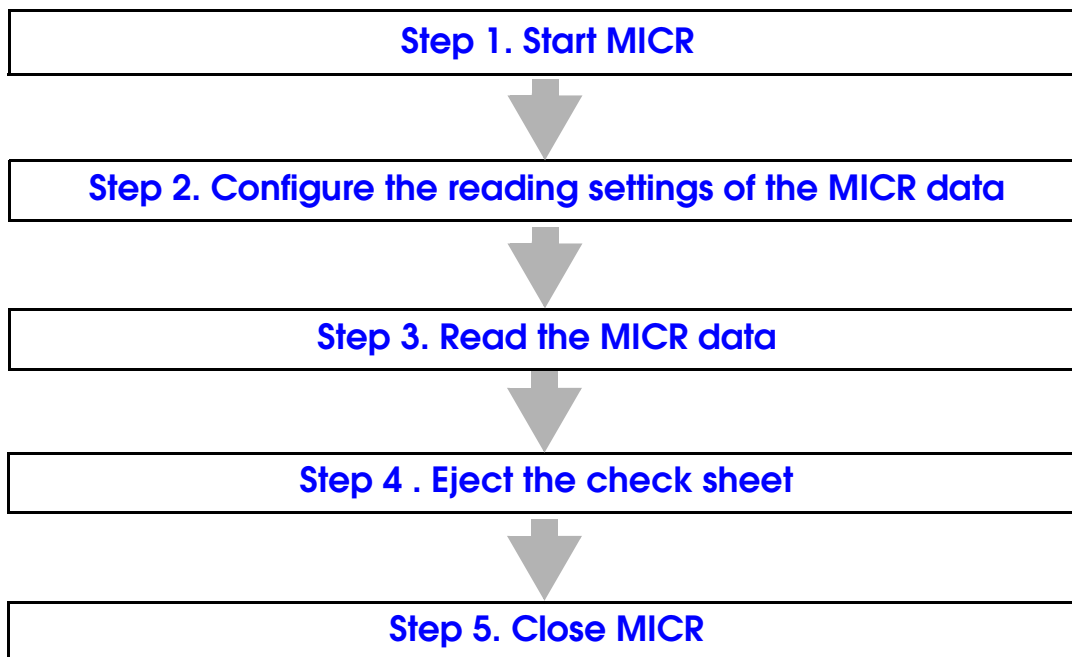


## NOTE

A single-sequence sample program that performs the following with one motion using functions of the hybrid printer with Status API is provided: reading MICR data, endorsement printing, front printing, and reading image data.

## Using the MICR

The MICR is a process that reads magnetic characters. Call Status API in the following flow to use MICR.



---

### Step 1. Start MICR

Call the following Status API to acquire MICR data. For details regarding Status API, refer to ["Reference for Win32" on page 41](#).

| Status API                  | Page                | Description                                                                                   |
|-----------------------------|---------------------|-----------------------------------------------------------------------------------------------|
| BiMICRSetReadBackFunction   | <a href="#">141</a> | The MICR read data is sent to an application using a callback function or button-click event. |
| BiMICRSetReadBackFunctionEx | <a href="#">144</a> |                                                                                               |
| BiMICRSetReadBackWnd        | <a href="#">146</a> |                                                                                               |

---

### Step 2. Configure the reading settings of the MICR data

Configure the reading settings when reading MICR data by calling BiMICRSelectDataHandling. BiMICRSelectDataHandling is called as follows. For details regarding Status API, refer to ["BiMICRSelectDataHandling" on page 139](#).

**nErr = BiMICRSelectDataHandling (nHandle, charSelect, detailSelect, errorSelect)**



---

### Step 3. Read the MICR data

Call BiMICRReadCheck to acquire the MICR data. Configure the read fonts (*readFont*) and check sheet insertion wait time (*waitInsertionTime*) and call as follows. Refer to ["BiMICRReadCheck" on page 133](#).

**nErr = BiMICRReadCheck (nHandle, readFont, waitInsertionTime)**

When Status API acquires MICRdata, the callback function or button-click event configured in ["Step 1. Start MICR" on page 32](#) is generated. The MICR data is confirmed here for the first time.



If BiMICRSetReadBackFuncion, BiMICRSetReadBackFuncionEx, or BiMICRSetReadBackWnd is not called, a Status API execution error is returned. MICR data cannot be acquired.

---

### Step 4 . Eject the check sheet

Call BiMICREjectCheck to eject the read check sheet. BiMICREjectCheck is called as follows. For details regarding Status API, refer to ["BiMICREjectCheck" on page 135](#).

**nErr = BiMICREjectCheck (nHandle)**

---

### Step 5. Close MICR

Call BiMICRCancelReadBack to close MICR. BiMICRCancelReadBack is called as follows. For details regarding Status API, refer to ["BiMICRCancelReadBack" on page 148](#).

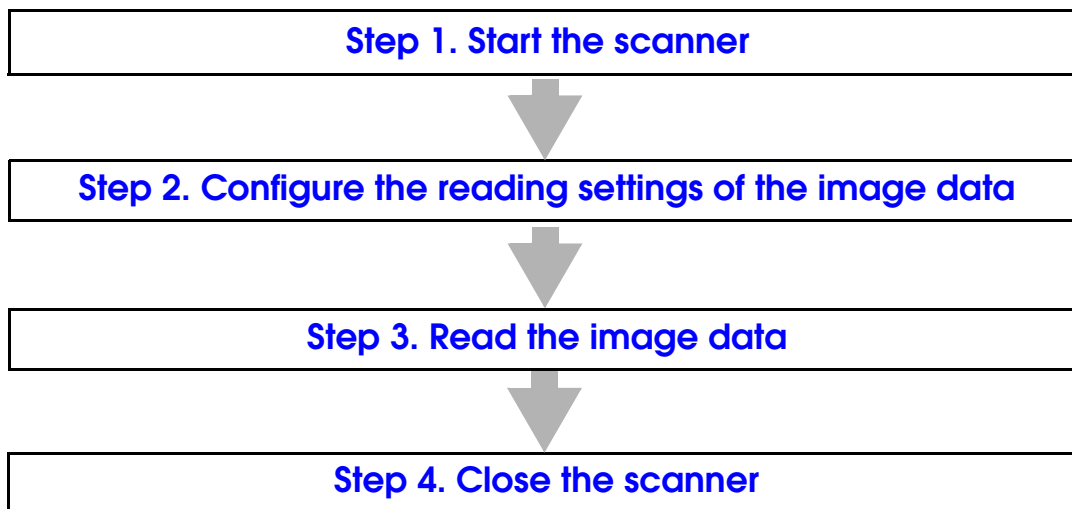


If this Status API is called, MICR data cannot be acquired even if BiMICRReadCheck is called. To acquire MICR data after calling Status API, recall BiMICRSetReadBackFuncion, BiMICRSetReadBackFuncionEx, and BiMICRSetReadBackWnd.

**nErr = BiMICRCancelReadBack (nHandle)**

## Using the Scanner

The scanner uses a process to read image data. Call Status API in the following flow to use the scanner.



---

### Step 1. Start the scanner

Call the following Status API to acquire the image data. For details regarding Status API, refer to [“Reference for Win32”](#) on page 41.

| Status API                 | Page                | Description                                                                                    |
|----------------------------|---------------------|------------------------------------------------------------------------------------------------|
| BiSCNSetReadBackFunction   | <a href="#">185</a> | The read image data is sent to an application using a callback function or button-click event. |
| BiSCNSetReadBackFunctionEx | <a href="#">188</a> |                                                                                                |
| BiSCNSetReadBackWnd        | <a href="#">190</a> |                                                                                                |

## Step 2. Configure the reading settings of the image data

Call the following Status API to acquire the image data using the scanner. For details regarding Status API, refer to [“Reference for Win32” on page 41](#).

| Status API           | Page                | Description                                                                                                                                          |
|----------------------|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| BiSCNSetImageQuality | <a href="#">165</a> | Configures the reading quality of the image data.                                                                                                    |
| BiSCNSetImageFormat  | <a href="#">159</a> | Configures the format of the reading image data.                                                                                                     |
| BiSCNSetScanArea     | <a href="#">171</a> | Configures the reading area of the image data.                                                                                                       |
| BiSCNPreScan         | <a href="#">174</a> | Automatically measures and configures the density of the image data.<br>This Status API is called when BiSCNSetImageQuality is configured to 2 tone. |
| BiSCNSetCroppingArea | <a href="#">154</a> | Acquires the specified area of the image data read by BiSCNReadImage.                                                                                |

## Step 3. Read the image data

Call BiSCNReadImage to acquire the image data. BiSCNReadImage is called as follows. Refer to [“BiSCNReadImage” on page 176](#).

**nErr = BiSCNReadImage (nHandle, wId, bSelectSheet, bWaitInsertionTime, bAddInforDataSize, pAddInforData, bMemory)**

When Status API acquires the image data, the callback function or button-click event configured in [“Step 1. Start the scanner” on page 34](#) is generated. The image data is confirmed here for the first time.

### NOTE

If BiSCNSetReadBackFuncion, BiSCNSetReadBackFuncionEx, or BiSCNSetReadBackWnd is not called, a Status API execution error is returned. The image data cannot be acquired.

## Step 4. Close the scanner

Call BiSCNCancelReadBack to close the scanner. BiSCNCancelReadBack is called as follows. For details regarding Status API, refer to [“BiSCNCancelReadBack” on page 192](#).

### NOTE

If this Status API is called, the image data cannot be acquired even if BiSCNReadImage is called. To acquire the image data after calling Status API, recall BiSCNSetReadBackFuncion, BiSCNSetReadBackFuncionEx, or BiSCNSetReadBackWnd.

**nErr = BiSCNCancelReadBack (nHandle)**

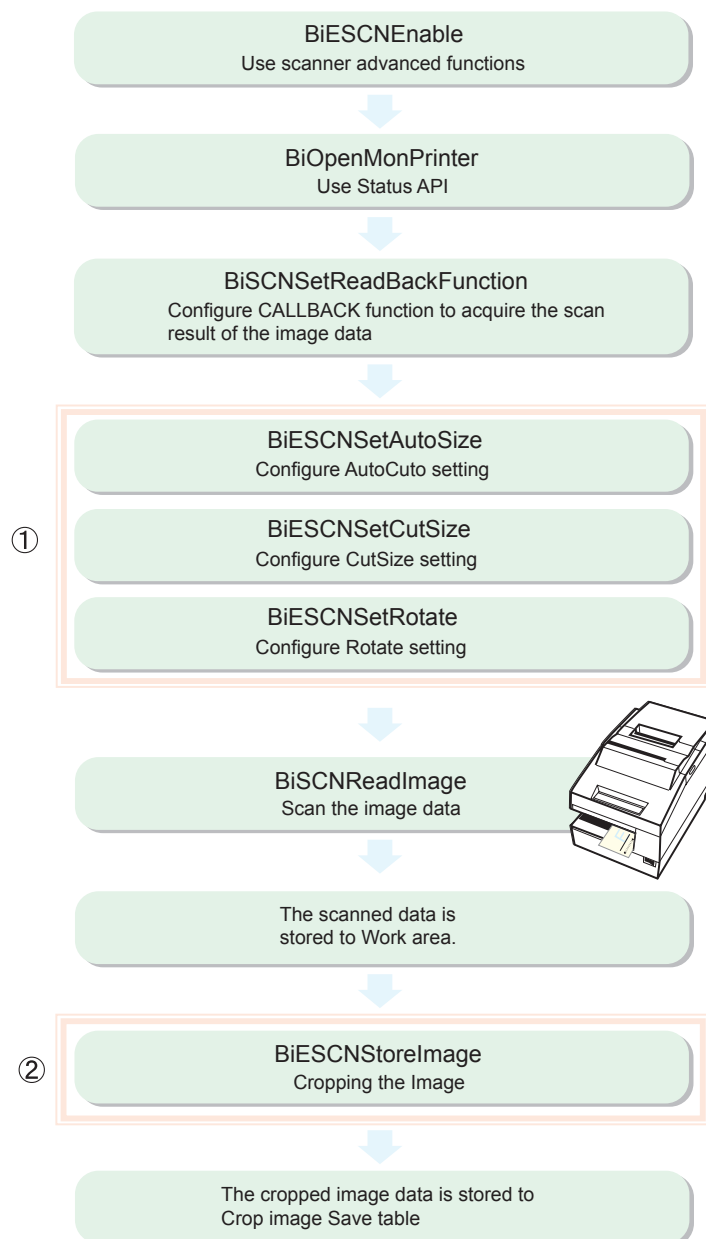
## Image data process

Process the image data by using the Status API scanner advanced functions.

The image data can be processed as follows.

**1** Processing when reading the image data (Configured before calling BiSCNReadImage)

**2** Processing after saving the image data to the work area



## Start using the scanner advanced functions

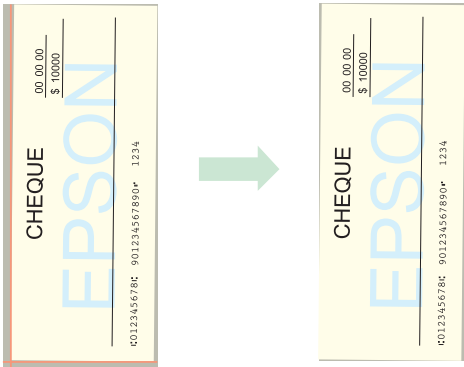
To use the scanner advanced functions, Call BiESCNEable before calling BiOpenMonPrinter that starts Status API. BiESCNEable is called as follows. Refer to ["BiESCNEable" on page 193](#).

**nErr = BiESCNEable (b.StoreType)**

## Processing when acquiring the image data

Configure the settings to call BiSCNReadImage and process when acquiring the image data. The following functions are available. For details regarding Status API, refer to ["Reference for Win32" on page 41](#).

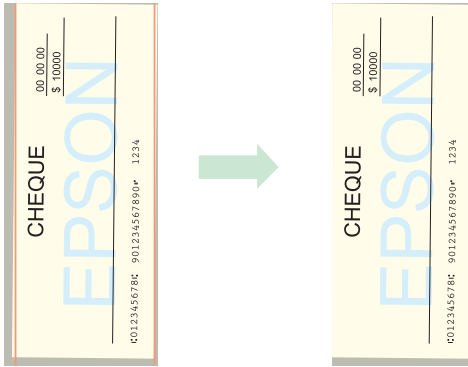
- AutoCuto Process



*This process crops the acquired image data by removing the left and bottom black margins.*

| Status API        | Page                | Description                           |
|-------------------|---------------------|---------------------------------------|
| BiESCNGetAutoSize | <a href="#">194</a> | Acquiring AutoCuto process settings   |
| BiESCNSetAutoSize | <a href="#">195</a> | Configuring AutoCuto process settings |

- CutSize Process



*This process crops the acquired image data to the specified size by removing the left and right margins.*

| Status API       | Page                | Description                          |
|------------------|---------------------|--------------------------------------|
| BiESCNGetCutSize | <a href="#">196</a> | Acquiring CutSize process settings   |
| BiESCNSetCutSize | <a href="#">197</a> | Configuring CutSize process settings |

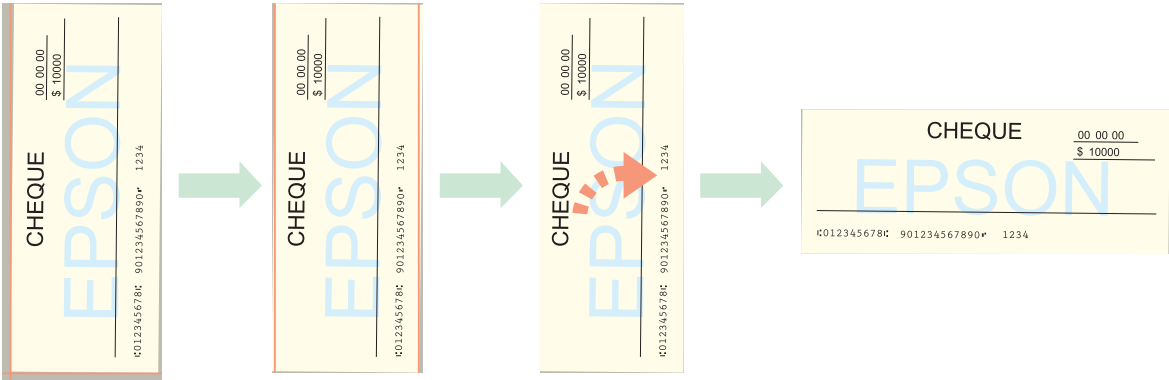
- Rotate Process



*This process rotates the acquired image data to the right by 90 degrees.*

| Status API      | Page | Description                         |
|-----------------|------|-------------------------------------|
| BiESCNGetRotate | 198  | Acquiring Rotate process settings   |
| BiESCNSetRotate | 199  | Configuring Rotate process settings |

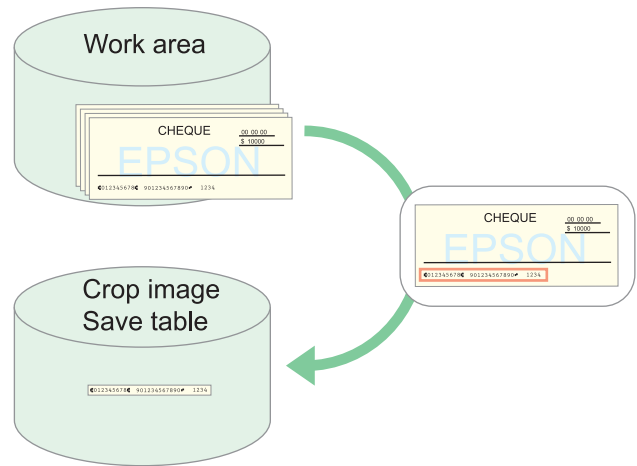
The following image data is processed by combining the AutoCuto process, CutSize process, and the Rotate process.



## Processing after saving the image data to the work area

This function processes the image data acquired by BiSCNReadImage after saving the data to the work area.

### Crop process



This process crops the specified area of the image data saved in the work area and names and saves the image data. For details regarding Status API, refer to [“Reference for Win32”](#) on page 41.

| Status API               | Page | Description                                                                                                                              |
|--------------------------|------|------------------------------------------------------------------------------------------------------------------------------------------|
| BiESCNDefineCropArea     | 202  | Registers and deletes the all of the cropped areas                                                                                       |
| BiESCNGetMaxCropAreas    | 204  | Acquires the number of cropped areas that can be registered                                                                              |
| BiESCNSStoreImage        | 205  | The registered area of the specified CropArea ID is cropped from the image data in the work area and saved to the Crop image save table. |
| BiESCNRtrieveImage       | 208  | Acquires cropped image data from the Crop image save table                                                                               |
| BiESCNClearImage         | 211  | Deletes cropped image data from the Crop image save table                                                                                |
| BiESCNGetRemainingImages | 213  | Acquires the number of image data that can be saved to the Crop image save table                                                         |





# Reference for Win32

This chapter describes the Status API and syntax used for each model. Refer to “[Model Information](#)” regarding the ASB and ink status for each printer, issues causing the printer to go offline, and maintenance counters.

NOTE

The data type is described in C++.

## Status API used for each model

Status API used for each model is as follows.

### BA-T500

| Status API                | Page                | Status API              | Page                |
|---------------------------|---------------------|-------------------------|---------------------|
| BiOpenMonPrinter          | <a href="#">59</a>  | BiCloseMonPrinter       | <a href="#">61</a>  |
| BiLockPrinter             | <a href="#">62</a>  | BiUnlockPrinter         | <a href="#">64</a>  |
| BiSetMonInterval          | <a href="#">65</a>  | BiSetMonEtherInterval   | <a href="#">66</a>  |
| BiDirectIO                | <a href="#">67</a>  | BiDirectIOEx            | <a href="#">69</a>  |
| BiResetPrinter            | <a href="#">73</a>  | BiCancelError           | <a href="#">75</a>  |
| BiGetType                 | <a href="#">77</a>  | BiGetStatus             | <a href="#">79</a>  |
| BiGetRealStatus           | <a href="#">80</a>  | BiSetStatusBackFunction | <a href="#">82</a>  |
| BiSetStatusBackFunctionEx | <a href="#">84</a>  | BiSetStatusBackWnd      | <a href="#">86</a>  |
| BiCancelStatusBack        | <a href="#">87</a>  | BiGetPrnCapability      | <a href="#">115</a> |
| BiSendDataFile            | <a href="#">121</a> | BiDirectSendRead        | <a href="#">123</a> |
| BiSetDefaultEchoTime      | <a href="#">126</a> | BiSetEtherEchoTime      | <a href="#">127</a> |
| BiSetReadWaitTimeOut      | <a href="#">128</a> |                         |                     |

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## EU-T300

| Status API                | Page                | Status API              | Page                |
|---------------------------|---------------------|-------------------------|---------------------|
| BiOpenMonPrinter          | <a href="#">59</a>  | BiCloseMonPrinter       | <a href="#">61</a>  |
| BiLockPrinter             | <a href="#">62</a>  | BiUnlockPrinter         | <a href="#">64</a>  |
| BiSetMonInterval          | <a href="#">65</a>  | BiSetMonEtherInterval   | <a href="#">66</a>  |
| BiDirectIO                | <a href="#">67</a>  | BiDirectIOEx            | <a href="#">69</a>  |
| BiResetPrinter            | <a href="#">73</a>  | BiCancelError           | <a href="#">75</a>  |
| BiGetType                 | <a href="#">77</a>  | BiGetStatus             | <a href="#">79</a>  |
| BiGetRealStatus           | <a href="#">80</a>  | BiSetStatusBackFunction | <a href="#">82</a>  |
| BiSetStatusBackFunctionEx | <a href="#">84</a>  | BiSetStatusBackWnd      | <a href="#">86</a>  |
| BiCancelStatusBack        | <a href="#">87</a>  | BiGetPrnCapability      | <a href="#">115</a> |
| BiSendDataFile            | <a href="#">121</a> | BiDirectSendRead        | <a href="#">123</a> |
| BiSetDefaultEchoTime      | <a href="#">126</a> | BiSetEtherEchoTime      | <a href="#">127</a> |
| BiSetReadWaitTimeOut      | <a href="#">128</a> |                         |                     |

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## EU-T400

| Status API                        | Page                | Status API                      | Page                |
|-----------------------------------|---------------------|---------------------------------|---------------------|
| BiOpenMonPrinter                  | <a href="#">59</a>  | BiCloseMonPrinter               | <a href="#">61</a>  |
| BiLockPrinter                     | <a href="#">62</a>  | BiUnlockPrinter                 | <a href="#">64</a>  |
| BiSetMonInterval                  | <a href="#">65</a>  | BiDirectIO                      | <a href="#">67</a>  |
| BiDirectIOEx                      | <a href="#">69</a>  | BiResetPrinter                  | <a href="#">73</a>  |
| BiCancelError                     | <a href="#">75</a>  | BiGetType                       | <a href="#">77</a>  |
| BiGetOfflineCode                  | <a href="#">78</a>  | BiGetStatus                     | <a href="#">79</a>  |
| BiGetRealStatus                   | <a href="#">80</a>  | BiSetStatusBackFunction         | <a href="#">82</a>  |
| BiSetStatusBackFunctionEx         | <a href="#">84</a>  | BiSetStatusBackWnd              | <a href="#">86</a>  |
| BiCancelStatusBack                | <a href="#">87</a>  | BiSetPresenterEventBackFunction | <a href="#">101</a> |
| BiSetPresenterEventBackFunctionEx | <a href="#">103</a> | BiSetPresenterEventBackWnd      | <a href="#">104</a> |
| BiCancelPresenterEventBack        | <a href="#">105</a> | BiEjectSheet                    | <a href="#">110</a> |
| BiGetCounter                      | <a href="#">111</a> | BiResetCounter                  | <a href="#">113</a> |
| BiGetPrnCapability                | <a href="#">115</a> | BiPreparePaperChange            | <a href="#">119</a> |
| BiRetractSheet                    | <a href="#">120</a> | BiSendDataFile                  | <a href="#">121</a> |
| BiDirectSendRead                  | <a href="#">123</a> | BiSetDefaultEchoTime            | <a href="#">126</a> |
| BiSetReadWaitTimeOut              | <a href="#">128</a> |                                 |                     |

## EU-T500

| Status API                        | Page                | Status API                      | Page                |
|-----------------------------------|---------------------|---------------------------------|---------------------|
| BiOpenMonPrinter                  | <a href="#">59</a>  | BiCloseMonPrinter               | <a href="#">61</a>  |
| BiLockPrinter                     | <a href="#">62</a>  | BiUnlockPrinter                 | <a href="#">64</a>  |
| BiSetMonInterval                  | <a href="#">65</a>  | BiDirectIO                      | <a href="#">67</a>  |
| BiDirectIOEx                      | <a href="#">69</a>  | BiResetPrinter                  | <a href="#">73</a>  |
| BiCancelError                     | <a href="#">75</a>  | BiGetType                       | <a href="#">77</a>  |
| BiGetOfflineCode                  | <a href="#">78</a>  | BiGetStatus                     | <a href="#">79</a>  |
| BiGetRealStatus                   | <a href="#">80</a>  | BiSetStatusBackFunction         | <a href="#">82</a>  |
| BiSetStatusBackFunctionEx         | <a href="#">84</a>  | BiSetStatusBackWnd              | <a href="#">86</a>  |
| BiCancelStatusBack                | <a href="#">87</a>  | BiSetPresenterEventBackFunction | <a href="#">101</a> |
| BiSetPresenterEventBackFunctionEx | <a href="#">103</a> | BiSetPresenterEventBackWnd      | <a href="#">104</a> |
| BiCancelPresenterEventBack        | <a href="#">105</a> | BiEjectSheet                    | <a href="#">110</a> |
| BiGetCounter                      | <a href="#">111</a> | BiResetCounter                  | <a href="#">113</a> |
| BiGetPrnCapability                | <a href="#">115</a> | BiPreparePaperChange            | <a href="#">119</a> |
| BiRetractSheet                    | <a href="#">120</a> | BiSendDataFile                  | <a href="#">121</a> |
| BiDirectSendRead                  | <a href="#">123</a> | BiSetDefaultEchoTime            | <a href="#">126</a> |
| BiSetReadWaitTimeOut              | <a href="#">128</a> |                                 |                     |

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| BiSetMonInterval             | <a href="#">65</a>  | BiSetMonEtherInterval      | <a href="#">66</a>  |
| BiDirectIO                   | <a href="#">67</a>  | BiDirectIOEx               | <a href="#">69</a>  |
| BiResetPrinter               | <a href="#">73</a>  | BiGetOfflineCode           | <a href="#">78</a>  |
| BiGetStatus                  | <a href="#">79</a>  | BiGetRealStatus            | <a href="#">80</a>  |
| BiSetStatusBackFunction      | <a href="#">82</a>  | BiSetStatusBackFunctionEx  | <a href="#">84</a>  |
| BiSetStatusBackWnd           | <a href="#">86</a>  | BiCancelStatusBack         | <a href="#">87</a>  |
| BiGetInkStatus               | <a href="#">88</a>  | BiSetInkStatusBackFunction | <a href="#">89</a>  |
| BiSetInkStatusBackFunctionEx | <a href="#">91</a>  | BiSetInkStatusBackWnd      | <a href="#">93</a>  |
| BiCancelInkStatusBack        | <a href="#">94</a>  | BiGetCounter               | <a href="#">111</a> |
| BiResetCounter               | <a href="#">113</a> | BiGetPrnCapability         | <a href="#">115</a> |
| BiSendDataFile               | <a href="#">121</a> | BiDirectSendRead           | <a href="#">123</a> |
| BiSetDefaultEchoTime         | <a href="#">126</a> | BiSetReadWaitTimeOut       | <a href="#">128</a> |

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| BiLockPrinter                 | <a href="#">62</a>  | BiUnlockPrinter                | <a href="#">64</a>  |
| BiSetMonInterval              | <a href="#">65</a>  | BiSetMonEtherInterval          | <a href="#">66</a>  |
| BiDirectIO                    | <a href="#">67</a>  | BiDirectIOEx                   | <a href="#">69</a>  |
| BiResetPrinter                | <a href="#">73</a>  | BiCancelError                  | <a href="#">75</a>  |
| BiGetType                     | <a href="#">77</a>  | BiGetStatus                    | <a href="#">79</a>  |
| BiGetRealStatus               | <a href="#">80</a>  | BiSetStatusBackFunction        | <a href="#">82</a>  |
| BiSetStatusBackFunctionEx     | <a href="#">84</a>  | BiSetStatusBackWnd             | <a href="#">86</a>  |
| BiCancelStatusBack            | <a href="#">87</a>  | BiGetCounter                   | <a href="#">111</a> |
| BiResetCounter                | <a href="#">113</a> | BiGetPrnCapability             | <a href="#">115</a> |
| BiOpenDrawer                  | <a href="#">117</a> | BiSendDataFile                 | <a href="#">121</a> |
| BiDirectSendRead              | <a href="#">123</a> | BiSetDefaultEchoTime           | <a href="#">126</a> |
| BiSetEtherEchoTime            | <a href="#">127</a> | BiSetReadWaitTimeOut           | <a href="#">128</a> |
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| BiMICREjectCheck              | <a href="#">135</a> | BiMICRCancelWaitCheckInsertion | <a href="#">136</a> |
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| BiDirectIO                    | <a href="#">67</a>  | BiDirectIOEx                   | <a href="#">69</a>  |
| BiResetPrinter                | <a href="#">73</a>  | BiCancelError                  | <a href="#">75</a>  |
| BiGetType                     | <a href="#">77</a>  | BiGetStatus                    | <a href="#">79</a>  |
| BiGetRealStatus               | <a href="#">80</a>  | BiSetStatusBackFunction        | <a href="#">82</a>  |
| BiSetStatusBackFunctionEx     | <a href="#">84</a>  | BiSetStatusBackWnd             | <a href="#">86</a>  |
| BiCancelStatusBack            | <a href="#">87</a>  | BiGetCounter                   | <a href="#">111</a> |
| BiResetCounter                | <a href="#">113</a> | BiGetPrnCapability             | <a href="#">115</a> |
| BiOpenDrawer                  | <a href="#">117</a> | BiSendDataFile                 | <a href="#">121</a> |
| BiDirectSendRead              | <a href="#">123</a> | BiSetDefaultEchoTime           | <a href="#">126</a> |
| BiSetEtherEchoTime            | <a href="#">127</a> | BiSetReadWaitTimeOut           | <a href="#">128</a> |
| BiMICRCleaning                | <a href="#">129</a> | BiMICRGetStatus                | <a href="#">130</a> |
| BiMICRLoadCheck               | <a href="#">132</a> | BiMICRReadCheck                | <a href="#">133</a> |
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| BiLockPrinter                  | <a href="#">62</a>  | BiUnlockPrinter                | <a href="#">64</a>  |
| BiSetMonInterval               | <a href="#">65</a>  | BiSetMonEtherInterval          | <a href="#">66</a>  |
| BiDirectIO                     | <a href="#">67</a>  | BiDirectIOEx                   | <a href="#">69</a>  |
| BiResetPrinter                 | <a href="#">73</a>  | BiCancelError                  | <a href="#">75</a>  |
| BiGetType                      | <a href="#">77</a>  | BiGetStatus                    | <a href="#">79</a>  |
| BiGetRealStatus                | <a href="#">80</a>  | BiSetStatusBackFunction        | <a href="#">82</a>  |
| BiSetStatusBackFunctionEx      | <a href="#">84</a>  | BiSetStatusBackWnd             | <a href="#">86</a>  |
| BiCancelStatusBack             | <a href="#">87</a>  | BiGetCounter                   | <a href="#">111</a> |
| BiResetCounter                 | <a href="#">113</a> | BiGetPrnCapability             | <a href="#">115</a> |
| BiOpenDrawer                   | <a href="#">117</a> | BiSendDataFile                 | <a href="#">121</a> |
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| BiMICRRetransmissionCheckData  | <a href="#">137</a> | BiMICRSelectDataHandling       | <a href="#">139</a> |
| BiMICRSetReadBackFunction      | <a href="#">141</a> | BiMICRSetReadBackFunctionEx    | <a href="#">144</a> |
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| BiESCNSetAutoSize              | <a href="#">195</a> | BiESCNGetCutSize               | <a href="#">196</a> |
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| BiDirectIO                     | 67   | BiDirectIOEx                   | 69   |
| BiResetPrinter                 | 73   | BiCancelError                  | 75   |
| BiGetType                      | 77   | BiGetStatus                    | 79   |
| BiGetRealStatus                | 80   | BiSetStatusBackFunction        | 82   |
| BiSetStatusBackFunctionEx      | 84   | BiSetStatusBackWnd             | 86   |
| BiCancelStatusBack             | 87   | BiGetCounter                   | 111  |
| BiResetCounter                 | 113  | BiGetPrnCapability             | 115  |
| BiOpenDrawer                   | 117  | BiSendDataFile                 | 121  |
| BiDirectSendRead               | 123  | BiSetDefaultEchoTime           | 126  |
| BiSetEtherEchoTime             | 127  | BiSetReadWaitTimeOut           | 128  |
| BiMICRCleaning                 | 129  | BiMICRGetStatus                | 130  |
| BiMICRLoadCheck                | 132  | BiMICRReadCheck                | 133  |
| BiMICREjectCheck               | 135  | BiMICRCancelWaitCheckInsertion | 136  |
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| BiMICRSetReadBackFunction      | 141  | BiMICRSetReadBackFunctionEx    | 144  |
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| BiSetMonInterval              | <a href="#">65</a>  | BiSetMonEtherInterval          | <a href="#">66</a>  |
| BiDirectIO                    | <a href="#">67</a>  | BiDirectIOEx                   | <a href="#">69</a>  |
| BiResetPrinter                | <a href="#">73</a>  | BiCancelError                  | <a href="#">75</a>  |
| BiGetType                     | <a href="#">77</a>  | BiGetOfflineCode               | <a href="#">78</a>  |
| BiGetStatus                   | <a href="#">79</a>  | BiGetRealStatus                | <a href="#">80</a>  |
| BiSetStatusBackFunction       | <a href="#">82</a>  | BiSetStatusBackFunctionEx      | <a href="#">84</a>  |
| BiSetStatusBackWnd            | <a href="#">86</a>  | BiCancelStatusBack             | <a href="#">87</a>  |
| BiGetInkStatus                | <a href="#">88</a>  | BiSetInkStatusBackFunction     | <a href="#">89</a>  |
| BiSetInkStatusBackFunctionEx  | <a href="#">91</a>  | BiSetInkStatusBackWnd          | <a href="#">93</a>  |
| BiCancelInkStatusBack         | <a href="#">94</a>  | BiGetCounter                   | <a href="#">111</a> |
| BiResetCounter                | <a href="#">113</a> | BiGetPrnCapability             | <a href="#">115</a> |
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| BiSetEtherEchoTime            | <a href="#">127</a> | BiSetReadWaitTimeOut           | <a href="#">128</a> |
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| BiMICRSetReadBackFunction     | <a href="#">141</a> | BiMICRSetReadBackFunctionEx    | <a href="#">144</a> |
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| BiSetMonInterval             | <a href="#">65</a>  | BiSetMonEtherInterval      | <a href="#">66</a>  |
| BiDirectIO                   | <a href="#">67</a>  | BiDirectIOEx               | <a href="#">69</a>  |
| BiResetPrinter               | <a href="#">73</a>  | BiCancelError              | <a href="#">75</a>  |
| BiGetType                    | <a href="#">77</a>  | BiGetOfflineCode           | <a href="#">78</a>  |
| BiGetStatus                  | <a href="#">79</a>  | BiGetRealStatus            | <a href="#">80</a>  |
| BiSetStatusBackFunction      | <a href="#">82</a>  | BiSetStatusBackFunctionEx  | <a href="#">84</a>  |
| BiSetStatusBackWnd           | <a href="#">86</a>  | BiCancelStatusBack         | <a href="#">87</a>  |
| BiGetInkStatus               | <a href="#">88</a>  | BiSetInkStatusBackFunction | <a href="#">89</a>  |
| BiSetInkStatusBackFunctionEx | <a href="#">91</a>  | BiSetInkStatusBackWnd      | <a href="#">93</a>  |
| BiCancelInkStatusBack        | <a href="#">94</a>  | BiGetCounter               | <a href="#">111</a> |
| BiResetCounter               | <a href="#">113</a> | BiGetPrnCapability         | <a href="#">115</a> |
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| BiLockPrinter             | <a href="#">62</a>  | BiUnlockPrinter         | <a href="#">64</a>  |
| BiSetMonInterval          | <a href="#">65</a>  | BiDirectIO              | <a href="#">67</a>  |
| BiDirectIOEx              | <a href="#">69</a>  | BiResetPrinter          | <a href="#">73</a>  |
| BiGetType                 | <a href="#">77</a>  | BiGetStatus             | <a href="#">79</a>  |
| BiGetRealStatus           | <a href="#">80</a>  | BiSetStatusBackFunction | <a href="#">82</a>  |
| BiSetStatusBackFunctionEx | <a href="#">84</a>  | BiSetStatusBackWnd      | <a href="#">86</a>  |
| BiCancelStatusBack        | <a href="#">87</a>  | BiGetPrnCapability      | <a href="#">115</a> |
| BiSendDataFile            | <a href="#">121</a> | BiDirectSendRead        | <a href="#">123</a> |
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| BiLockPrinter           | <a href="#">62</a>  | BiUnlockPrinter           | <a href="#">64</a>  |
| BiSetMonInterval        | <a href="#">65</a>  | BiSetMonEtherInterval     | <a href="#">66</a>  |
| BiDirectIO              | <a href="#">67</a>  | BiDirectIOEx              | <a href="#">69</a>  |
| BiResetPrinter          | <a href="#">73</a>  | BiCancelError             | <a href="#">75</a>  |
| BiGetType               | <a href="#">77</a>  | BiGetOfflineCode          | <a href="#">78</a>  |
| BiGetStatus             | <a href="#">79</a>  | BiGetRealStatus           | <a href="#">80</a>  |
| BiSetStatusBackFunction | <a href="#">82</a>  | BiSetStatusBackFunctionEx | <a href="#">84</a>  |
| BiSetStatusBackWnd      | <a href="#">86</a>  | BiCancelStatusBack        | <a href="#">87</a>  |
| BiGetCounter            | <a href="#">111</a> | BiResetCounter            | <a href="#">113</a> |
| BiGetPrnCapability      | <a href="#">115</a> | BiOpenDrawer              | <a href="#">117</a> |
| BiSendDataFile          | <a href="#">121</a> | BiDirectSendRead          | <a href="#">123</a> |
| BiSetDefaultEchoTime    | <a href="#">126</a> | BiSetEtherEchoTime        | <a href="#">127</a> |
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| BiOpenMonPrinter        | <a href="#">59</a>  | BiCloseMonPrinter         | <a href="#">61</a>  |
| BiLockPrinter           | <a href="#">62</a>  | BiUnlockPrinter           | <a href="#">64</a>  |
| BiSetMonInterval        | <a href="#">65</a>  | BiSetMonEtherInterval     | <a href="#">66</a>  |
| BiDirectIO              | <a href="#">67</a>  | BiDirectIOEx              | <a href="#">69</a>  |
| BiResetPrinter          | <a href="#">73</a>  | BiCancelError             | <a href="#">75</a>  |
| BiGetType               | <a href="#">77</a>  | BiGetOfflineCode          | <a href="#">78</a>  |
| BiGetStatus             | <a href="#">79</a>  | BiGetRealStatus           | <a href="#">80</a>  |
| BiSetStatusBackFunction | <a href="#">82</a>  | BiSetStatusBackFunctionEx | <a href="#">84</a>  |
| BiSetStatusBackWnd      | <a href="#">86</a>  | BiCancelStatusBack        | <a href="#">87</a>  |
| BiGetCounter            | <a href="#">111</a> | BiResetCounter            | <a href="#">113</a> |
| BiGetPrnCapability      | <a href="#">115</a> | BiOpenDrawer              | <a href="#">117</a> |
| BiSendDataFile          | <a href="#">121</a> | BiDirectSendRead          | <a href="#">123</a> |
| BiSetDefaultEchoTime    | <a href="#">126</a> | BiSetEtherEchoTime        | <a href="#">127</a> |
| BiSetReadWaitTimeOut    | <a href="#">128</a> |                           |                     |

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| BiOpenMonPrinter                 | <a href="#">59</a>  | BiCloseMonPrinter           | <a href="#">61</a>  |
| BiLockPrinter                    | <a href="#">62</a>  | BiUnlockPrinter             | <a href="#">64</a>  |
| BiSetMonInterval                 | <a href="#">65</a>  | BiSetMonEtherInterval       | <a href="#">66</a>  |
| BiDirectIO                       | <a href="#">67</a>  | BiDirectIOEx                | <a href="#">69</a>  |
| BiResetPrinter                   | <a href="#">73</a>  | BiCancelError               | <a href="#">75</a>  |
| BiGetType                        | <a href="#">77</a>  | BiGetStatus                 | <a href="#">79</a>  |
| BiGetRealStatus                  | <a href="#">80</a>  | BiSetStatusBackFunction     | <a href="#">82</a>  |
| BiSetStatusBackFunctionEx        | <a href="#">84</a>  | BiSetStatusBackWnd          | <a href="#">86</a>  |
| BiCancelStatusBack               | <a href="#">87</a>  | BiGetBatteryStatus          | <a href="#">95</a>  |
| BiSetBatteryStatusBackFunctionEx | <a href="#">97</a>  | BiSetBatteryStatusBackWndEx | <a href="#">99</a>  |
| BiCancelBatteryStatusBack        | <a href="#">100</a> | BiAutoPowerOffTime          | <a href="#">106</a> |
| BiPowerOff                       | <a href="#">108</a> | BiGetCounter                | <a href="#">111</a> |
| BiResetCounter                   | <a href="#">113</a> | BiGetPrnCapability          | <a href="#">115</a> |
| BiSendDataFile                   | <a href="#">121</a> | BiDirectSendRead            | <a href="#">123</a> |
| BiSetDefaultEchoTime             | <a href="#">126</a> | BiSetEtherEchoTime          | <a href="#">127</a> |
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| BiLockPrinter                    | <a href="#">62</a>  | BiUnlockPrinter             | <a href="#">64</a>  |
| BiSetMonInterval                 | <a href="#">65</a>  | BiSetMonEtherInterval       | <a href="#">66</a>  |
| BiDirectIO                       | <a href="#">67</a>  | BiDirectIOEx                | <a href="#">69</a>  |
| BiResetPrinter                   | <a href="#">73</a>  | BiCancelError               | <a href="#">75</a>  |
| BiGetType                        | <a href="#">77</a>  | BiGetStatus                 | <a href="#">79</a>  |
| BiGetRealStatus                  | <a href="#">80</a>  | BiSetStatusBackFunction     | <a href="#">82</a>  |
| BiSetStatusBackFunctionEx        | <a href="#">84</a>  | BiSetStatusBackWnd          | <a href="#">86</a>  |
| BiCancelStatusBack               | <a href="#">87</a>  | BiGetBatteryStatus          | <a href="#">95</a>  |
| BiSetBatteryStatusBackFunctionEx | <a href="#">97</a>  | BiSetBatteryStatusBackWndEx | <a href="#">99</a>  |
| BiCancelBatteryStatusBack        | <a href="#">100</a> | BiAutoPowerOffTime          | <a href="#">106</a> |
| BiPowerOff                       | <a href="#">108</a> | BiGetCounter                | <a href="#">111</a> |
| BiResetCounter                   | <a href="#">113</a> | BiGetPrnCapability          | <a href="#">115</a> |
| BiSendDataFile                   | <a href="#">121</a> | BiDirectSendRead            | <a href="#">123</a> |
| BiSetDefaultEchoTime             | <a href="#">126</a> | BiSetEtherEchoTime          | <a href="#">127</a> |
| BiSetReadWaitTimeOut             | <a href="#">128</a> |                             |                     |

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## TM-T70

| Status API                | Page                | Status API              | Page                |
|---------------------------|---------------------|-------------------------|---------------------|
| BiOpenMonPrinter          | <a href="#">59</a>  | BiCloseMonPrinter       | <a href="#">61</a>  |
| BiLockPrinter             | <a href="#">62</a>  | BiUnlockPrinter         | <a href="#">64</a>  |
| BiSetMonInterval          | <a href="#">65</a>  | BiSetMonEtherInterval   | <a href="#">66</a>  |
| BiDirectIO                | <a href="#">67</a>  | BiDirectIOEx            | <a href="#">69</a>  |
| BiResetPrinter            | <a href="#">73</a>  | BiCancelError           | <a href="#">75</a>  |
| BiGetType                 | <a href="#">77</a>  | BiGetStatus             | <a href="#">79</a>  |
| BiGetRealStatus           | <a href="#">80</a>  | BiSetStatusBackFunction | <a href="#">82</a>  |
| BiSetStatusBackFunctionEx | <a href="#">84</a>  | BiSetStatusBackWnd      | <a href="#">86</a>  |
| BiCancelStatusBack        | <a href="#">87</a>  | BiPowerOff              | <a href="#">108</a> |
| BiGetCounter              | <a href="#">111</a> | BiResetCounter          | <a href="#">113</a> |
| BiGetPrnCapability        | <a href="#">115</a> | BiOpenDrawer            | <a href="#">117</a> |
| BiSendDataFile            | <a href="#">121</a> | BiDirectSendRead        | <a href="#">123</a> |
| BiSetDefaultEchoTime      | <a href="#">126</a> | BiSetEtherEchoTime      | <a href="#">127</a> |
| BiSetReadWaitTimeOut      | <a href="#">128</a> |                         |                     |

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## TM-T88III

| Status API                | Page                | Status API              | Page                |
|---------------------------|---------------------|-------------------------|---------------------|
| BiOpenMonPrinter          | <a href="#">59</a>  | BiCloseMonPrinter       | <a href="#">61</a>  |
| BiLockPrinter             | <a href="#">62</a>  | BiUnlockPrinter         | <a href="#">64</a>  |
| BiSetMonInterval          | <a href="#">65</a>  | BiSetMonEtherInterval   | <a href="#">66</a>  |
| BiDirectIO                | <a href="#">67</a>  | BiDirectIOEx            | <a href="#">69</a>  |
| BiResetPrinter            | <a href="#">73</a>  | BiCancelError           | <a href="#">75</a>  |
| BiGetType                 | <a href="#">77</a>  | BiGetStatus             | <a href="#">79</a>  |
| BiGetRealStatus           | <a href="#">80</a>  | BiSetStatusBackFunction | <a href="#">82</a>  |
| BiSetStatusBackFunctionEx | <a href="#">84</a>  | BiSetStatusBackWnd      | <a href="#">86</a>  |
| BiCancelStatusBack        | <a href="#">87</a>  | BiGetPrnCapability      | <a href="#">115</a> |
| BiOpenDrawer              | <a href="#">117</a> | BiSendDataFile          | <a href="#">121</a> |
| BiDirectSendRead          | <a href="#">123</a> | BiSetDefaultEchoTime    | <a href="#">126</a> |
| BiSetEtherEchoTime        | <a href="#">127</a> | BiSetReadWaitTimeOut    | <a href="#">128</a> |

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**TM-T88IV**

| Status API                | Page                | Status API              | Page                |
|---------------------------|---------------------|-------------------------|---------------------|
| BiOpenMonPrinter          | <a href="#">59</a>  | BiCloseMonPrinter       | <a href="#">61</a>  |
| BiLockPrinter             | <a href="#">62</a>  | BiUnlockPrinter         | <a href="#">64</a>  |
| BiSetMonInterval          | <a href="#">65</a>  | BiSetMonEtherInterval   | <a href="#">66</a>  |
| BiDirectIO                | <a href="#">67</a>  | BiDirectIOEx            | <a href="#">69</a>  |
| BiResetPrinter            | <a href="#">73</a>  | BiCancelError           | <a href="#">75</a>  |
| BiGetType                 | <a href="#">77</a>  | BiGetStatus             | <a href="#">79</a>  |
| BiGetRealStatus           | <a href="#">80</a>  | BiSetStatusBackFunction | <a href="#">82</a>  |
| BiSetStatusBackFunctionEx | <a href="#">84</a>  | BiSetStatusBackWnd      | <a href="#">86</a>  |
| BiCancelStatusBack        | <a href="#">87</a>  | BiPowerOff              | <a href="#">108</a> |
| BiGetCounter              | <a href="#">111</a> | BiResetCounter          | <a href="#">113</a> |
| BiGetPrnCapability        | <a href="#">115</a> | BiOpenDrawer            | <a href="#">117</a> |
| BiSendDataFile            | <a href="#">121</a> | BiDirectSendRead        | <a href="#">123</a> |
| BiSetDefaultEchoTime      | <a href="#">126</a> | BiSetEtherEchoTime      | <a href="#">127</a> |
| BiSetReadWaitTimeOut      | <a href="#">128</a> |                         |                     |

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**TM-T88IV ReStick**

| Status API                | Page                | Status API              | Page                |
|---------------------------|---------------------|-------------------------|---------------------|
| BiOpenMonPrinter          | <a href="#">59</a>  | BiCloseMonPrinter       | <a href="#">61</a>  |
| BiLockPrinter             | <a href="#">62</a>  | BiUnlockPrinter         | <a href="#">64</a>  |
| BiSetMonInterval          | <a href="#">65</a>  | BiSetMonEtherInterval   | <a href="#">66</a>  |
| BiDirectIO                | <a href="#">67</a>  | BiDirectIOEx            | <a href="#">69</a>  |
| BiResetPrinter            | <a href="#">73</a>  | BiCancelError           | <a href="#">75</a>  |
| BiGetType                 | <a href="#">77</a>  | BiGetStatus             | <a href="#">79</a>  |
| BiGetRealStatus           | <a href="#">80</a>  | BiSetStatusBackFunction | <a href="#">82</a>  |
| BiSetStatusBackFunctionEx | <a href="#">84</a>  | BiSetStatusBackWnd      | <a href="#">86</a>  |
| BiCancelStatusBack        | <a href="#">87</a>  | BiPowerOff              | <a href="#">108</a> |
| BiGetCounter              | <a href="#">111</a> | BiResetCounter          | <a href="#">113</a> |
| BiGetPrnCapability        | <a href="#">115</a> | BiOpenDrawer            | <a href="#">117</a> |
| BiSendDataFile            | <a href="#">121</a> | BiDirectSendRead        | <a href="#">123</a> |
| BiSetDefaultEchoTime      | <a href="#">126</a> | BiSetEtherEchoTime      | <a href="#">127</a> |
| BiSetReadWaitTimeOut      | <a href="#">128</a> |                         |                     |

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## TM-T90

| Status API              | Page                | Status API                | Page                |
|-------------------------|---------------------|---------------------------|---------------------|
| BiOpenMonPrinter        | <a href="#">59</a>  | BiCloseMonPrinter         | <a href="#">61</a>  |
| BiLockPrinter           | <a href="#">62</a>  | BiUnlockPrinter           | <a href="#">64</a>  |
| BiSetMonInterval        | <a href="#">65</a>  | BiSetMonEtherInterval     | <a href="#">66</a>  |
| BiDirectIO              | <a href="#">67</a>  | BiDirectIOEx              | <a href="#">69</a>  |
| BiResetPrinter          | <a href="#">73</a>  | BiCancelError             | <a href="#">75</a>  |
| BiGetType               | <a href="#">77</a>  | BiGetOfflineCode          | <a href="#">78</a>  |
| BiGetStatus             | <a href="#">79</a>  | BiGetRealStatus           | <a href="#">80</a>  |
| BiSetStatusBackFunction | <a href="#">82</a>  | BiSetStatusBackFunctionEx | <a href="#">84</a>  |
| BiSetStatusBackWnd      | <a href="#">86</a>  | BiCancelStatusBack        | <a href="#">87</a>  |
| BiGetCounter            | <a href="#">111</a> | BiResetCounter            | <a href="#">113</a> |
| BiGetPrnCapability      | <a href="#">115</a> | BiOpenDrawer              | <a href="#">117</a> |
| BiSendDataFile          | <a href="#">121</a> | BiDirectSendRead          | <a href="#">123</a> |
| BiSetDefaultEchoTime    | <a href="#">126</a> | BiSetEtherEchoTime        | <a href="#">127</a> |
| BiSetReadWaitTimeOut    | <a href="#">128</a> |                           |                     |

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## TM-U120

| Status API              | Page                | Status API                | Page                |
|-------------------------|---------------------|---------------------------|---------------------|
| BiOpenMonPrinter        | <a href="#">59</a>  | BiCloseMonPrinter         | <a href="#">61</a>  |
| BiLockPrinter           | <a href="#">62</a>  | BiUnlockPrinter           | <a href="#">64</a>  |
| BiSetMonInterval        | <a href="#">65</a>  | BiDirectIO                | <a href="#">67</a>  |
| BiDirectIOEx            | <a href="#">69</a>  | BiResetPrinter            | <a href="#">73</a>  |
| BiCancelError           | <a href="#">75</a>  | BiGetType                 | <a href="#">77</a>  |
| BiGetStatus             | <a href="#">79</a>  | BiGetRealStatus           | <a href="#">80</a>  |
| BiSetStatusBackFunction | <a href="#">82</a>  | BiSetStatusBackFunctionEx | <a href="#">84</a>  |
| BiSetStatusBackWnd      | <a href="#">86</a>  | BiCancelStatusBack        | <a href="#">87</a>  |
| BiGetPrnCapability      | <a href="#">115</a> | BiOpenDrawer              | <a href="#">117</a> |
| BiSendDataFile          | <a href="#">121</a> | BiDirectSendRead          | <a href="#">123</a> |
| BiSetDefaultEchoTime    | <a href="#">126</a> | BiSetReadWaitTimeOut      | <a href="#">128</a> |

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**TM-U120II**

| Status API              | Page                | Status API                | Page                |
|-------------------------|---------------------|---------------------------|---------------------|
| BiOpenMonPrinter        | <a href="#">59</a>  | BiCloseMonPrinter         | <a href="#">61</a>  |
| BiLockPrinter           | <a href="#">62</a>  | BiUnlockPrinter           | <a href="#">64</a>  |
| BiSetMonInterval        | <a href="#">65</a>  | BiDirectIO                | <a href="#">67</a>  |
| BiDirectIOEx            | <a href="#">69</a>  | BiResetPrinter            | <a href="#">73</a>  |
| BiCancelError           | <a href="#">75</a>  | BiGetType                 | <a href="#">77</a>  |
| BiGetStatus             | <a href="#">79</a>  | BiGetRealStatus           | <a href="#">80</a>  |
| BiSetStatusBackFunction | <a href="#">82</a>  | BiSetStatusBackFunctionEx | <a href="#">84</a>  |
| BiSetStatusBackWnd      | <a href="#">86</a>  | BiCancelStatusBack        | <a href="#">87</a>  |
| BiGetPrnCapability      | <a href="#">115</a> | BiOpenDrawer              | <a href="#">117</a> |
| BiSendDataFile          | <a href="#">121</a> | BiDirectSendRead          | <a href="#">123</a> |
| BiSetDefaultEchoTime    | <a href="#">126</a> | BiSetReadWaitTimeOut      | <a href="#">128</a> |

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**TM-U220**

| Status API                | Page                | Status API              | Page                |
|---------------------------|---------------------|-------------------------|---------------------|
| BiOpenMonPrinter          | <a href="#">59</a>  | BiCloseMonPrinter       | <a href="#">61</a>  |
| BiLockPrinter             | <a href="#">62</a>  | BiUnlockPrinter         | <a href="#">64</a>  |
| BiSetMonInterval          | <a href="#">65</a>  | BiSetMonEtherInterval   | <a href="#">66</a>  |
| BiDirectIO                | <a href="#">67</a>  | BiDirectIOEx            | <a href="#">69</a>  |
| BiResetPrinter            | <a href="#">73</a>  | BiCancelError           | <a href="#">75</a>  |
| BiGetType                 | <a href="#">77</a>  | BiGetStatus             | <a href="#">79</a>  |
| BiGetRealStatus           | <a href="#">80</a>  | BiSetStatusBackFunction | <a href="#">82</a>  |
| BiSetStatusBackFunctionEx | <a href="#">84</a>  | BiSetStatusBackWnd      | <a href="#">86</a>  |
| BiCancelStatusBack        | <a href="#">87</a>  | BiGetPrnCapability      | <a href="#">115</a> |
| BiOpenDrawer              | <a href="#">117</a> | BiSendDataFile          | <a href="#">121</a> |
| BiDirectSendRead          | <a href="#">123</a> | BiSetDefaultEchoTime    | <a href="#">126</a> |
| BiSetEtherEchoTime        | <a href="#">127</a> | BiSetReadWaitTimeOut    | <a href="#">128</a> |

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## TM-U230

| Status API                | Page                | Status API              | Page                |
|---------------------------|---------------------|-------------------------|---------------------|
| BiOpenMonPrinter          | <a href="#">59</a>  | BiCloseMonPrinter       | <a href="#">61</a>  |
| BiLockPrinter             | <a href="#">62</a>  | BiUnlockPrinter         | <a href="#">64</a>  |
| BiSetMonInterval          | <a href="#">65</a>  | BiSetMonEtherInterval   | <a href="#">66</a>  |
| BiDirectIO                | <a href="#">67</a>  | BiDirectIOEx            | <a href="#">69</a>  |
| BiResetPrinter            | <a href="#">73</a>  | BiCancelError           | <a href="#">75</a>  |
| BiGetType                 | <a href="#">77</a>  | BiGetStatus             | <a href="#">79</a>  |
| BiGetRealStatus           | <a href="#">80</a>  | BiSetStatusBackFunction | <a href="#">82</a>  |
| BiSetStatusBackFunctionEx | <a href="#">84</a>  | BiSetStatusBackWnd      | <a href="#">86</a>  |
| BiCancelStatusBack        | <a href="#">87</a>  | BiGetPrnCapability      | <a href="#">115</a> |
| BiSendDataFile            | <a href="#">121</a> | BiDirectSendRead        | <a href="#">123</a> |
| BiSetDefaultEchoTime      | <a href="#">126</a> | BiSetEtherEchoTime      | <a href="#">127</a> |
| BiSetReadWaitTimeOut      | <a href="#">128</a> |                         |                     |

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## TM-U295

| Status API                | Page                | Status API              | Page                |
|---------------------------|---------------------|-------------------------|---------------------|
| BiOpenMonPrinter          | <a href="#">59</a>  | BiCloseMonPrinter       | <a href="#">61</a>  |
| BiLockPrinter             | <a href="#">62</a>  | BiUnlockPrinter         | <a href="#">64</a>  |
| BiSetMonInterval          | <a href="#">65</a>  | BiDirectIO              | <a href="#">67</a>  |
| BiDirectIOEx              | <a href="#">69</a>  | BiResetPrinter          | <a href="#">73</a>  |
| BiGetType                 | <a href="#">77</a>  | BiGetStatus             | <a href="#">79</a>  |
| BiGetRealStatus           | <a href="#">80</a>  | BiSetStatusBackFunction | <a href="#">82</a>  |
| BiSetStatusBackFunctionEx | <a href="#">84</a>  | BiSetStatusBackWnd      | <a href="#">86</a>  |
| BiCancelStatusBack        | <a href="#">87</a>  | BiGetPrnCapability      | <a href="#">115</a> |
| BiSendDataFile            | <a href="#">121</a> | BiDirectSendRead        | <a href="#">123</a> |
| BiSetDefaultEchoTime      | <a href="#">126</a> | BiSetReadWaitTimeOut    | <a href="#">128</a> |



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**TM-U375**

| Status API                | Page                | Status API              | Page                |
|---------------------------|---------------------|-------------------------|---------------------|
| BiOpenMonPrinter          | <a href="#">59</a>  | BiCloseMonPrinter       | <a href="#">61</a>  |
| BiLockPrinter             | <a href="#">62</a>  | BiUnlockPrinter         | <a href="#">64</a>  |
| BiSetMonInterval          | <a href="#">65</a>  | BiDirectIO              | <a href="#">67</a>  |
| BiDirectIOEx              | <a href="#">69</a>  | BiResetPrinter          | <a href="#">73</a>  |
| BiGetType                 | <a href="#">77</a>  | BiGetStatus             | <a href="#">79</a>  |
| BiGetRealStatus           | <a href="#">80</a>  | BiSetStatusBackFunction | <a href="#">82</a>  |
| BiSetStatusBackFunctionEx | <a href="#">84</a>  | BiSetStatusBackWnd      | <a href="#">86</a>  |
| BiCancelStatusBack        | <a href="#">87</a>  | BiGetPrnCapability      | <a href="#">115</a> |
| BiSendDataFile            | <a href="#">121</a> | BiDirectSendRead        | <a href="#">123</a> |
| BiSetDefaultEchoTime      | <a href="#">126</a> | BiSetReadWaitTimeOut    | <a href="#">128</a> |

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**TM-U590**

| Status API                | Page                | Status API              | Page                |
|---------------------------|---------------------|-------------------------|---------------------|
| BiOpenMonPrinter          | <a href="#">59</a>  | BiCloseMonPrinter       | <a href="#">61</a>  |
| BiLockPrinter             | <a href="#">62</a>  | BiUnlockPrinter         | <a href="#">64</a>  |
| BiSetMonInterval          | <a href="#">65</a>  | BiSetMonEtherInterval   | <a href="#">66</a>  |
| BiDirectIO                | <a href="#">67</a>  | BiDirectIOEx            | <a href="#">69</a>  |
| BiResetPrinter            | <a href="#">73</a>  | BiCancelError           | <a href="#">75</a>  |
| BiGetType                 | <a href="#">77</a>  | BiGetStatus             | <a href="#">79</a>  |
| BiGetRealStatus           | <a href="#">80</a>  | BiSetStatusBackFunction | <a href="#">82</a>  |
| BiSetStatusBackFunctionEx | <a href="#">84</a>  | BiSetStatusBackWnd      | <a href="#">86</a>  |
| BiCancelStatusBack        | <a href="#">87</a>  | BiGetPrnCapability      | <a href="#">115</a> |
| BiSendDataFile            | <a href="#">121</a> | BiDirectSendRead        | <a href="#">123</a> |
| BiSetDefaultEchoTime      | <a href="#">126</a> | BiSetEtherEchoTime      | <a href="#">127</a> |
| BiSetReadWaitTimeOut      | <a href="#">128</a> |                         |                     |

## TM-U675

| Status API                    | Page                | Status API                     | Page                |
|-------------------------------|---------------------|--------------------------------|---------------------|
| BiOpenMonPrinter              | <a href="#">59</a>  | BiCloseMonPrinter              | <a href="#">61</a>  |
| BiLockPrinter                 | <a href="#">62</a>  | BiUnlockPrinter                | <a href="#">64</a>  |
| BiSetMonInterval              | <a href="#">65</a>  | BiSetMonEtherInterval          | <a href="#">66</a>  |
| BiDirectIO                    | <a href="#">67</a>  | BiDirectIOEx                   | <a href="#">69</a>  |
| BiResetPrinter                | <a href="#">73</a>  | BiCancelError                  | <a href="#">75</a>  |
| BiGetType                     | <a href="#">77</a>  | BiGetStatus                    | <a href="#">79</a>  |
| BiGetRealStatus               | <a href="#">80</a>  | BiSetStatusBackFunction        | <a href="#">82</a>  |
| BiSetStatusBackFunctionEx     | <a href="#">84</a>  | BiSetStatusBackWnd             | <a href="#">86</a>  |
| BiCancelStatusBack            | <a href="#">87</a>  | BiGetCounter                   | <a href="#">111</a> |
| BiResetCounter                | <a href="#">113</a> | BiGetPrnCapability             | <a href="#">115</a> |
| BiOpenDrawer                  | <a href="#">117</a> | BiSendDataFile                 | <a href="#">121</a> |
| BiDirectSendRead              | <a href="#">123</a> | BiSetDefaultEchoTime           | <a href="#">126</a> |
| BiSetEtherEchoTime            | <a href="#">127</a> | BiSetReadWaitTimeOut           | <a href="#">128</a> |
| BiMICRCleaning                | <a href="#">129</a> | BiMICRGetStatus                | <a href="#">130</a> |
| BiMICRLoadCheck               | <a href="#">132</a> | BiMICRReadCheck                | <a href="#">133</a> |
| BiMICREjectCheck              | <a href="#">135</a> | BiMICRCancelWaitCheckInsertion | <a href="#">136</a> |
| BiMICRRetransmissionCheckData | <a href="#">137</a> | BiMICRSetReadBackFunction      | <a href="#">141</a> |
| BiMICRSetReadBackFunctionEx   | <a href="#">144</a> | BiMICRSetReadBackWnd           | <a href="#">146</a> |
| BiMICRCancelReadBack          | <a href="#">148</a> |                                |                     |

## TM-U950

| Status API                     | Page                | Status API                    | Page                |
|--------------------------------|---------------------|-------------------------------|---------------------|
| BiOpenMonPrinter               | <a href="#">59</a>  | BiCloseMonPrinter             | <a href="#">61</a>  |
| BiLockPrinter                  | <a href="#">62</a>  | BiUnlockPrinter               | <a href="#">64</a>  |
| BiSetMonInterval               | <a href="#">65</a>  | BiDirectIO                    | <a href="#">67</a>  |
| BiDirectIOEx                   | <a href="#">69</a>  | BiResetPrinter                | <a href="#">73</a>  |
| BiCancelError                  | <a href="#">75</a>  | BiGetType                     | <a href="#">77</a>  |
| BiGetStatus                    | <a href="#">79</a>  | BiGetRealStatus               | <a href="#">80</a>  |
| BiSetStatusBackFunction        | <a href="#">82</a>  | BiSetStatusBackFunctionEx     | <a href="#">84</a>  |
| BiSetStatusBackWnd             | <a href="#">86</a>  | BiCancelStatusBack            | <a href="#">87</a>  |
| BiGetPrnCapability             | <a href="#">115</a> | BiSendDataFile                | <a href="#">121</a> |
| BiDirectSendRead               | <a href="#">123</a> | BiSetDefaultEchoTime          | <a href="#">126</a> |
| BiSetReadWaitTimeOut           | <a href="#">128</a> | BiMICRCleaning                | <a href="#">129</a> |
| BiMICRGetStatus                | <a href="#">130</a> | BiMICRLoadCheck               | <a href="#">132</a> |
| BiMICRReadCheck                | <a href="#">133</a> | BiMICREjectCheck              | <a href="#">135</a> |
| BiMICRCancelWaitCheckInsertion | <a href="#">136</a> | BiMICRRetransmissionCheckData | <a href="#">137</a> |
| BiMICRSetReadBackFunction      | <a href="#">141</a> | BiMICRSetReadBackFunctionEx   | <a href="#">144</a> |
| BiMICRSetReadBackWnd           | <a href="#">146</a> | BiMICRCancelReadBack          | <a href="#">148</a> |

## BiOpenMonPrinter

Makes Status API available for the printer and returns the handle.

You can open one printer from multiple processes at the same time.

When you open the opened printer from the same process again, a new different handle will return. In such a case, both handles are valid.

---

### Syntax

*nHandle* = **BiOpenMonPrinter** (*INT nType*, *LPSTR pName*)

Example)

- Make Status API available from the port.  
*nHandle* = BiOpenMonPrinter(1,"ESDPRT001");
- Make Status API available from the printer.  
*nHandle* = BiOpenMonPrinter(2, "EPSON TM-T88IV Receipt");

### Argument

*nType*: Specifies the *pName* type. This is an INT type.

| Macro Definition (Constant) | Value | Description                                |
|-----------------------------|-------|--------------------------------------------|
| TYPE_PORT                   | 1     | Specify the port name in <i>pName</i> .    |
| TYPE_PRINTER                | 2     | Specify the printer name in <i>pName</i> . |

*pName*: If 1 is specified in *nType*, specify the port name (example: "ESDPRT001").  
If 2 is specified, specify the printer name (example: "EPSON TM-T88IV Receipt").  
This is a LPSTR type.

### Return value

Returns the variable (*nHandle*) defined in INT type. If Status API is successfully used, the handle identifying the printer is returned to *nHandle* (correct value). The handle is returned even if the printer is offline.

The following Status API execution errors (value) are returned.

| Macro Definition (Constant) | Value | Description                                 |
|-----------------------------|-------|---------------------------------------------|
| ERR_TYPE                    | -10   | Parameter error of <i>nType</i>             |
| ERR_OPENED                  | -20   | The specified printer is already opened.    |
| ERR_NO_PRINTER              | -30   | The specified printer driver does not exist |
| ERR_NO_TARGET               | -40   | Printer unavailable                         |
| ERR_NO_MEMORY               | -50   | Not enough memory                           |
| ERR_TIMEOUT                 | -70   | Timeout error                               |
| ERR_ACCESS                  | -80   | R/W cannot be performed on the printer      |

| Macro Definition (Constant) | Value | Description                                                                                               |
|-----------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| ERR_PARAM                   | -90   | Parameter error                                                                                           |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |
| ERR_SPL_NOT_EXIST           | -350  | The spooler service is not operating.                                                                     |



For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

## Comment

Call this function before using other Status API functions. The handle of the return value is used as the argument by other Status API functions.



When this function is called, the specified printer is exclusively available until BiCloseMon-Printer is called. Status API functions from other applications are unavailable during this time.

Acquired handles are only valid within the same application.

The maximum number of printers that can be started at one time is 32.

The following operations are executed according to the printer status when this function is called.

| Printer Status          | Operation                                                                                             |
|-------------------------|-------------------------------------------------------------------------------------------------------|
| Online                  | Returns the handle to <i>nHandle</i> .                                                                |
| Offline                 | Returns the handle to <i>nHandle</i> . However, switch to online as the printer cannot print offline. |
| Cable Removed/Power Off | Returns "ERR_ACCESS" to <i>nHandle</i> .                                                              |

## BiCloseMonPrinter

Cancels the status monitoring printer.

### NOTE

When a BiOpenMonPrinter function is called, always cancel the status monitoring printer using the BiCloseMonPrinter function. An error is generated if a BiOpenMonPrinter function is called again without canceling.

### Syntax

*nErr* = **BiCloseMonPrinter** (*nHandle*)

### Argument

*nHandle*: Specifies the handle. This is an INT type.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                                                                               |
|-----------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | Success                                                                                                   |
| ERR_HANDLE                  | -60   | Specified handle is invalid                                                                               |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |

### NOTE

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## BiLockPrinter

Locks the printer.

### NOTE

- This API is used for a shared printer.
- When using a local printer, this API is used to control multiple processes.

### Syntax

*nErr* = **BiLockPrinter** (*nHandle*, *timeout*)

### Argument

*nHandle*: Specifies the handle. This is an INT type.

*timeout*: Specifies the timeout time in ms (milliseconds). Specify it with a positive value. This is a DWORD type.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                                                                               |
|-----------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | Success                                                                                                   |
| ERR_HANDLE                  | -60   | Specified handle is invalid                                                                               |
| ERR_EXEC_FUNCTION           | -310  | This function is unavailable as Status API is used by other applications.                                 |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                        |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                    |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                  |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                    |

### NOTE

For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

---

## Comment

This API allows you to access the TM printer exclusively. The BiUnlockPrinter API is provided for canceling the exclusive access. While the TM printer is exclusively accessed, the printer does not accept any other API requests of direct access to the printer. The printer will return `ERR_LOCKED` to those other API requests.

The exclusive access right to the TM printer is given to a process. Therefore, the exclusive API access is available from other threads in the same process that is locking the printer.

Executing of API in the same process can be repeated. In this case, the printer is locked with multiple accesses. To unlock the printer, execute BiUnlockPrinter the number of times the API has been executed.

When executing exclusive access from a client to a shared printer or to a local printer via Ethernet, the access status is interrupted if the connection is lost, and restored upon recovery of the connection.

However, while the exclusive access status is being interrupted, another process can lock the TM printer for exclusive access. Once the printer is locked by another process, the printer returns `ERR_LOCKED` to API of the previous process. When another process is finished unlocking the printer, the exclusive access status of the previous process is restored.

Possible causes of the connection failure are as follows.

[Failure during exclusive access to a printer connected via Ethernet]

- The printer is turned Off, or the Ethernet connection between the computer and the printer is disconnected.
- The computer has entered Standby or Hibernate mode.

[Failure during exclusive access to a shared printer from a client]

- The connection between the client and the server is disconnected.
- The client computer has entered Standby or Hibernate mode.

## BiUnlockPrinter

Unlocks the lock of the printer.

### NOTE

- This API is used for a shared printer.
- When using a local printer, this API is used to control multiple processes.

### Syntax

*nErr* = **BiUnlockPrinter** (*nHandle*)

### Argument

*nHandle*: Specifies the handle. This is an INT type.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                                                                               |
|-----------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | Success                                                                                                   |
| ERR_HANDLE                  | -60   | Specified handle is invalid                                                                               |
| ERR_EXEC_FUNCTION           | -310  | This function is unavailable as Status API is used by other applications.                                 |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                        |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                    |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                  |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                    |

### NOTE

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

### Comment

This API unlocks the printer locked by "BiLockPrinter". After the lock is canceled, the printer can accept the API from other processes.

If you execute this API when the printer is not locked, "SUCCESS" will be returned to *Return value*.



## BiSetMonInterval

Configures the time interval for Status API to read printer status.

### CAUTION

Setting the interval to a long time overflows the serial receiving buffer and an accurate ASB status cannot be acquired.

### Syntax

*nErr* = **BiSetMonInterval** (*nHandle*, *wNoPrnInterval*, *wPrnInterval*)

### Argument

**nHandle:** Specifies the handle. This is an INT type.

**wNoPrnInterval:** This is not applicable. This is a WORD type.

**wPrnInterval:** Configure the status monitoring interval of the printer in ms(millisecond) units. This is a WORD type.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                                                                               |
|-----------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | Success                                                                                                   |
| ERR_HANDLE                  | -60   | Specified handle is invalid                                                                               |
| ERR_PARAM                   | -90   | Parameter error                                                                                           |
| ERR_EXEC_FUNCTION           | -310  | This function is unavailable as Status API is used by other applications.                                 |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                    |

### NOTE

For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

## BiSetMonEtherInterval

Status API configures the read interval of the network printer status.

---

### Syntax

*nErr* = **BiSetMonEtherInterval** (*nHandle*, *wEtherInterval*)

### Argument

**nHandle:** Specifies the handle. This is an INT type.

**wEtherInterval:** Configure the status monitoring interval of the network printer in ms (millisecond) units. This is a WORD type.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition<br>(Constant) | Value | Description                                                                                               |
|--------------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| SUCCESS                        | 0     | Success                                                                                                   |
| ERR_HANDLE                     | -60   | Specified handle is invalid                                                                               |
| ERR_PARAM                      | -90   | Parameter error                                                                                           |
| ERR_NOT_SUPPORT                | -100  | Not supported                                                                                             |
| ERR_EXEC_FUNCTION              | -310  | This function is unavailable as Status API is used by other applications.                                 |
| ERR_PH_NOT_EXIST               | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |
| ERR_LOCKED                     | -1000 | The printer is locked.                                                                                    |



For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

## BiDirectIO

Sends special commands (ESC/POS command) to the printer. Can also acquire command execution results from the printer. It is recommended that BiDirectIOEx is used to acquire execution results.

### NOTE

Contact the dealer regarding ESC/POS commands.

### Syntax

*nErr* = **BiDirectIO** (*nHandle*, *writeLen*, *writeCmd*, *readLen*, *readBuff*, *Timeout*, *nullTerminate*)

Refer to the next argument.

### Argument

|                       |                                                                                                                                                                                                                                                                                         |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>nHandle:</b>       | Specifies the handle. This is an INT type.                                                                                                                                                                                                                                              |
| <b>writeLen:</b>      | Specifies the data length to write to the printer. Does not write to the printer when "0".<br>This is a BYTE type.                                                                                                                                                                      |
| <b>writeCmd:</b>      | Specifies the data (ESC/POS command) to write to the printer. This is a LPBYTE type.                                                                                                                                                                                                    |
| <b>readLen:</b>       | Specifies the data length read from the printer.<br>Specify when the command execution results are required from the printer.<br>Specify as "0" when not required. This is a LPBYTE type.                                                                                               |
| <b>readBuff:</b>      | Specifies the buffer saving the data read from the printer.<br>This is a LPBYTE type.                                                                                                                                                                                                   |
| <b>Timeout:</b>       | Specifies the timeout time in ms (milliseconds). This is a DWORD type.                                                                                                                                                                                                                  |
| <b>nullTerminate:</b> | In the case of "True", reading is complete when NULL is received from the printer. At this time, specify the readBuff size to readLen.<br>In the case of "FALSE ", the length of data specified in readLen is read or data is read from the printer until a timeout error is generated. |

### NOTE

Ensure that the size of readBuff is the same length specified in readLen or longer.  
Contact the dealer regarding ESC/POS commands.

## Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                                                                               |
|-----------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | Success                                                                                                   |
| ERR_HANDLE                  | -60   | Specified handle is invalid                                                                               |
| ERR_TIMEOUT                 | -70   | Timeout error                                                                                             |
| ERR_ACCESS                  | -80   | R/W cannot be performed on the printer                                                                    |
| ERR_PARAM                   | -90   | Parameter error                                                                                           |
| ERR_EXEC_FUNCTION           | -310  | This function is unavailable as Status API is used by other applications.                                 |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                        |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                    |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                  |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                    |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## Comment

Confirm proper execution of the function by confirming the return value of *nErr* or proper command execution by confirming printer operation. If execution results are acquired from the printer (specify *readLen*), confirm the execution results.

The following operations are executed according to the printer status when this function is called.

| Printer Status          | Operation                                                                                                                                                                                                                                                           |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Online                  | Returns "SUCCESS" to <i>nErr</i> .<br>Executes the command.                                                                                                                                                                                                         |
| Offline                 | When "0" is specified to <i>readLen</i> :<br>Returns "SUCCESS" to <i>nErr</i> . The command executes after the printer is online.<br>When a value over "1" is specified to <i>readLen</i> :<br>Returns "ERR_TIMEOUT" to <i>nErr</i> . Does not execute the command. |
| Cable Removed/Power Off | Returns "ERR_ACCESS" to <i>nErr</i> . Does not execute the command.                                                                                                                                                                                                 |
| Printing                | Returns "ERR_ACCESS" to <i>nErr</i> . Does not execute the command.                                                                                                                                                                                                 |

## BiDirectIOEx

Sends special commands (ESC/POS command) to the printer. Can also acquire command execution results from the printer. The ASB suppress command can be added for differences with BiDirectIO. When the ASB suppress command is added, separate data (ASB status, etc.) is not sent from the printer until this function is complete, therefore, this is recommended when receiving execution results from the printer.

### NOTE

When considering expandability and versatility, it is recommended to use BiDirectIOEx rather than using the BiDirectIO function.  
Contact the dealer regarding ESC/POS commands.

### Syntax

*nErr* = **BiDirectIOEx** (*nHandle*, *writeLen*, *writeCmd*, *readLen*, *readBuff*, *Timeout*, *nullTerminate*, *option*)

Refer to the next argument.

### Argument

|                        |                                                                                                                                                                                                                                                                                        |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>nHandle</i> :       | Specifies the handle. This is an INT type.                                                                                                                                                                                                                                             |
| <i>writeLen</i> :      | Specifies the data length to write to the printer. Does not write to the printer when "0". This is a DWORD type.                                                                                                                                                                       |
| <i>writeCmd</i> :      | Specifies the data (ESC/POS command) to write to the printer. This is a LPBYTE type.                                                                                                                                                                                                   |
| <i>readLen</i> :       | Specifies the data length read from the printer.<br>Specify when the command execution results are required from the printer.<br>Specify as "0" when not required. This is a LPDWORD type.                                                                                             |
| <i>readBuff</i> :      | Specifies the buffer saving the data read from the printer.<br>This is a LPBYTE type.                                                                                                                                                                                                  |
| <i>Timeout</i> :       | Specifies the timeout time in ms (milliseconds). This is a DWORD type.                                                                                                                                                                                                                 |
| <i>nullTerminate</i> : | In the case of "True", reading is complete when NULL is received from the printer. At this time, specify the readBuff size to readLen.<br>In the case of "FALSE", the length of data specified in readLen is read or data is read from the printer until a timeout error is generated. |

option: Controls the ASB suppression command. This is a BYTE type.

| Value | Description                                                                                |
|-------|--------------------------------------------------------------------------------------------|
| 0     | Send an ASB suppression command before writing data and enable ASB after reading the data. |
| 1     | Does not send the ASB suppression command or ASB enable command.                           |

**NOTE**

Ensure that the size of readBuff is the same length specified in readLen or longer.

## Return value

Returns the following Status API execution errors (value) to the variable (nErr) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                                                                               |
|-----------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | Success                                                                                                   |
| ERR_NO_MEMORY               | -50   | Not enough memory                                                                                         |
| ERR_HANDLE                  | -60   | Specified handle is invalid                                                                               |
| ERR_TIMEOUT                 | -70   | Timeout error                                                                                             |
| ERR_ACCESS                  | -80   | R/W cannot be performed on the printer                                                                    |
| ERR_PARAM                   | -90   | Parameter error                                                                                           |
| ERR_EXEC_FUNCTION           | -310  | This function is unavailable as Status API is used by other applications.                                 |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                        |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                    |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                  |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                    |

**NOTE**

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## Comment

Confirm proper execution of the function by confirming the return value of *nErr* or proper command execution by confirming printer operation. If execution results are acquired from the printer (specify *readLen*), confirm the execution results.

The following operations are executed according to the printer status when this function is called.

| Printer Status          | Operation                                                                                                                                                                                                                                                           |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Online                  | Returns "SUCCESS" to <i>nErr</i> .<br>Executes the command.                                                                                                                                                                                                         |
| Offline                 | When "0" is specified to <i>readLen</i> :<br>Returns "SUCCESS" to <i>nErr</i> . The command executes after the printer is online.<br>When a value over "1" is specified to <i>readLen</i> :<br>Returns "ERR_TIMEOUT" to <i>nErr</i> . Does not execute the command. |
| Cable Removed/Power Off | Returns "ERR_ACCESS" to <i>nErr</i> . Does not execute the command.                                                                                                                                                                                                 |
| Printing                | Returns "ERR_ACCESS" to <i>nErr</i> . Does not execute the command.                                                                                                                                                                                                 |

## Caution

- Although the maximum data length that can be specified for Read/Write is 2GB, specify the required minimum data length.
- Do not send invalid commands of ASB status transmissions using this function while monitoring the status of the printer. Subsequent status cannot be acquired.
- The ASB (automatic status notification) suppression command ensures that unintended data is not received when sending commands requesting a response from the printer.  
If you do not use the ASB suppression, ensure that the programming considers the reception of unintended data.

- Specifying the receiving buffer processes the data received from the printer using this function or processes the data using the same process as the monitoring sled (BiGetStatus function, etc.). Refer to the following.

| Transmission Command                          | Receiving Buffer Specified | Receiving Buffer                                      | Operation of the Monitoring Sled               |
|-----------------------------------------------|----------------------------|-------------------------------------------------------|------------------------------------------------|
| Acquiring status command                      | Yes                        | Saves the ASB status to the receiving buffer          | Does not callback<br>Does not renew the status |
|                                               | No                         | -                                                     | Does not callback<br>Does not renew the status |
| Presenter Command                             | Yes                        | Saves the presenter response to the receiving buffer  | Does not callback                              |
|                                               | No                         | -                                                     | Calls back the presenter                       |
| Command with responses from other printers    | Yes                        | Enters the printer response into the receiving buffer | Does not effect the monitoring sled            |
|                                               | No                         | -                                                     | Abnormal callbacks may be generated            |
| Command without responses from other printers | Yes                        | Generates timeout error                               | Does not effect the monitoring sled            |
|                                               | No                         | -                                                     | Does not effect the monitoring sled            |



# BiResetPrinter

Resets status monitoring printers.

NOTE

- Cancels print jobs when this is called while printing.
- The TM printer with the serial interface cannot be reset.

## Syntax

*nErr* = **BiResetPrinter** (*nHandle*)

Specify the handle in *nHandle*.

## Argument

*nHandle*: Specifies the handle. This is an INT type.

## Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                                                                               |
|-----------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | Success                                                                                                   |
| ERR_HANDLE                  | -60   | Specified handle is invalid                                                                               |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                             |
| ERR_EXEC_FUNCTION           | -310  | Cannot call as another Status API is in use                                                               |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                  |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                    |

NOTE

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

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## Comment

Confirm proper execution of the function by confirming the return value of *nErr* or by resetting the printer and confirming that the printer is online (confirming the ASB status).

### NOTE

After this function is executed, the printer cannot receive a print command for 15 seconds. If print is executed during this time, the job is sent to the spooler and the print processes is executed after the passage of the aforementioned time.

The following operations are executed according to the printer status when this function is called.

| Printer Status              | Operation                                                   |
|-----------------------------|-------------------------------------------------------------|
| Online                      | Returns "SUCCESS" to <i>nErr</i> and resets.                |
| Offline                     | Returns "SUCCESS" to <i>nErr</i> and resets.                |
| Cable Removed/<br>Power Off | Returns "ASB_NO_RESPONSE" to ASB status and does not reset. |
| Printing                    | Cancels the print job and resets.                           |

## BiCancelError

If a printer recoverable error is generated, execute this function after removing the error cause, and the TM printer recovers from the error.

### NOTE

If a printer recoverable error is generated while transmitting data, recovery may not be possible with this function. In this case, use BiResetPrinter after resolving the error cause and recover from the error.

## Syntax

*nErr* = **BiCancelError** (*nHandle*)

Specify the handle in *nHandle*.

## Argument

*nHandle*: Specifies the handle. This is an INT type.

## Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                                                                               |
|-----------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | Success                                                                                                   |
| ERR_HANDLE                  | -60   | Specified handle is invalid                                                                               |
| ERR_ACCESS                  | -80   | R/W cannot be performed on the printer                                                                    |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                             |
| ERR_EXEC_FUNCTION           | -310  | This function is unavailable as Status API is used by other applications.                                 |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                        |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                    |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                  |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                    |

### NOTE

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

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## Comment

Use BiCancelError as follows.

| Error                                     | Response                                                                                                                           |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Cover open error                          | Call this function after closing the cover.                                                                                        |
| Auto cutter error                         | Call this function after removing any paper around the cutter and closing the cover.                                               |
| Platen open error (EU-T500)               | Call this function after closing the platen opened while printing.                                                                 |
| BM detection error (EU-T500)              | No available black mark is detected. Call this function after loading the paper with black marks in the correct direction.         |
| Presenter error (EU-T500)                 | A paper jam error is generated in the presenter.<br>Call this function after removing the paper in the presenter.                  |
| Journal printing function error (EU-T500) | A calling error of BiCheckPrint in the journal unit is generated.<br>Call this function after removing the paper in the presenter. |

## BiGetType

Acquires the type ID of the printer.

### NOTE

For information on the type ID that can be acquired, ask your dealer.

### Syntax

*nErr* = **BiGetType** (*nHandle*, *typeID*, *font*, *exrom*, *special*)

If you specify a handle to *nHandle*, a type ID is set to *typeID*, Device font is set to *font*. A special ID of the printer returns to *special*.

### Argument

**nHandle:** Specifies the handle. This is an INT type.  
**typeID:** A type ID of the printer will be set. This is a LPBYTE type.  
**font:** Device font will be set. This is a LPBYTE type.  
**exrom:** This is not applicable. This is a LPBYTE type.  
**special:** A special ID of the printer will be set. This is a LPBYTE type.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                                                                               |
|-----------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | Success                                                                                                   |
| ERR_HANDLE                  | -60   | Specified handle is invalid                                                                               |
| ERR_TIMEOUT                 | -70   | Timeout error                                                                                             |
| ERR_ACCESS                  | -80   | R/W cannot be performed on the printer                                                                    |
| ERR_PARAM                   | -90   | Parameter error                                                                                           |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                             |
| ERR_EXEC_FUNCTION           | -310  | This function is unavailable as Status API is used by other applications.                                 |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                        |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                    |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                  |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                    |

### NOTE

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## BiGetOfflineCode

Acquires the cause of the printer to go offline.

### NOTE

- While the Ethernet is connected, acquiring the offline cause is not supported.
- If this function is called while the printer is online, the offline cause cannot be acquired. In addition, the cause cannot be acquired when the printer power is OFF or cables have been unplugged.
- Call this function after 500ms have passed after calling BiResetPrinter (printer reset).

### Syntax

*nErr* = **BiGetOfflineCode** (*nHandle*, *offlinecode*)

### Argument

*nHandle*: Specifies the handle. This is an INT type.

*offlinecode*: Returns the offline cause as a 5 byte value. This is a LPBYTE type.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                                               |
|-----------------------------|-------|---------------------------------------------------------------------------|
| SUCCESS                     | 0     | Success                                                                   |
| ERR_HANDLE                  | -60   | Specified handle is invalid                                               |
| ERR_PARAM                   | -90   | Parameter error                                                           |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                             |
| ERR_EXEC_FUNCTION           | -310  | This function is unavailable as Status API is used by other applications. |

### NOTE

For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

### Comment

Refer to "[Model Information](#)" on page 261 regarding the causes for the printer to go offline. The following operations are executed according to the printer status when this function is called.

| Printer Status          | Operation                                                              |
|-------------------------|------------------------------------------------------------------------|
| Online                  | Returns "SUCCESS" to <i>nErr</i> and acquires the online value.        |
| Offline                 | Returns "SUCCESS" to <i>nErr</i> and acquires the offline cause.       |
| Cable Removed/Power Off | Returns "SUCCESS" to <i>nErr</i> but cannot acquire the offline cause. |

# BiGetStatus

Acquires the current printer status (ASB status).

## Syntax

*nErr* = **BiGetStatus** (*nHandle* , *lpStatus*)

Specify the handle in *nHandle*. Returns ASB status to *lpStatus*.

## Argument

- nHandle*: Specifies the handle. This is an INT type.
- lpStatus*: Returns the ASB status saved to Status API. This is a LPDWORD type.  
The ASB status is a 4 byte configuration.

## Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                 |
|-----------------------------|-------|---------------------------------------------|
| SUCCESS                     | 0     | Success                                     |
| ERR_HANDLE                  | -60   | Specified handle is invalid                 |
| ERR_PARAM                   | -90   | Parameter error                             |
| ERR_EXEC_FUNCTION           | -310  | Cannot call as another Status API is in use |



For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

## Comment

Refer to "[Model Information](#)" on page 261 regarding the ASB status that can be acquired by each printer.



There are invalid ASB statuses according to the printer model in use.

## BiGetRealStatus

Acquires the current printer status (ASB status).

---

### Syntax

*nErr* = **BiGetRealStatus** (*nHandle* , *lpStatus*)

### Argument

**nHandle:** Specifies the handle. This is an INT type.

**lpStatus:** Returns the ASB status saved to Status API. This is a LPDWORD type.  
The ASB status is a 4 byte configuration.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition<br>(Constant) | Value | Description                                                                                               |
|--------------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| SUCCESS                        | 0     | Success                                                                                                   |
| ERR_HANDLE                     | -60   | Specified handle is invalid                                                                               |
| ERR_ACCESS                     | -80   | R/W cannot be performed on the printer                                                                    |
| ERR_PARAM                      | -90   | Parameter error                                                                                           |
| ERR_EXEC_FUNCTION              | -310  | Cannot call as another Status API is in use                                                               |
| ERR_EXEC_MICR                  | -320  | Cannot call as the MICR is reading                                                                        |
| ERR_EXEC_SCAN                  | -330  | Cannot call as the scanner is scanning                                                                    |
| ERR_PH_NOT_EXIST               | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |
| ERR_RESET                      | -400  | Cannot call as the printer is restarting                                                                  |
| ERR_LOCKED                     | -1000 | The printer is locked.                                                                                    |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).



---

## Comment

This function sends the command to acquire the ASB status to the printer and receives the acquired status after the function is called. That is why, even when printing has been completed, ASB\_PRINTSUCCESS is not acquired. Also, when the power is turned off, ASB\_NO\_RESPONSE is not acquired because ERR\_ACCESS is returned.

Refer to "[Model Information](#)" on [page 261](#) regarding the ASB status that can be acquired by each printer.



There are invalid ASB statuses according to the printer model in use.

## BiSetStatusBackFunction

Automatically acquires the printer status (ASB status) using the callback function when the printer status changes.



This is unavailable when the development environment is VB.

### Syntax

```
nErr = BiSetStatusBackFunction (nHandle, int (CALLBACK EXPORT *pStatusCB)  
                                (DWORD dwStatus))
```

### Argument

nHandle: Specifies the handle. This is an INT type.

int (CALLBACK EXPORT \*pStatusCB)(DWORD dwStatus):  
Specifies the definition address of the callback function.

dwStatus: Returns the ASB status saved to Status API. This is a DWORD type.  
The ASB status is a 4 byte configuration.

### Return value

Returns the following Status API execution errors (value) to the variable (nErr) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition<br>(Constant) | Value | Description                                 |
|--------------------------------|-------|---------------------------------------------|
| SUCCESS                        | 0     | Success                                     |
| ERR_HANDLE                     | -60   | Specified handle is invalid                 |
| ERR_PARAM                      | -90   | Parameter error                             |
| ERR_EXIST                      | -210  | The specified data already exists.          |
| ERR_EXEC_FUNCTION              | -310  | Cannot call as another Status API is in use |



For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

---

## Comment

Call this function to set the printer status to *dwStatus* and call the callback function. When the printer status changes, new information is automatically set to *dwStatus* and calls the callback function. Cancel this function using `BiCancelStatusBack`.

Refer to "[Model Information](#)" on [page 261](#) regarding the ASB status that can be acquired by each printer.



There are invalid ASB statuses according to the printer model in use.  
Status API cannot be used within the registered callback function.

## BiSetStatusBackFunctionEx

Automatically acquires the printer status (ASB status) using the callback function when the printer status changes.

Identifies the printer port originating the callback, in addition to the functions of BiSetStatusBackFunction.

### NOTE

This is unavailable when the development environment is VB.

### Syntax

```
nErr = BiSetStatusBackFunctionEx (nHandle, int (CALLBACK EXPORT *pStatusCB)  
                                (DWORD dwStatus, LPSTR lpcPortName))
```

### Argument

nHandle: Specifies the handle. This is an INT type.

int (CALLBACK EXPORT \*pStatusCB)(DWORD dwStatus, LPSTR lpcPortName):  
Specifies the definition address of the callback function.

dwStatus: Returns the ASB status saved to Status API. The ASB status is a 4 byte configuration. This is a DWORD type.

lpcPortName: Returns the printer port name originating the callback. This is a LPSTR type.

### Return value

Returns the following Status API execution errors (value) to the variable (nErr) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition<br>(Constant) | Value | Description                                 |
|--------------------------------|-------|---------------------------------------------|
| SUCCESS                        | 0     | Success                                     |
| ERR_HANDLE                     | -60   | Specified handle is invalid                 |
| ERR_PARAM                      | -90   | Parameter error                             |
| ERR_EXIST                      | -210  | The specified data already exists.          |
| ERR_EXEC_FUNCTION              | -310  | Cannot call as another Status API is in use |

### NOTE

For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

---

## Comment

Call this function to set the printer status to *dwStatus* and call the callback function. When the printer status changes, new information is automatically set to *dwStatus* and calls the callback function. Cancel this function using `BiCancelStatusBack`.

Refer to "[Model Information](#)" on [page 261](#) regarding the ASB status that can be acquired by each printer.



There are invalid ASB statuses according to the printer model in use.  
Status API cannot be used within the registered callback function.

## BiSetStatusBackWnd

Automatically generates a click event and acquires the printer status (ASB status) when the printer status changes.

---

### Syntax

*nErr* = **BiSetStatusBackWnd** (*nHandle*, *hWnd*, *lpStatus*)

Specify the handle in *nHandle*. Returns ASB status to *lpStatus*.

### Argument

- nHandle*: Specifies the handle. This is an INT type.
- hWnd*: Specifies the window handle of the button generating the click event.  
This is a Long type.
- lpStatus*: Returns the ASB status saved to Status API. This is a LPDWORD type.  
The ASB status is a 4 byte configuration.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition<br>(Constant) | Value | Description                                 |
|--------------------------------|-------|---------------------------------------------|
| SUCCESS                        | 0     | Success                                     |
| ERR_HANDLE                     | -60   | Specified handle is invalid                 |
| ERR_PARAM                      | -90   | Parameter error                             |
| ERR_EXIST                      | -210  | The specified data already exists.          |
| ERR_EXEC_FUNCTION              | -310  | Cannot call as another Status API is in use |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

---

### Comment

Refer to ["Model Information" on page 261](#) regarding the ASB status that can be acquired by each printer.



There are invalid ASB statuses according to the printer model in use.  
Status API cannot be used from the specified window handle.

## *BiCancelStatusBack*

Cancels the automatic status notification request process called using the `BiSetStatusBackFunction`, `BiSetStatusBackFunctionEx`, or `BiSetStatusBackWnd` function.

### Syntax

*nErr* = **BiCancelStatusBack** (*nHandle*)

Specify the handle in *nHandle*.

### Argument

*nHandle*: Specifies the handle. This is an INT type.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition<br>(Constant) | Value | Description                                 |
|--------------------------------|-------|---------------------------------------------|
| SUCCESS                        | 0     | Success                                     |
| ERR_HANDLE                     | -60   | Specified handle is invalid                 |
| ERR_EXEC_FUNCTION              | -310  | Cannot call as another Status API is in use |

#### NOTE

Returns "SUCCESS" even when executed when the automatic status notification request process is not registered. For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## BiGetInkStatus

Acquires the current ink status.

---

### Syntax

*nErr* = **BiGetInkStatus** (*nHandle*, *lpStatus*)

### Argument

*nHandle*: Specifies the handle. This is an INT type.

*lpStatus*: The current ink status is returned in a LPWORD type.  
The ink status is a 2 byte configuration.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition<br>(Constant) | Value | Description                                 |
|--------------------------------|-------|---------------------------------------------|
| SUCCESS                        | 0     | Success                                     |
| ERR_HANDLE                     | -60   | Specified handle is invalid                 |
| ERR_PARAM                      | -90   | Parameter error                             |
| ERR_NOT_SUPPORT                | -100  | Not supported                               |
| ERR_EXEC_FUNCTION              | -310  | Cannot call as another Status API is in use |



For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

---

### Comment

Refer to "[Model Information](#)" on page 261 regarding the ink status that can be acquired by each printer.



## BiSetInkStatusBackFunction

Automatically acquires the ink status using the callback function when the ink status changes.

### NOTE

This is unavailable when the development environment is VB 6.0.

### Syntax

*nErr* = **BiSetInkStatusBackFunction** (*int nHandle*, *int (CALLBACK EXPORT \*pStatusCB)*  
(*WORD wStatus*))

### Argument

*nHandle*: Specifies the handle. This is an INT type.

*int (CALLBACK EXPORT \*pStatusCB)(WORD wStatus)*:  
Specifies the definition address of the callback function.

*wStatus*: Automatically returns the ink status. This is a WORD type.  
The ink status is a 2 byte configuration.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                 |
|-----------------------------|-------|---------------------------------------------|
| SUCCESS                     | 0     | Success                                     |
| ERR_HANDLE                  | -60   | Specified handle is invalid                 |
| ERR_PARAM                   | -90   | Parameter error                             |
| ERR_NOT_SUPPORT             | -100  | Not supported                               |
| ERR_EXIST                   | -210  | The specified data already exists.          |
| ERR_EXEC_FUNCTION           | -310  | Cannot call as another Status API is in use |

### NOTE

For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

---

## Comment

Call this function to set the printer status to *wStatus* and call the callback function. When the ink status changes, new information is automatically set to *wStatus* and the callback function is called. Cancel this function using `BiCancelInkStatusBack`.

Refer to "[Model Information](#)" on page 261 regarding the ink status that can be acquired by each printer.



Status API cannot be used within the registered callback function.

## BiSetInkStatusBackFunctionEx

Automatically acquires the ink status using the callback function when the ink status changes. Identifies the printer port originating the callback, in addition to the functions of BiSetInkStatusBackFunction.

### NOTE

This is unavailable when the development environment is VB 6.0.

### Syntax

```
nErr = BiSetInkStatusBackFunctionEx (nHandle, int (CALLBACK EXPORT *pStatusCB)  
                                         (WORD wStatus, LPSTR lpcPortName))
```

### Argument

*nHandle*: Specifies the handle. This is an INT type.

*int* (CALLBACK EXPORT \**pStatusCB*)(WORD *wStatus*, LPSTR *lpcPortName*):  
Specifies the definition address of the callback function.

*wStatus*: Automatically returns the ink status. This is a WORD type.  
The ink status is a 2 byte configuration.

*lpcPortName*: Returns the printer port name originating the callback. This is a LPSTR type.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition<br>(Constant) | Value | Description                                 |
|--------------------------------|-------|---------------------------------------------|
| SUCCESS                        | 0     | Success                                     |
| ERR_HANDLE                     | -60   | Specified handle is invalid                 |
| ERR_PARAM                      | -90   | Parameter error                             |
| ERR_NOT_SUPPORT                | -100  | Not supported                               |
| ERR_EXIST                      | -210  | The specified data already exists.          |
| ERR_EXEC_FUNCTION              | -310  | Cannot call as another Status API is in use |

### NOTE

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

---

## Comment

Call this function to set the ink status to *wStatus* and call the callback function. When the printer status changes, new information is automatically set to *wStatus* and the port name of the acquired destination is set to *lpcPortName* and the callback function is called. Cancel this function using `BiCancelInkStatusBack`.

Refer to ["Model Information" on page 261](#) regarding the ink status that can be acquired by each printer.



Status API cannot be used within the registered callback function.

## BiSetInkStatusBackWnd

Automatically acquires the ink status generating a click event when the ink status changes.

### Syntax

*nErr* = **BiSetInkStatusBackWnd** (*nHandle*, *hWnd*, *lpStatus*)

### Argument

- nHandle:** Specifies the handle. This is an INT type.
- hWnd:** Specifies the window handle of the button generating the click event. This is a Long type.
- lpStatus:** Automatically returns the ink status. This is a LPWORD type. The ink status is a 2 byte configuration.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                 |
|-----------------------------|-------|---------------------------------------------|
| SUCCESS                     | 0     | Success                                     |
| ERR_HANDLE                  | -60   | Specified handle is invalid                 |
| ERR_PARAM                   | -90   | Parameter error                             |
| ERR_NOT_SUPPORT             | -100  | Not supported                               |
| ERR_EXIST                   | -210  | The specified data already exists.          |
| ERR_EXEC_FUNCTION           | -310  | Cannot call as another Status API is in use |

#### NOTE

For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

### Comment

Refer to "[Model Information](#)" on page 261 regarding the ink status that can be acquired by each printer.

#### NOTE

Status API cannot be used from the specified window handle.

## BiCancelInkStatusBack

Cancels the automatic ink status notification request process called using the BiSetInkStatusBackFunction, BiSetInkStatusBackFunctionEx, or BiSetInkStatusBackWnd.

---

### Syntax

*nErr* = **BiCancelInkStatusBack** (*nHandle*)

### Argument

*nHandle*: Specifies the handle. This is an INT type.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                 |
|-----------------------------|-------|---------------------------------------------|
| SUCCESS                     | 0     | Success                                     |
| ERR_HANDLE                  | -60   | Specified handle is invalid                 |
| ERR_NOT_SUPPORT             | -100  | Not supported                               |
| ERR_EXEC_FUNCTION           | -310  | Cannot call as another Status API is in use |



Returns "SUCCESS" even when called while the automatic ink status notification request process is not registered. For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## BiGetBatteryStatus

Acquires the printer's current battery status.

### Syntax

*nErr* = **BiGetBatteryStatus** (*nHandle* , *lpbPowerStatus* , *lpbBatteryStatus*)

### Argument

- nHandle:** Specifies the handle. This is an INT type.
- lpbPowerStatus:** Specifies the memory address where the power status is set. This is a LPBYTE type.
- lpbBatteryStatus:** Specifies the memory address where the remaining amount of the battery is set. This is a LPBYTE type.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                 |
|-----------------------------|-------|---------------------------------------------|
| SUCCESS                     | 0     | Success                                     |
| ERR_HANDLE                  | -60   | Specified handle is invalid                 |
| ERR_PARAM                   | -90   | Parameter error                             |
| ERR_NOT_SUPPORT             | -100  | Not supported                               |
| ERR_EXEC_FUNCTION           | -310  | Cannot call as another Status API is in use |

#### NOTE

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

---

## Comment

Printer's power status is set for *lpbPowerStatus*. Printer's battery status is set for *lpbBatteryStatus*. For the power status and the battery status value, refer to Power status and Battery status below.

### Power status

| Value | Description              |
|-------|--------------------------|
| 30h   | Power supply: AC adapter |
| 31h   | Power supply: Battery    |

### Battery status

| Value | Description                       |
|-------|-----------------------------------|
| 30h   | Remaining battery amount: Level H |
| 31h   | Remaining battery amount: Level M |
| 32h   | Remaining battery amount: Level L |
| 33h   | Remaining battery amount: Level S |
| 34h   | Battery is not installed.         |

#### CAUTION

If the AC adapter is plugged or unplugged while the TM-P60 is printing, an incorrect power status or battery status may be returned. Do not plug or unplug the AC adapter while the TM-P60 is printing. (Restriction)



## BiSetBatteryStatusBackFunctionEx

Automatically acquires the printer's current battery status using the callback function when the printer's current battery status changes. Returns the pointer to the port name to recognize from which port the callback is.

### NOTE

This is unavailable when the development environment is VB 6.0.

### Syntax

```
nErr = BiSetBatteryStatusBackFunctionEx (nHandle, int (CALLBACK EXPORT *pBatteryCB)
                                         (BYTE bPowerStatus, BYTE bBatteryStatus,
                                          LPSTR lpcPortName))
```

### Argument

nHandle: Specifies the handle. This is an INT type.

int (CALLBACK EXPORT \*pBatteryCB)

(BYTE bPowerStatus, BYTE bBatteryStatus, LPSTR lpcPortName):

Specifies the definition address of the callback function.

bPowerStatus: Sets the value of the power status for lpbPowerStatus, and then sends the event. This is a BYTE type.

bBatteryStatus: Sets the battery status value for lpbBatteryStatus, and then sends the event. This is a BYTE type.

lpcPortName: Returns the printer port name originating the callback. This is a LPSTR type.

### Return value

Returns the following Status API execution errors (value) to the variable (nErr) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                 |
|-----------------------------|-------|---------------------------------------------|
| SUCCESS                     | 0     | Success                                     |
| ERR_HANDLE                  | -60   | Specified handle is invalid                 |
| ERR_PARAM                   | -90   | Parameter error                             |
| ERR_NOT_SUPPORT             | -100  | Not supported                               |
| ERR_EXIST                   | -210  | The specified data already exists.          |
| ERR_EXEC_FUNCTION           | -310  | Cannot call as another Status API is in use |

### NOTE

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

---

## Comment

Refer to "[BiGetBatteryStatus](#)" on page 95 regarding the printer's current battery status that can be acquired by each printer.

## BiSetBatteryStatusBackWndEx

Automatically acquires the printer's current battery status generating a click event when the printer's current battery status changes, and the pointer to the port name.

### Syntax

```
nErr = BiSetBatteryStatusBackWndEx (nHandle , hWnd , lpbPowerStatus ,
                                     lpbBatteryStatus , lpcPortName)
```

### Argument

- nHandle:** Specifies the handle. This is an INT type.
- hWnd:** Specifies the window handle of the button generating the click event. This is a Long type.
- lpbPowerStatus:** Sets the value of the power status for lpbPowerStatus, and then sends the event. This is a LPBYTE type.
- lpbBatteryStatus:** Sets the battery status value for lpbBatteryStatus, and then sends the event. This is a LPBYTE type.
- lpcPortName:** Copies the port name for lpcPortName, and then sends the event. lpcPortName must have enough memory to copy the port name including the end NULL. This is a LPSTR type.

### Return value

Returns the following Status API execution errors (value) to the variable (nErr) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                 |
|-----------------------------|-------|---------------------------------------------|
| SUCCESS                     | 0     | Success                                     |
| ERR_HANDLE                  | -60   | Specified handle is invalid                 |
| ERR_PARAM                   | -90   | Parameter error                             |
| ERR_NOT_SUPPORT             | -100  | Not supported                               |
| ERR_EXIST                   | -210  | The specified data already exists.          |
| ERR_EXEC_FUNCTION           | -310  | Cannot call as another Status API is in use |

#### NOTE

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

### Comment

Refer to ["BiGetBatteryStatus" on page 95](#) regarding the printer's current battery status that can be acquired by each printer.

## BiCancelBatteryStatusBack

Cancels the battery status notification request registered using BiSetBatteryStatusBackFunctionEx/BiSetBatteryStatusBackWndEx.

---

### Syntax

*nErr* = **BiCancelBatteryStatusBack** (*nHandle*)

### Argument

*nHandle*: Specifies the handle. This is an INT type.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                 |
|-----------------------------|-------|---------------------------------------------|
| SUCCESS                     | 0     | Success                                     |
| ERR_HANDLE                  | -60   | Specified handle is invalid                 |
| ERR_NOT_SUPPORT             | -100  | Not supported                               |
| ERR_EXEC_FUNCTION           | -310  | Cannot call as another Status API is in use |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## BiSetPresenterEventBackFunction

Automatically acquires the operating results of the presenter using the callback function.

### NOTE

This is unavailable when the development environment is VB.

### Syntax

```
nErr = BiSetPresenterEventBackFunction (nHandle, int (CALLBACK EXPORT *pEventCB)
                                         (BYTE returncode))
```

### Argument

*nHandle*: Specifies the handle. This is an INT type.

*int* (CALLBACK EXPORT \*pEventCB)(BYTE returncode):

Specifies the definition address of the callback function.

*returncode*: Returns the operating results of the presenter. This is a BYTE type.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                              |
|-----------------------------|-------|----------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                  |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect. |
| ERR_PARAM                   | -90   | Parameter error                                          |
| ERR_NOT_SUPPORT             | -100  | Not supported                                            |
| ERR_EXIST                   | -210  | The specified data already exists.                       |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.  |

### NOTE

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

---

## Comment

Call this function to set the operating results of the presenter to returncode and call the callback function. Cancel this function using BiCancelPresenterEventBack.

The operating results of the acquiring presenter are as follows.

| returncode | Description                                |
|------------|--------------------------------------------|
| 20h        | Paper removed                              |
| 21h        | Retract successful                         |
| 22h        | Retract failed                             |
| 23h        | Eject successful                           |
| 24h        | Eject failed                               |
| 25h        | No paper                                   |
| 26h        | Roll paper exchange preparation successful |
| 27h        | Roll paper exchange preparation failed     |
| 41h        | Timeout retract successful                 |
| 42h        | Timeout retract failed                     |
| 43h        | Timeout eject successful                   |
| 44h        | Timeout eject failed                       |

## BiSetPresenterEventBackFunctionEx

Automatically acquires the operating results of the presenter using the callback function. Identifies the printer port originating the callback, in addition to the functions of BiSetPresenterEventBackFunction.

### NOTE

This is unavailable when the development environment is VB.

### Syntax

```
nErr = BiSetPresenterEventBackFunctionEx (nHandle, int (CALLBACK EXPORT *pEventCB)
                                         (BYTE returncode,
                                          LPSTR lpcPortName))
```

### Argument

nHandle: Specifies the handle. This is an INT type.

int (CALLBACK EXPORT \*pEventCB)(BYTE returncode, LPSTR lpcPortName):  
Specifies the definition address of the callback function.

returncode: Returns the operating results of the presenter. This is a BYTE type.

lpcPortName: Returns the printer port name originating the callback. This is an LPSTR type.

### Return value

Returns the following Status API execution errors (value) to the variable (nErr) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                              |
|-----------------------------|-------|----------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                  |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect. |
| ERR_PARAM                   | -90   | Parameter error                                          |
| ERR_NOT_SUPPORT             | -100  | Not supported                                            |
| ERR_EXIST                   | -210  | The specified data already exists.                       |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.  |

### NOTE

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

### Comment

Call this function to set the operating results of the presenter to returncode and call the callback function. Cancel this function using BiCancelPresenterEventBack.

Refer to ["BiSetPresenterEventBackFunction" on page 101](#).

## BiSetPresenterEventBackWnd

Automatically generates a click event and acquires the operating results of the presenter.

---

### Syntax

*nErr* = **BiSetPresenterEventBackWnd** (*int nHandle, long hWnd, LPBYTE returncode*)

### Argument

- nHandle:** Specifies the handle. This is an INT type.
- hWnd** Specifies the window handle of the button generating the click event.  
This is a Long type.
- returncode:** Returns the operating results of the presenter. This is a LPBYTE type.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                              |
|-----------------------------|-------|----------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                  |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect. |
| ERR_PARAM                   | -90   | Parameter error                                          |
| ERR_NOT_SUPPORT             | -100  | Not supported                                            |
| ERR_EXIST                   | -210  | The specified data already exists.                       |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.  |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

---

### Comment

Refer to ["BiSetPresenterEventBackFunction" on page 101](#) for the operating results of the acquiring presenter. Cancel this function using `BiCancelPresenterEventBack`.



## *BiCancelPresenterEventBack*

Cancels the automatic status notification request process of the presenter called by the `BiSetPresenterEventBackFunction`, `BiSetPresenterEventBackFunctionEx`, or `BiSetPresenterEventBackWnd` function.

### Syntax

*nErr* = **BiCancelPresenterEventBack** (*int nHandle*)

### Argument

**nHandle:** Specifies the handle. This is an INT type.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                              |
|-----------------------------|-------|----------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                  |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect. |
| ERR_NOT_SUPPORT             | -100  | Not supported                                            |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.  |

#### NOTE

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## BiAutoPowerOffTime

Updates the maintenance counter and prepares to turn off the power to the printer.

Cannot turn off the power to the printer.

### NOTE

Cannot call when in online recovery standby.

## Syntax

*nErr* = **BiAutoPowerOffTime** (*nHandle* , *bMode* , *lpbTime*)

## Argument

*nHandle*: Specifies the handle. This is an INT type.

*bMode*: Specifies the process mode. This is a BYTE type.

| Macro Definition (Constant) | Value | Description                       |
|-----------------------------|-------|-----------------------------------|
| EPS_BI_GET                  | 0     | Acquires the auto power off time. |
| EPS_BI_SET                  | 1     | Sets the auto power off time.     |

*lpbTime*: Specifies the memory address to set the auto power off time.  
This is a LPBYTE type.

## Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                                                                               |
|-----------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | Success                                                                                                   |
| ERR_NO_MEMORY               | -50   | Not enough memory                                                                                         |
| ERR_HANDLE                  | -60   | Specified handle is invalid                                                                               |
| ERR_TIMEOUT                 | -70   | Timeout error                                                                                             |
| ERR_ACCESS                  | -80   | R/W cannot be performed on the printer                                                                    |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                             |
| ERR_EXEC_FUNCTION           | -310  | Cannot call as another Status API is in use                                                               |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                    |

### NOTE

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

---

## Comment

Sets the auto power off time.

| <b>lpbTime</b> | <b>Auto power off time</b> |
|----------------|----------------------------|
| 0              | Auto power off: disabled   |
| 1 - 60         | 1 to 60 minutes            |

## BiPowerOff

Updates the maintenance counter and prepares to turn off the power to the printer.

Cannot turn off the power to the printer.

### NOTE

Cannot call when in online recovery standby.

## Syntax

*nErr* = **BiPowerOff** (*nHandle*)

Specify the handle in *nHandle*.

## Argument

*nHandle*: Specifies the handle. This is an INT type.

## Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                                                                               |
|-----------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | Success                                                                                                   |
| ERR_NO_MEMORY               | -50   | Not enough memory                                                                                         |
| ERR_HANDLE                  | -60   | Specified handle is invalid                                                                               |
| ERR_TIMEOUT                 | -70   | Timeout error                                                                                             |
| ERR_ACCESS                  | -80   | R/W cannot be performed on the printer                                                                    |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                             |
| ERR_EXEC_FUNCTION           | -310  | Cannot call as another Status API is in use                                                               |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                    |

### NOTE

For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

Comment

The printer operation performed by this API differs with the TM printer model.

| Operation                                             | TM-P60 | TM-P60Peeler | TM-T70 | TM-T88IV |
|-------------------------------------------------------|--------|--------------|--------|----------|
| Stores the maintenance counter value.                 | √      | √            | √      | √        |
| Places the interface in BUSY state.                   | √      | √            | √      | √        |
| Places the TM printer in standby mode with power off. | √      | √            | √      | √        |
| Turns the printer power off.                          | √      | √            | -      | -        |

## BiEjectSheet

Ejects the presenter's receipt paper.

---

### Syntax

*nErr* = **BiEjectSheet** (*nHandle*)

### Argument

**nHandle:** Specifies the handle. This is an INT type.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition<br>(Constant) | Value | Description                                                                                               |
|--------------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| SUCCESS                        | 0     | Success                                                                                                   |
| ERR_HANDLE                     | -60   | Specified handle is invalid                                                                               |
| ERR_TIMEOUT                    | -70   | Timeout error                                                                                             |
| ERR_ACCESS                     | -80   | R/W cannot be performed on the printer                                                                    |
| ERR_NOT_SUPPORT                | -100  | Not supported                                                                                             |
| ERR_EXEC_FUNCTION              | -310  | This function is unavailable as Status API is used by other applications.                                 |
| ERR_PH_NOT_EXIST               | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |
| ERR_RESET                      | -400  | Cannot call as the printer is restarting                                                                  |
| ERR_LOCKED                     | -1000 | The printer is locked.                                                                                    |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

---

### Comment

Call BiSetPresenterEventBackFunction/BiSetPresenterEventBackFunctionEx/  
BiSetPresenterEventBackWnd to confirm the successful execution of the function.

## BiGetCounter

Acquires the maintenance counter value.

### NOTE

- For information on the counter number and the maintenance counters that can be acquired, ask your dealer.
- The maintenance counter may not be available according to the printer. In this case, a timeout error is generated.
- Confirm that the ASB status is online before calling this function.

### Syntax

*nErr* = **BiGetCounter** (*nHandle*, *readno*, *readcounter*)

Specify the handle in *nHandle*. *readno* specifies the acquired maintenance counter number and the maintenance counter value is returned to *readcounter*.

### Argument

*nHandle*: Specifies the handle. This is an INT type.  
*readno*: Specifies the acquired maintenance counter number. This is a WORD type.  
*readcounter*: Returns the maintenance counter. This is a LPDWORD type.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                                                                               |
|-----------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | Success                                                                                                   |
| ERR_HANDLE                  | -60   | Specified handle is invalid                                                                               |
| ERR_TIMEOUT                 | -70   | Timeout error                                                                                             |
| ERR_ACCESS                  | -80   | R/W cannot be performed on the printer                                                                    |
| ERR_PARAM                   | -90   | Parameter error                                                                                           |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                             |
| ERR_EXEC_FUNCTION           | -310  | This function is unavailable as Status API is used by other applications.                                 |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                        |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                    |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                  |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                    |

### NOTE

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

---

## Comment

There are two types of maintenance counters; those that can be reset by the user, and integrated counters that cannot be reset.

The following operations are executed according to the printer status when this function is called.

| Printer Status              | Operation                                                                                |
|-----------------------------|------------------------------------------------------------------------------------------|
| Online                      | Returns "SUCCESS" to <i>nErr</i> . Acquires the maintenance counter value.               |
| Offline                     | Returns "ERR_TIMEOUT" to <i>nErr</i> . Does not acquire the maintenance counter value.   |
| Cable Removed/<br>Power Off | Returns "ERR_ACCESS" to <i>nErr</i> .<br>Does not acquire the maintenance counter value. |
| Printing                    | Returns "ERR_ACCESS" to <i>nErr</i> .<br>Does not acquire the maintenance counter value. |



## BiResetCounter

Resets the maintenance counter.

### NOTE

- For information on the counter number and the maintenance counters that can be acquired, ask your dealer.
- The maintenance counter may not be available according to the printer. In this case, a timeout error is generated.
- Confirm that the ASB status is online before calling this function.

### Syntax

*nErr* = **BiResetCounter** (*nHandle*, *readno*)

Specify the handle in *nHandle*. Specify the maintenance counter number reset to *readno*.

### Argument

*nHandle*: Specifies the handle. This is an INT type.

*readno*: Specifies the maintenance counter number to be reset. This is a WORD type.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                                                                               |
|-----------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | Success                                                                                                   |
| ERR_HANDLE                  | -60   | Specified handle is invalid                                                                               |
| ERR_TIMEOUT                 | -70   | Timeout error                                                                                             |
| ERR_ACCESS                  | -80   | R/W cannot be performed on the printer                                                                    |
| ERR_PARAM                   | -90   | Parameter error                                                                                           |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                             |
| ERR_EXEC_FUNCTION           | -310  | This function is unavailable as Status API is used by other applications.                                 |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                        |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                    |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                  |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                    |

### NOTE

For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

---

## Comment

If "SUCCESS" is the return value of *nErr* and the value acquired by BiGetCounter after resetting the maintenance counter, this confirms normal execution.

The following operations are executed according to the printer status when this function is called.

| Printer Status          | Operation                                                                      |
|-------------------------|--------------------------------------------------------------------------------|
| Online                  | Returns "SUCCESS" to <i>nErr</i> . Resets the maintenance counter.             |
| Offline                 | Returns "ERR_TIMEOUT" to <i>nErr</i> . Does not reset the maintenance counter. |
| Cable Removed/Power Off | Returns "ERR_ACCESS" to <i>nErr</i> . Does not reset the maintenance counter.  |
| Printing                | Returns "ERR_ACCESS" to <i>nErr</i> . Does not reset the maintenance counter.  |

## BiGetPrnCapability

Acquires the specified printer information in printer ID.

### NOTE

- For information on the Printer Capability that can be acquired, ask your dealer.
- There are printer ID's that are not supported by printers. If unsupported printer ID's are specified, a timeout error is generated.

### Syntax

*nErr* = **BiGetPrnCapability** (*nHandle*, *prnID*, *pBuffSize*, *pBuff*)

Specify the handle in *nHandle* and specify the acquiring printer information to *prnID*. Specify the memory size to set the printer information in *pBuffSize* and specify the memory address to set the printer information in *pBuff*.

### Argument

- nHandle:** Specifies the handle. This is an INT type.
- prnID:** Specifies the acquiring printer information. This is a BYTE type.
- pBuffSize:** Specifies the memory size to set the printer information (1 to 80). Returns the actual read data size after calling this function. In the case of insufficient buffer capacity, the required byte size is returned. This is a LPBYTE type.
- pBuff:** Specifies the memory address to set the printer information. This is a LPBYTE type.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                                                                               |
|-----------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | Success                                                                                                   |
| ERR_HANDLE                  | -60   | Specified handle is invalid                                                                               |
| ERR_TIMEOUT                 | -70   | Timeout error                                                                                             |
| ERR_ACCESS                  | -80   | R/W cannot be performed on the printer                                                                    |
| ERR_PARAM                   | -90   | Parameter error                                                                                           |
| ERR_BUFFER_OVER_FLOW        | -140  | Lack of buffer capacity.                                                                                  |
| ERR_EXEC_FUNCTION           | -310  | This function is unavailable as Status API is used by other applications.                                 |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                        |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                    |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |

| Macro Definition<br>(Constant) | Value | Description                              |
|--------------------------------|-------|------------------------------------------|
| ERR_RESET                      | -400  | Cannot call as the printer is restarting |
| ERR_LOCKED                     | -1000 | The printer is locked.                   |

**NOTE**

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

# BiOpenDrawer

Opens the drawer.



Opens the drawer even when the printer is offline.

## Syntax

*nErr* = **BiOpenDrawer** (*nHandle*, *drawer*, *pulse*)

Specify the handle in *nHandle*. Specify the drawer to open in *drawer* and specify the time until the drawer opens in *pulse*.

## Argument

*nHandle*: Specifies the handle. This is an INT type.

*drawer*: Specifies the drawer to open. This is a BYTE type.

| Macro Definition (Constant) | Value | Description    |
|-----------------------------|-------|----------------|
| EPS_BI_DRAWER_1             | 1     | Opens drawer 1 |
| EPS_BI_DRAWER_2             | 2     | Opens drawer 2 |

*pulse*: Specifies the time until the drawer is opened. This is a BYTE type.

| Macro Definition (Constant) | Value | Description                                |
|-----------------------------|-------|--------------------------------------------|
| EPS_BI_PLUSE_100            | 1     | Operates the drawer after 100 milliseconds |
| EPS_BI_PLUSE_200            | 2     | Operates the drawer after 200 milliseconds |
| EPS_BI_PLUSE_300            | 3     | Operates the drawer after 300 milliseconds |
| EPS_BI_PLUSE_400            | 4     | Operates the drawer after 400 milliseconds |
| EPS_BI_PLUSE_500            | 5     | Operates the drawer after 500 milliseconds |
| EPS_BI_PLUSE_600            | 6     | Operates the drawer after 600 milliseconds |
| EPS_BI_PLUSE_700            | 7     | Operates the drawer after 700 milliseconds |
| EPS_BI_PLUSE_800            | 8     | Operates the drawer after 800 milliseconds |

## Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                                                                               |
|-----------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | Success                                                                                                   |
| ERR_HANDLE                  | -60   | Specified handle is invalid                                                                               |
| ERR_ACCESS                  | -80   | R/W cannot be performed on the printer                                                                    |
| ERR_PARAM                   | -90   | Parameter error                                                                                           |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                             |
| ERR_EXEC_FUNCTION           | -310  | This function is unavailable as Status API is used by other applications.                                 |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                        |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                    |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                  |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                    |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## Comment

The following operations are executed according to the printer status when this function is called.

| Printer Status          | Operation                                                       |
|-------------------------|-----------------------------------------------------------------|
| Online                  | Returns "SUCCESS" to <i>nErr</i> . Opens the drawer.            |
| Offline                 | Returns "SUCCESS" to <i>nErr</i> . Opens the drawer.            |
| Cable Removed/Power Off | Returns "ERR_ACCESS" to <i>nErr</i> . Does not open the drawer. |

# BiPreparePaperChange

Ejects backwards to prepare for roll paper exchange.

## Syntax

*nErr* = **BiPreparePaperChange** (*nHandle*)

## Argument

*nHandle*: Specifies the handle. This is an INT type.

## Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                                                                               |
|-----------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | Success                                                                                                   |
| ERR_HANDLE                  | -60   | Specified handle is invalid                                                                               |
| ERR_TIMEOUT                 | -70   | Timeout error                                                                                             |
| ERR_ACCESS                  | -80   | R/W cannot be performed on the printer                                                                    |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                             |
| ERR_EXEC_FUNCTION           | -310  | This function is unavailable as Status API is used by other applications.                                 |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                  |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                    |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## BiRetractSheet

Retracts the receipt paper.

---

### Syntax

*nErr* = **BiRetractSheet** (*nHandle*)

### Argument

*nHandle*: Specifies the handle. This is an INT type.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition<br>(Constant) | Value | Description                                                                                               |
|--------------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| SUCCESS                        | 0     | Success                                                                                                   |
| ERR_HANDLE                     | -60   | Specified handle is invalid                                                                               |
| ERR_TIMEOUT                    | -70   | Timeout error                                                                                             |
| ERR_ACCESS                     | -80   | R/W cannot be performed on the printer                                                                    |
| ERR_NOT_SUPPORT                | -100  | Not supported                                                                                             |
| ERR_EXEC_FUNCTION              | -310  | This function is unavailable as Status API is used by other applications.                                 |
| ERR_PH_NOT_EXIST               | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |
| ERR_RESET                      | -400  | Cannot call as the printer is restarting                                                                  |
| ERR_LOCKED                     | -1000 | The printer is locked.                                                                                    |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

---

### Comment

Call BiSetPresenterEventBackFunction/BiSetPresenterEventBackFunctionEx/  
BiSetPresenterEventBackWnd to confirm the successful execution of the function.



# BiSendDataFile

Specify the command definition file to define the transmission command (ESC/POS command).

NOTE

Specify the command definition file in the specified format.  
Contact the dealer regarding ESC/POS commands.

## Syntax

*nErr* = **BiSendDataFile** (*nHandle*, *lpcFileName*)

Specify the handle in *nHandle* and the command definition file name in *lpcFileName*.

## Argument

- nHandle*: Specifies the handle. This is an INT type.
- lpcFileName*: Specifies the command definition file name. This is a LPCSTR type.

## Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

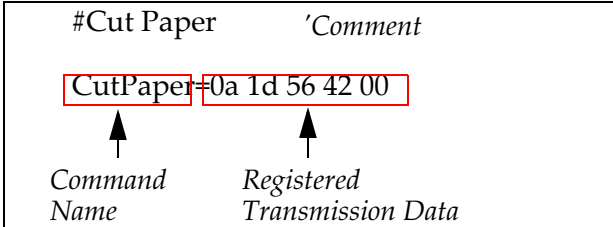
| Macro Definition (Constant) | Value | Description                                 |
|-----------------------------|-------|---------------------------------------------|
| SUCCESS                     | 0     | Success                                     |
| ERR_NO_MEMORY               | -50   | Not enough memory                           |
| ERR_HANDLE                  | -60   | Specified handle is invalid                 |
| ERR_PARAM                   | -90   | Parameter error                             |
| ERR_EXEC_FUNCTION           | -310  | Cannot call as another Status API is in use |

NOTE

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## Comment

Describe the command definition file using the following format.



NOTE

Contact the dealer regarding ESC/POS commands.

## Caution

- Handle character strings following "#" as comments.
- The character string listed to the left of "=" is the "command name" of the data to be written to the printer and the character string listed to the right of "=" is the "registered transmission data".
- Ensure that character strings are listed using parentheses (" ").
- List binary data as two digit hexadecimal.
- The maximum size of "command names" is 33 bytes (33 characters in ANK).
- The maximum size of "registered transmission data" is 10,240 bytes. However, the size of the "registered transmission data" is not the length of an "ASCIIZ character string" but the size after converting the data to binary. Refer to the following examples.

Example)    ABC="ABC": The maximum size of "registered transmission data" is 3 bytes.  
              ABC="ABC" 0D 0A: The maximum size of "registered transmission data" is 5 bytes.  
              ABC=41 42 43 0D 0A: The maximum size of "registered transmission data" is 5 bytes.

- If a command name is already registered, stop the command registration process and return an error.
- The number of commands that can be registered is limited to the usable memory of the system.
- Call the BiCloseMonPrinter function to cancel the registered command data.

## BiDirectSendRead

Executes the command defined in BiSendDataFile(ESC/POScommands).

### Syntax

```
nErr = BiDirectSendRead (nHandle, lpcCmdName, lpcReadName, readLen, pReadBuf,  
                           Timeout, nullTerminate )
```

Refer to the next argument.

### Argument

- nHandle:** Specifies the handle. This is an INT type.
- lpcCmdName:** Specifies the "command name" of the command definition file name. This is a LPCSTR type.
- lpcReadName:** Specifies the "receiving data type name" of the data read from the printer. Refer to Page "[BiSendDataFile](#)" on page 121. This is a LPCSTR type.
- readLen:** Specifies the data length read from the printer. Does not write to the printer when "0". Returns the data length when reading. This is a LPDWORD type.
- preadBuff:** Specifies the buffer saving the data read from the printer. This is a LPBYTE type.
- Timeout:** Specifies the timeout time in ms (milliseconds). This is a DWORD type.
- nullTerminate:** In the case of "TRUE", reading is complete when NULL is received from the printer. At this time, specify the readBuff size to readLen. In the case of "FALSE ", the length of data specified in readLen is read or data is read from the printer until a timeout error is generated.

#### NOTE

Ensure that the size of preadBuff is the same length specified in readLen or longer.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                            |
|-----------------------------|-------|----------------------------------------|
| SUCCESS                     | 0     | Success                                |
| ERR_NO_MEMORY               | -50   | Not enough memory                      |
| ERR_HANDLE                  | -60   | Specified handle is invalid            |
| ERR_TIMEOUT                 | -70   | Timeout error                          |
| ERR_ACCESS                  | -80   | R/W cannot be performed on the printer |
| ERR_PARAM                   | -90   | Parameter error                        |

| Macro Definition (Constant) | Value | Description                                                                                               |
|-----------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| ERR_EXEC_FUNCTION           | -310  | This function is unavailable as Status API is used by other applications.                                 |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                        |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                    |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                  |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                    |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## Comment

This function specifies the name (macro name) previously specified in the command definition file. The following data types can be specified as responses from the printer.

| Data Types      | Description                                                                              |
|-----------------|------------------------------------------------------------------------------------------|
| ASB             | Automatic status transmission                                                            |
| ASB Extended    | Automatic status transmission regarding extended status                                  |
| Ptr Info Byte   | Printer ID information                                                                   |
| Ptr Info String | Printer information B                                                                    |
| Power OFF       | Power OFF notification                                                                   |
| Power ON        | Power ON notification                                                                    |
| Realtime        | Realtime transmission of status                                                          |
| Buffer Clear    | Buffer clear                                                                             |
| Slip Remaining  | Dot count transmission of remaining print area of a single-cut sheet                     |
| NVM Image Size  | Transmission of full capacity of NV graphics area                                        |
| NVM Image Free  | Transmission of remaining capacity of NV graphics area                                   |
| NVM Image Keys  | Transmission of the key code list of defined NV graphics                                 |
| NVM Image List  | Transmission of the data ID list of image reading results saved to NV memory for storage |
| NVM User Used   | Transmission of usage capacity (byte count of used area)                                 |
| NVM User Free   | Transmission of remaining capacity (byte count of unused area)                           |
| NVM User Get    | Transmission of the storage data of a specified record                                   |
| NVM User Keys   | Transmission of the key code list of a storage record                                    |
| NVM Set Mode    | Transmission of transfer notification to user settings mode                              |
| NVM Get Mswitch | Transmission of memory switch values                                                     |
| NVM Set Size    | Transmission of customized values                                                        |
| ASB Ink         | Automatic status transmission regarding ink                                              |
| Ptr Info Type A | Printer information A                                                                    |

| Data Types       | Description                                                    |
|------------------|----------------------------------------------------------------|
| Test Print       | Execution of test print                                        |
| RAM Image Free   | Transmission of remaining area of download graphics area       |
| RAM Image Keys   | Transmission of the key code list of defined download graphics |
| OfflineCode Bit  | Transmission of offline response (bit format)                  |
| OfflineCode Data | Transmission of offline response (data format)                 |
| ProcessID        | Transmission of process ID response                            |
| Data Types       | Description                                                    |
| Buffer Clear24   | Buffer clear 24                                                |
| Other            | Data not applicable to the aforementioned                      |

**NOTE**

Contact the dealer regarding ESC/POS commands.

## BiSetDefaultEchoTime

Configures the response confirmation frequency of the network printer and the initial time value for a single timeout.

### NOTE

Can only be used when connected by Ethernet.

## Syntax

*nErr* = **BiSetDefaultEchoTime** (*Count*, *Timeout*)

Configures the response confirmation frequency to *Count* and the single timeout time to *Timeout*.

## Argument

**Count:** Configures the response confirmation frequency (1 to 255). This is a BYTE type.  
**Timeout:** Configures the single timeout time (1 to 65535) in ms (millisecond) units. This is a WORD type.

## Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                                                                               |
|-----------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | Success                                                                                                   |
| ERR_PARAM                   | -90   | Parameter error                                                                                           |
| ERR_EXEC_FUNCTION           | -310  | This function is unavailable as Status API is used by other applications.                                 |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |

### NOTE

- For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).
- When a shred printer is accessed from a client that does not have PortHandler, the printer returns ERR\_PH\_NOT\_EXIST.

## Comment

The response confirmation frequency is once and the timeout time is 1 second immediately after installing Status API. The configured value is valid the next time the BiOpenMonPrinter function is called.

## BiSetEtherEchoTime

Configures the response confirmation frequency of the network printer and the timeout time for one time after Status API is available.



Can only be used when connected by Ethernet.

### Syntax

*nErr* = **BiSetEtherEchoTime** (*nHandle* , *Count*, *Timeout*)

Specify the handle in *nHandle*. Configures the response confirmation frequency to *Count* and the single timeout time to *Timeout*.

### Argument

**nHandle:** Specifies the handle. This is an INT type.  
**Count:** Configures the response confirmation frequency (1 to 255). This is a BYTE type.  
**Timeout:** Configures the single timeout time (1 to 65535) in ms (millisecond) units. This is a WORD type.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition (Constant) | Value | Description                                                                                               |
|-----------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | Success                                                                                                   |
| ERR_HANDLE                  | -60   | Specified handle is invalid                                                                               |
| ERR_PARAM                   | -90   | Parameter error                                                                                           |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                             |
| ERR_EXEC_FUNCTION           | -310  | Cannot call as another Status API is in use                                                               |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                    |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

### Comment

If a value is not configured to this function, the value set in the BiSetDefaultEchoTime function is used.

## BiSetReadWaitTimeOut

This is a compatible API. This API itself has no function.

---

### Syntax

*nErr* = **BiSetReadWaitTimeOut** (*nHandle* , *wTimeOut*)

### Argument

*nHandle*: Specifies the handle. This is an INT type.

*wTimeOut*: Not used. This is a WORD type.

### Return value

Returns the following Status API execution errors (value) to the variable (*nErr*) defined by the INT type. Returns "SUCCESS" (macro definition) when this function is successfully called.

| Macro Definition<br>(Constant) | Value | Description |
|--------------------------------|-------|-------------|
| SUCCESS                        | 0     | Success     |

#### NOTE

For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.



## BiMICRCleaning

Cleans the MICR mechanism.

### Syntax

*nErr* = **BiMICRCleaning** (*nHandle*)

### Argument

*nHandle*: Specifies the handle. This is an INT type.

### Return Values

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                                                                                                                          |
|-----------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                                                                                                              |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect.                                                                                             |
| ERR_TIMEOUT                 | -70   | A time out error occurred.                                                                                                                           |
| ERR_ACCESS                  | -80   | Reading/writing with the printer is not possible (The printer's power is not on or the cable connections are faulty or printing or accessing, etc.). |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                                                                        |
| ERR_EXEC_FUNCTION           | -310  | This function is unavailable as Status API is used by other applications.                                                                            |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                                                                   |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                                                               |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server.                                            |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                                                             |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                                                               |

#### NOTE

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

### Explanation

If this function is called, the mechanism waits for the cleaning sheet to be inserted. Insert the cleaning sheet and carry out cleaning of the mechanism. After cleaning is finished, the MICR function is deselected and roll paper is used for the printing sheets.

## BiMICRGetStatus

Acquires the MICR status.

---

### Syntax

*nErr* = **BiMICRGetStatus** (*nHandle* , *pStatus*)

### Argument

*nHandle*: Specifies the handle. This is an INT type.

*pStatus*: Specifies the memory address where the MICR status is set. See the following MICR states concerning the types of MICR status that are returned. This is a LPBYTE type.

| Bit | ON/OFF | Value | Status                     |
|-----|--------|-------|----------------------------|
| 0   | -      | 0x00  | Fixed to 0                 |
| 1   | -      | 0x02  | Fixed to 1                 |
| 2   | ON     | 0x04  | Not selected               |
|     | OFF    | 0x00  | Selected                   |
| 3   | ON     | 0x08  | Wait for insertion         |
|     | OFF    | 0x00  | Do not wait for insertion  |
| 4   | -      | 0x10  | Fixed to 1                 |
| 5   | ON     | 0x20  | No paper in the TOF sensor |
|     | OFF    | 0x00  | Paper in the TOF sensor    |
| 6   | ON     | 0x40  | No paper in the BOF sensor |
|     | OFF    | 0x00  | Paper in the BOF sensor    |
| 7   | -      | 0x00  | Fixed to 0                 |

### Return Values

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                                                                                                                          |
|-----------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                                                                                                              |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect.                                                                                             |
| ERR_TIMEOUT                 | -70   | A time out error occurred.                                                                                                                           |
| ERR_ACCESS                  | -80   | Reading/writing with the printer is not possible (The printer's power is not on or the cable connections are faulty or printing or accessing, etc.). |
| ERR_PARAM                   | -90   | Parameter error                                                                                                                                      |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                                                                        |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.                                                                                              |

| Macro Definition (Constant) | Value | Description                                                                                               |
|-----------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                    |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                  |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                    |

**NOTE**

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## BiMICRLoadCheck

Loads the check to the check print start position when the MICR function is selected.

---

### Syntax

*nErr* = **BiMICRLoadCheck** (*nHandle*)

### Argument

**nHandle:** Specifies the handle. This is an INT type.

### Return Values

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                                                                                                                          |
|-----------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                                                                                                              |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect.                                                                                             |
| ERR_TIMEOUT                 | -70   | A time out error occurred.                                                                                                                           |
| ERR_ACCESS                  | -80   | Reading/writing with the printer is not possible (The printer's power is not on or the cable connections are faulty or printing or accessing, etc.). |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                                                                        |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.                                                                                              |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                                                                   |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                                                               |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server.                                            |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting.                                                                                                            |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                                                               |

#### NOTE

For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

## BiMICRReadCheck

Executes check reading. If 0 is specified for the check insertion wait time, the printer's wait time is canceled. Furthermore, the check insertion wait time after MICR reading is finished is reset to 0, the printer's default value.

### Syntax

```
nErr = BiMICRReadCheck(nHandle , readFont , waitInsertionTime)
```

### Argument

*nHandle*: Specifies the handle. This is an INT type.

*readFont*: Specifies the reading font. This is a BYTE type.

| Value | Description |
|-------|-------------|
| 0     | E13B        |
| 1     | CMC7        |

*waitInsertionTime*: Specifies the check insertion wait time.  
0 ~ 15 (x 60 sec.) (The printer's default is 0)  
This is a BYTE type.

### Return Values

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                                                                                                                          |
|-----------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                                                                                                              |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect.                                                                                             |
| ERR_TIMEOUT                 | -70   | A time out error occurred.                                                                                                                           |
| ERR_ACCESS                  | -80   | Reading/writing with the printer is not possible (The printer's power is not on or the cable connections are faulty or printing or accessing, etc.). |
| ERR_PARAM                   | -90   | Parameter error                                                                                                                                      |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                                                                        |
| ERR_WITHOUT_CB              | -130  | Cannot execute because either BiSCNSetReadBackFunction or BiSCNSetReadBackWnd has not been called.                                                   |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.                                                                                              |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                                                                   |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                                                               |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server.                                            |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting.                                                                                                            |

| Macro Definition<br>(Constant) | Value | Description            |
|--------------------------------|-------|------------------------|
| ERR_LOCKED                     | -1000 | The printer is locked. |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## Caution

Be sure to call either BiMICRSetReadBackFunction or BiMICRSetReadBackWnd before calling this function.

## BiMICREjectCheck

Ejects the check when the MICR function is selected.

### Syntax

*nErr* = **BiMICREjectCheck** (*nHandle*)

### Argument

*nHandle*: Specifies the handle. This is an INT type.

### Return Values

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                                                                                                                          |
|-----------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                                                                                                              |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect.                                                                                             |
| ERR_TIMEOUT                 | -70   | A time out error occurred.                                                                                                                           |
| ERR_ACCESS                  | -80   | Reading/writing with the printer is not possible (The printer's power is not on or the cable connections are faulty or printing or accessing, etc.). |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                                                                        |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.                                                                                              |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                                                               |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server.                                            |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                                                             |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                                                               |

#### NOTE

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## BiMICRCancelWaitCheckInsertion

Cancels check insertion wait.

---

### Syntax

*nErr* = **BiMICRCancelWaitCheckInsertion** (*nHandle*)

### Argument

*nHandle*: Specifies the handle. This is an INT type.

### Return Values

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition<br>(Constant) | Value | Description                                                                                                                                          |
|--------------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS                        | 0     | SUCCESS                                                                                                                                              |
| ERR_HANDLE                     | -60   | The handle value specified for the printer is incorrect.                                                                                             |
| ERR_TIMEOUT                    | -70   | A time out error occurred.                                                                                                                           |
| ERR_ACCESS                     | -80   | Reading/writing with the printer is not possible (The printer's power is not on or the cable connections are faulty or printing or accessing, etc.). |
| ERR_NOT_SUPPORT                | -100  | Not supported                                                                                                                                        |
| ERR_EXEC_FUNCTION              | -310  | Cannot be used because the other API is being executed.                                                                                              |
| ERR_PH_NOT_EXIST               | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server.                                            |
| ERR_RESET                      | -400  | Cannot call as the printer is restarting                                                                                                             |
| ERR_LOCKED                     | -1000 | The printer is locked.                                                                                                                               |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

---

### Caution

Even if called with a printer which does not have the MICR function built in, the slip insertion wait setting is canceled.



## *BiMICRRetransmissionCheckData*

Resends the check reading results.

---

### Syntax

*nErr* = **BiMICRRetransmissionCheckData** (*nHandle* , *pReadBuffSize* , *readCharBuff* ,  
*pStatus* ,*pDetail* , *timeout*)

### Argument

|                        |                                                                                                                                                                                                                                                                                                                         |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>nHandle</i> :       | Specifies the handle. This is an INT type.                                                                                                                                                                                                                                                                              |
| <i>pReadBuffSize</i> : | Specifies the size of memory where the reading data are set. After this function is executed, the size of the actual reading data is set. This is a LPBYTE type.                                                                                                                                                        |
| <i>readCharBuff</i> :  | Specifies the memory addresses where the reading data are set. This is a LPBYTE type.                                                                                                                                                                                                                                   |
| <i>pStatus</i> :       | Specifies a 1-byte memory address where the reading status is set. See the MICR reading status in BiMICRSetReadBackFunction concerning the status that is returned. This is a LPBYTE type.                                                                                                                              |
| <i>pDetail</i> :       | Specifies a 1-byte memory address that sets detailed information after a returned reading error in the case that addition of detailed information is specified by the BiMICRSelectDataHandlingfunction. See BiMICRSetReadBackFunction concerning the MICR detailed information that is returned. This is a LPBYTE type. |
| <i>timeout</i> :       | Specifies the timeout time for data reading in ms units. This is a DWORD type.                                                                                                                                                                                                                                          |

## Return Values

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                                                                                                                          |
|-----------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                                                                                                              |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect.                                                                                             |
| ERR_TIMEOUT                 | -70   | A time out error occurred.                                                                                                                           |
| ERR_ACCESS                  | -80   | Reading/writing with the printer is not possible (The printer's power is not on or the cable connections are faulty or printing or accessing, etc.). |
| ERR_PARAM                   | -90   | Parameter error                                                                                                                                      |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                                                                        |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.                                                                                              |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                                                                   |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                                                               |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server.                                            |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                                                             |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                                                               |



For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

## Explanation

If this function is called in the case that check reading is not being executed by the BiMICRReadCheckfunction, the reading data are not set. The reading status ends with an error.

## Cautions

Depending on the printer model (firmware version), the detailed information after there is a reading error may not be supported. In that case, nothing will be set.

If the reading data overflows, bit 6 of the MICR reading status goes ON (reading data overflow).

## BiMICRSelectDataHandling

Selects the check reading operation.

### Syntax

*nErr* = **BiMICRSelectDataHandling** (*nHandle* , *charSelect* , *detailSelect* , *errorSelect* )

### Argument

*nHandle*: Specifies the handle. This is an INT type.

*charSelect*: Specifies handling of characters that cannot be analyzed. This is a BYTE type.

| Value | Description                                                                                                                                                                                                                                                  |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0     | Interrupts analysis processing at the point when characters that cannot be analyzed are detected and doesn't add the reading data.                                                                                                                           |
| 1     | Replaces characters which cannot be analyzed with a '?' and continues analysis processing, then if the reading data size is at or less than the reading data size specified in BiMICRSetReadBackFunction / BiMICRSetReadBackWnd, the reading data are added. |

*detailSelect*: Specifies whether or not to add detailed information after a reading error. This is a BYTE type.

| Value | Description                        |
|-------|------------------------------------|
| 0     | Detailed information is not added. |
| 1     | Detailed information is added.     |

*errorSelect*: Specifies whether or not to end the MICR function or continue it after an error. Furthermore, the MICR function continues regardless of this setting if reading ends normally or if there was an error in adding the reading results. This is a BYTE type.

| Value | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0     | The MICR function is ended only after there is an error in not adding the reading data.                                                                                                                                                                                                                                                                                                                                                                    |
| 1     | If reading ends due to an error caused by any of the following causes, the MICR function continues even after notification of the reading results. <ul style="list-style-type: none"> <li>* A check with a non-standard length is inserted.</li> <li>* The magnetic waveform cannot be detected.</li> <li>* Characters which cannot be analyzed are detected in analysis processing.</li> <li>* Errors were detected in the noise measurements.</li> </ul> |

## Return Values

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                                                                                                                          |
|-----------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                                                                                                              |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect.                                                                                             |
| ERR_TIMEOUT                 | -70   | A time out error occurred.                                                                                                                           |
| ERR_ACCESS                  | -80   | Reading/writing with the printer is not possible (The printer's power is not on or the cable connections are faulty or printing or accessing, etc.). |
| ERR_PARAM                   | -90   | Parameter error                                                                                                                                      |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                                                                        |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.                                                                                              |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                                                                   |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                                                               |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server.                                            |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                                                             |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                                                               |

### NOTE

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## BiMICRSetReadBackFunction

Executes reading of checks by BiMICRReadCheck and registers the address of the callback function when the results are notified as well as the memory addresses where each type of information read from the check is set.

### NOTE

This is unavailable when the development environment is VB.

### Syntax

```
nErr = BiMICRSetReadBackFunction (nHandle , int (CALLBACK EXPORT *pMircb)(void) ,  
                                     pReadBuffSize , readCharBuff , pStatus ,pDetail )
```

### Argument

*nHandle*: Specifies the handle. This is an INT type.

*int* (CALLBACK EXPORT \**pMircb*)(*void*):

Specifies the address of the callback function for notifying the results from reading of a check.

*pReadBuffSize*: Specifies the size of the memory where the reading data are set. After execution of this function, the size of the data which were actually read is set. This is a LPBYTE type.

*readCharBuff*: Specifies the memory address where the check reading data are set. This is a LPBYTE type.

*pStatus*: Specifies a 1-byte memory address where the reading status is stored. See MICR reading status below concerning the status that is returned. This is a LPBYTE type.

*For the TM-H6000, TM-H6000II, TM-H6000III, TM-J7000/7100*

| Bit | ON/OFF | Value | Status                          |
|-----|--------|-------|---------------------------------|
| 0   | ON     | 0x01  | Reading font: CMC7              |
|     | OFF    | 0x00  | Reading font: E13B              |
| 1   | -      | 0x00  | Fixed to 0                      |
| 2   | -      | 0x00  | Fixed to 0                      |
| 3   | ON     | 0x08  | Detailed information: Added     |
|     | OFF    | 0x00  | Detailed information: Not added |
| 4   | ON     | 0x10  | Rereading: Disabled             |
|     | OFF    | 0x00  | Rereading: Enabled              |
| 5   | ON     | 0x20  | Reading result: Abnormal end    |
|     | OFF    | 0x00  | Reading result: Normal end      |
| 6   | ON     | 0x40  | Reading data overflow: YES      |
|     | OFF    | 0x00  | Reading data overflow: NO       |

For the TM-H6000, TM-H6000II, TM-H6000III, TM-J7000/7100

| Bit | ON/OFF | Value | Status     |
|-----|--------|-------|------------|
| 7   | -      | 0x00  | Fixed to 0 |

For the TM-H5000II, TM-H5200, TM-U675, TM-U950

| Bit | ON/OFF | Value | Status                       |
|-----|--------|-------|------------------------------|
| 0   | ON     | 0x01  | Reading font: CMC7           |
|     | OFF    | 0x00  | Reading font: E13B           |
| 1   | -      | 0x00  | Fixed to 0                   |
| 2   | -      | 0x00  | Fixed to 0                   |
| 3   | -      | 0x00  | Fixed to 0                   |
| 4   | ON     | 0x10  | Rereading: Disabled          |
|     | OFF    | 0x00  | Rereading: Enabled           |
| 5   | ON     | 0x20  | Reading result: Abnormal end |
|     | OFF    | 0x00  | Reading result: Normal end   |
| 6   | ON     | 0x40  | Reading data overflow: YES   |
|     | OFF    | 0x00  | Reading data overflow: NO    |
| 7   | -      | 0x00  | Fixed to 0                   |

pDetail:

Specifies a 1-byte memory address in which reading of a check ends in an error, which is returned in cases where detailed information is added in accordance with the BiMICRSelectDataHandlingfunction. See the following detailed MICR information concerning the detailed information that is returned. This is a LPBYTE type.

| Value | Information                                                                                                                                          |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 40h   | No abnormality                                                                                                                                       |
| 41h   | Check reading was not executed even once.(The BiMICRREADCheckfunction has not been called.)                                                          |
| 42h   | Check insertion wait was canceled.(The BiMICRCancelWaitCheckInsertionfunction was called.)                                                           |
| 43h   | Check insertion wait was canceled by the set time being exceeded. (The time out set time passed while the BiMICRReadCheckfunction was being called.) |
| 44h   | A check with a non-standard length was inserted.                                                                                                     |
| 45h   | The magnetic waveform was not detected.                                                                                                              |
| 46h   | Characters which could not be analyzed were detected in analysis processing.                                                                         |
| 47h   | An error occurred during check reading processing.                                                                                                   |
| 48h   | An error was detected in the noise measurement.                                                                                                      |
| 49h   | Check reading processing was interrupted by the cover being opened.                                                                                  |

## Return Values

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                              |
|-----------------------------|-------|----------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                  |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect. |
| ERR_PARAM                   | -90   | Parameter error                                          |
| ERR_NOT_SUPPORT             | -100  | Not supported                                            |
| ERR_EXIST                   | -210  | The specified data already exists.                       |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.  |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## Caution

Be sure to call this function before calling the BiMICRReadCheckfunction. An error will be returned if the BiMICRReadCheckfunction is called before this function is called.

Depending on the printer model (firmware version), the detailed information after there is a reading error may not be supported. In that case, nothing will be set.

If the reading data overflows, bit 6 of the MICR reading status goes ON (reading data overflow).

## BiMICRSetReadBackFunctionEx

Executes reading of checks by BiMICRReadCheck and registers the address of the callback function when the results are notified as well as the memory addresses where each type of information read from the check is set.

### NOTE

This is unavailable when the development environment is VB.

### Syntax

```
nErr = BiMICRSetReadBackFunctionEx (nHandle , int (CALLBACK EXPORT *pMicrCB)  
                                     (LPSTR lpcPortName) , pReadBuffSize ,  
                                     readCharBuff , pStatus , pDetail )
```

### Argument

- |                                                                                            |                                                                                                                                                                                                                                                                                                           |
|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>nHandle</i> :                                                                           | Specifies the handle. This is an INT type.                                                                                                                                                                                                                                                                |
| <i>int</i> ( <i>CALLBACK EXPORT</i> * <i>pMicrCB</i> )( <i>LPSTR</i> <i>lpcPortName</i> ): | Specifies the address of the callback function for notifying the results from reading of a check.                                                                                                                                                                                                         |
| <i>pReadBuffSize</i> :                                                                     | Specifies the size of the memory where the reading data are set. After execution of this function, the size of the data which were actually read is set. This is a LPBYTE type.                                                                                                                           |
| <i>readCharBuff</i> :                                                                      | Specifies the memory address where the check reading data are set. This is a LPBYTE type.                                                                                                                                                                                                                 |
| <i>pStatus</i> :                                                                           | Specifies a 1-byte memory address where the reading status is stored. See MICR reading status below concerning the status that is returned. This is a LPBYTE type.                                                                                                                                        |
| <i>pDetail</i> :                                                                           | Specifies a 1-byte memory address in which reading of a check ends in an error, which is returned in cases where detailed information is added in accordance with the BiMICRSelectDataHandlingfunction. See the following detailed MICR information concerning the detailed information that is returned. |



## Return Values

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                              |
|-----------------------------|-------|----------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                  |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect. |
| ERR_PARAM                   | -90   | Parameter error                                          |
| ERR_NOT_SUPPORT             | -100  | Not supported                                            |
| ERR_EXIST                   | -210  | The specified data already exists.                       |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.  |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## Explanation

The following MICR reading states can be acquired. Refer to [Explanation] and [Caution] in BiMICRSetReadBackFunction.

## Caution

The difference between this argument and BiMICRSetReadBackFunction is that the port from which the callback is sent can be recognized.

## BiMICRSetReadBackWnd

Executes check reading by BiMICRReadCheck, registers the handle of a button which sends the button's click event when the results are notified, and registers the memory addresses where each type of reading information is set.

---

### Syntax

*nErr* = **BiMICRSetReadBackWnd** (*nHandle*, *hWnd*, *pReadBuffSize*, *readCharBuff*, *pStatus*, *pDetail*)

### Argument

- nHandle:** Specifies the handle. This is an INT type.
- hWnd:** Specifies the button handle. Sends the click event to this button. This is a Long type.
- pReadBuffSize:** Specifies the size of memory where the reading data are set. after this function is executed, the size of the actual reading data is set. This is a LPBYTE type.
- readCharBuff:** Specifies the memory addresses where the reading data are set. This is a LPBYTE type.
- pStatus:** Specifies a 1-byte memory address where the reading status is set. This is a LPBYTE type.
- pDetail:** Specifies a 1-byte memory address that sets detailed information after a returned reading error in the case that addition of detailed information is specified by the BiMICRSelectDataHandlingfunction. This is a LPBYTE type.

### Return Values

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                              |
|-----------------------------|-------|----------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                  |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect. |
| ERR_PARAM                   | -90   | Parameter error                                          |
| ERR_NOT_SUPPORT             | -100  | Not supported                                            |
| ERR_EXIST                   | -210  | The specified data already exists.                       |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.  |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

---

## Explanation

Acquires the MICR reading status of 5.19 "BiMICRSetReadBackFunction."

## Cautions

Be sure to call this function before calling the BiMICRReadCheckfunction. An error will be returned if the BiMICRReadCheckfunction is called before this function is called.

Depending on the printer model (firmware version), the detailed information after there is a reading error may not be supported. In that case, nothing will be set.

If the reading data overflows, bit 6 of the MICR reading status goes ON (reading data overflow).

## BiMICRCancelReadBack

Cancels a reading information notification request registered using BiMICRSetReadBackFunction, BiMICRSetReadBackFunctionEx or BiMICRSetReadBackWnd.

---

### Syntax

*nErr* = **BiMICRCancelReadBack** (*nHandle*)

### Argument

*nHandle*: Specifies the handle. This is an INT type.

### Return Values

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                              |
|-----------------------------|-------|----------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                  |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect. |
| ERR_NOT_SUPPORT             | -100  | Not supported                                            |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.  |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                       |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## BiSCNClumpPaper

Sets the cut sheet paper in the clumped state. After this function is executed, the printer is set in the cut sheet insertion wait state, then the paper is clumped after it is inserted. If paper is already clumped at this time, nothing is done.

### Syntax

*nErr* = **BiSCNClumpPaper** (*nHandle*)

### Argument

*nHandle*: Specifies the handle. This is an INT type.

### Return value

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                                                                                                                          |
|-----------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                                                                                                              |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect.                                                                                             |
| ERR_TIMEOUT                 | -70   | A time out error occurred.                                                                                                                           |
| ERR_ACCESS                  | -80   | Reading/writing with the printer is not possible (The printer's power is not on or the cable connections are faulty or printing or accessing, etc.). |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                                                                        |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.                                                                                              |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                                                                   |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                                                               |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server.                                            |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                                                             |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                                                               |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

### Caution

If this function is executed for the TM-H6000III, which is not equipped with a scanner, it ends normally, but the paper is not clumped.

This function is valid for the scanner unit currently selected.

## BiSCNGetClumpStatus

Acquires the clump status of cut sheets.

### Syntax

*nErr* = **BiSCNGetClumpStatus** (*nHandle* , *pStatus*)

### Argument

*nHandle*: Specifies the handle. This is an INT type.

*pStatus*: Specifies the memory address where the cut sheet clump status is to be stored. See the cut sheet clump status items shown below concerning the returned status. This is a LPBYTE type.

| Bit | ON/OFF | Value | Status                                                           |
|-----|--------|-------|------------------------------------------------------------------|
| 0   | ON     | 0x01  | Feeding processing of slip to printing position:<br>Not possible |
|     | OFF    | 0x00  | Feeding processing of slip to printing position:<br>Possible     |
| 1   | ON     | 0x02  | Reading MICR of check: Not possible                              |
|     | OFF    | 0x00  | Reading MICR on check: Possible                                  |
| 2   | ON     | 0x04  | Image processing of check: Not possible                          |
|     | OFF    | 0x00  | Image processing of check: Possible                              |
| 3   | ON     | 0x08  | Image processing of card scanner unit: Not possible              |
|     | OFF    | 0x00  | Image processing of card scanner unit: Possible                  |
| 4   | -      | 0x00  | Fixed to 0                                                       |
| 5   | -      | 0x00  | Fixed to 0                                                       |
| 6   | -      | 0x40  | Fixed to 1                                                       |
| 7   | -      | 0x00  | Fixed to 0                                                       |

### Return value

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition<br>(Constant) | Value | Description                                                                                                                                          |
|--------------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS                        | 0     | SUCCESS                                                                                                                                              |
| ERR_HANDLE                     | -60   | The handle value specified for the printer is incorrect.                                                                                             |
| ERR_TIMEOUT                    | -70   | A time out error occurred.                                                                                                                           |
| ERR_ACCESS                     | -80   | Reading/writing with the printer is not possible (The printer's power is not on or the cable connections are faulty or printing or accessing, etc.). |
| ERR_PARAM                      | -90   | Parameter error                                                                                                                                      |
| ERR_NOT_SUPPORT                | -100  | Not supported                                                                                                                                        |

| Macro Definition<br>(Constant) | Value | Description                                                                                               |
|--------------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| ERR_EXEC_FUNCTION              | -310  | Cannot be used because the other API is being executed.                                                   |
| ERR_EXEC_MICR                  | -320  | Cannot call as the MICR is reading                                                                        |
| ERR_EXEC_SCAN                  | -330  | Cannot call as the scanner is scanning                                                                    |
| ERR_PH_NOT_EXIST               | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |
| ERR_RESET                      | -400  | Cannot call as the printer is restarting                                                                  |
| ERR_LOCKED                     | -1000 | The printer is locked.                                                                                    |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## Caution

If this function is executed for the TM-H6000III, which is not equipped with a scanner, it ends with an ERR\_TIMEOUT.

## BiSCNGetCroppingArea

Acquires the cropping area set in the printer.

---

### Syntax

*nErr* = **BiSCNGetCroppingArea** (*nHandle* , *pBuffSize* , *pBuff* )

### Argument

- nHandle:** Specifies the handle. This is an INT type.
- pBuffSize:** Specifies the size of memory where the cropping area information is set. The actual size of the scanned data is set. This is a LPWORD type.
- pBuff:** Specifies the memory address where the cropping area information is set. The information is set in the following format. This is a LPBYTE type.  
The following format is returned.

|                                                 |
|-------------------------------------------------|
| Cropping area number (1 byte)                   |
| Starting X-coordinate of cropping area (1 byte) |
| Starting Y-coordinate of cropping area (1 byte) |
| Ending X-coordinate of cropping area (1 byte)   |
| Ending Y-coordinate of cropping area (1 byte)   |
| :                                               |
| :                                               |

### Return value

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                                                                                                                          |
|-----------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                                                                                                              |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect.                                                                                             |
| ERR_TIMEOUT                 | -70   | A time out error occurred.                                                                                                                           |
| ERR_ACCESS                  | -80   | Reading/writing with the printer is not possible (The printer's power is not on or the cable connections are faulty or printing or accessing, etc.). |
| ERR_PARAM                   | -90   | Parameter error                                                                                                                                      |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                                                                        |
| ERR_BUFFER_OVER_FLOW        | -140  | Lack of buffer capacity.                                                                                                                             |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.                                                                                              |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                                                                   |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                                                               |



| Macro Definition<br>(Constant) | Value | Description                                                                                               |
|--------------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| ERR_PH_NOT_EXIST               | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |
| ERR_RESET                      | -400  | Cannot call as the printer is restarting                                                                  |
| ERR_LOCKED                     | -1000 | The printer is locked.                                                                                    |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## Caution

If this function is executed for the TM-H6000III, which is not equipped with a scanner, it ends with an ERR\_TIMEOUT.

If the buffer capacity is insufficient after this function is executed, the necessary number of bytes is set in pBuffSize. If any other error occurs, nothing is set.

This function is valid only for check paper.

## BiSCNSetCroppingArea

Specifies the cropping area.

---

### Syntax

*nErr* = **BiSCNSetCroppingArea** (*nHandle* , *bAreaNo* , *bStartX* , *bStartY* , *bEndX* , *bEndY*)

### Argument

- nHandle:** Specifies the handle. This is an INT type.
- bAreaNo:** Specifies the cropping area number. The valid setting range is 1~255. This is a BYTE type.
- bStartX:** Specifies the starting X coordinate of the cropping area. The valid setting range is 0 ~ 254 in mm units.  
This is a BYTE type.
- bStartY:** Specifies the starting Y coordinate of the cropping area. The valid setting range is 0 ~ 254 in mm units.  
This is a BYTE type.
- bEndX:** Specifies the ending X coordinate of the cropping area. The valid setting range is 1 ~ 255 in mm units.  
This is a BYTE type.
- bEndY:** Specifies the ending Y coordinate of the cropping area. The valid setting range is 1 ~ 255 in mm units.  
This is a BYTE type.

### Return value

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                                                                                                                          |
|-----------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                                                                                                              |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect.                                                                                             |
| ERR_TIMEOUT                 | -70   | A time out error occurred.                                                                                                                           |
| ERR_ACCESS                  | -80   | Reading/writing with the printer is not possible (The printer's power is not on or the cable connections are faulty or printing or accessing, etc.). |
| ERR_PARAM                   | -90   | Parameter error                                                                                                                                      |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                                                                        |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.                                                                                              |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                                                                   |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                                                               |

| Macro Definition (Constant) | Value | Description                                                                                               |
|-----------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server. |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                  |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                    |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## Caution

For the TM-H6000III, which is not equipped with a scanner, this function ends normally even if it is executed, but the range is not set.

The coordinate reference point (0, 0) is the top right when facing toward the check paper insertion direction.

If  $bStartX > bEndX$ , or  $bStartY > bEndY$ , it results in a parameter error.

Valid ranges for arguments of BiSCNSetCroppingArea are as follows. A value exceeding the range cannot be set.

$1 \leq bAreaNo \leq 10$ ,  $0 \leq bStartX \leq 98$ ,  $0 \leq bStartY \leq 228$ ,  $2 \leq bEndX \leq 255$ ,  $2 \leq bEndY \leq 255$

If the specified Cropping area number already exists, the cropping area with that number is updated.

If a  $bEndX$ ,  $bEndY$  which exceeds the printer's scannable area is specified, the values for the printer's maximum scannable area are set.

If an odd number is specified to a set value, it is handled as an even number. A starting point ( $bStarX$ ,  $bStartY$ ) is handled on the minus side, and an ending point ( $bEndX$ ,  $bEndY$ ) is handled on the plus side.

This function is valid only for check paper.

The set read area is applied beginning with the next image data read. (The read area is not applied to image data that has already been read)

## BiSCNDeleteCroppingArea

Deletes the cropping area set in the printer.

---

### Syntax

*nErr* = **BiSCNDeleteCroppingArea** (*nHandle* ,*bAreaNo*)

### Argument

**nHandle:** Specifies the handle. This is an INT type.

**bAreaNo:** Specifies the number of the cropping area to be deleted. The valid setting range is 1-255. If 0 is set, all the cropping areas are deleted. This is a BYTE type.

### Return value

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition<br>(Constant) | Value | Description                                                                                                                                          |
|--------------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS                        | 0     | SUCCESS                                                                                                                                              |
| ERR_HANDLE                     | -60   | The handle value specified for the printer is incorrect.                                                                                             |
| ERR_TIMEOUT                    | -70   | A time out error occurred.                                                                                                                           |
| ERR_ACCESS                     | -80   | Reading/writing with the printer is not possible (The printer's power is not on or the cable connections are faulty or printing or accessing, etc.). |
| ERR_NOT_SUPPORT                | -100  | Not supported                                                                                                                                        |
| ERR_EXEC_FUNCTION              | -310  | Cannot be used because the other API is being executed.                                                                                              |
| ERR_EXEC_MICR                  | -320  | Cannot call as the MICR is reading                                                                                                                   |
| ERR_EXEC_SCAN                  | -330  | Cannot call as the scanner is scanning                                                                                                               |
| ERR_PH_NOT_EXIST               | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server.                                            |
| ERR_RESET                      | -400  | Cannot call as the printer is restarting                                                                                                             |
| ERR_LOCKED                     | -1000 | The printer is locked.                                                                                                                               |



For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

---

### Caution

If this function is executed for the TM-H6000III, which is not equipped with a scanner, it ends normally, but the cropping area is not deleted.

This function is valid only for check paper.

## *BiSCNGetImageFormat*

Acquires the format of the image set in the printer.

---

### Syntax

*nErr* = **BiSCNGetImageFormat** (*nHandle* , *pFormat*)

### Argument

**nHandle:** Specifies the handle. This is an INT type.

**pFormat:** Specifies the memory address where the format of the notified image data is set. The set value is as shown below. This is a LPBYTE type.

| Macro Definition<br>(Constant) | Value | Description                                         |
|--------------------------------|-------|-----------------------------------------------------|
| EPS_BI_SCN_TIFF                | 1     | TIFF format CCITT (Group 4) compressed data.        |
| EPS_BI_SCN_RASTER              | 2     | Raster format uncompressed data.                    |
| EPS_BI_SCN_BITMAP              | 3     | Bitmap format uncompressed data.                    |
| EPS_BI_SCN_TIFF256             | 4     | TIFF format uncompressed data                       |
| EPS_BI_SCN_JPEGHIGH            | 5     | JPEG format high compression (size priority) data   |
| EPS_BI_SCN_JPEGNORMAL          | 6     | JPEG format normal compression data                 |
| EPS_BI_SCN_JPEGLOW             | 7     | JPEG format low compression (quality priority) data |

## Return value

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                                                                                                                          |
|-----------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                                                                                                              |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect.                                                                                             |
| ERR_TIMEOUT                 | -70   | A time out error occurred.                                                                                                                           |
| ERR_ACCESS                  | -80   | Reading/writing with the printer is not possible (The printer's power is not on or the cable connections are faulty or printing or accessing, etc.). |
| ERR_PARAM                   | -90   | Parameter error                                                                                                                                      |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                                                                        |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.                                                                                              |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                                                                   |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                                                               |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server.                                            |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                                                             |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                                                               |

### NOTE

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## BiSCNSetImageFormat

Sets the format of the scanning image data. Furthermore, the value set with this function is valid until the printer's power is turned OFF or until the printer is reset.

### Syntax

*nErr* = **BiSCNSetImageFormat** (*nHandle* , *bFormat* )

### Argument

**nHandle:** Specifies the handle. This is an INT type.

**bFormat:** Specifies the format of image data notified. The valid specification values are as shown below. This is a BYTE type.

The default value is EPS\_BI\_SCN\_TIFF after the printer's power is turned on, or after it is reset.

| Macro Definition (Constant) | Value | Description                                         |
|-----------------------------|-------|-----------------------------------------------------|
| EPS_BI_SCN_TIFF             | 1     | TIFF format CCITT (Group 4) compressed data.        |
| EPS_BI_SCN_RASTER           | 2     | Raster format uncompressed data.                    |
| EPS_BI_SCN_BITMAP           | 3     | Bitmap format uncompressed data.                    |
| EPS_BI_SCN_TIFF256          | 4     | TIFF format uncompressed data                       |
| EPS_BI_SCN_JPEGHIGH         | 5     | JPEG format high compression (size priority) data   |
| EPS_BI_SCN_JPEGNORMAL       | 6     | JPEG format normal compression data                 |
| EPS_BI_SCN_JPEGLOW          | 7     | JPEG format low compression (quality priority) data |

## Return value

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                                                                                                                          |
|-----------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                                                                                                              |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect.                                                                                             |
| ERR_TIMEOUT                 | -70   | A time out error occurred.                                                                                                                           |
| ERR_ACCESS                  | -80   | Reading/writing with the printer is not possible (The printer's power is not on or the cable connections are faulty or printing or accessing, etc.). |
| ERR_PARAM                   | -90   | Parameter error                                                                                                                                      |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                                                                        |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.                                                                                              |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                                                                   |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                                                               |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server.                                            |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                                                             |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                                                               |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## Caution

If this function is executed for the TM-H6000III, which is not equipped with a scanner, it ends normally, but the format is not set.

Since this function does not check whether the scanner of the printer is capable of using a specified image data format, be sure to confirm it with the information acquired by the function of BiGetPrnCapability before using.

This function is valid for the scanner unit currently selected.

The set reading quality is applied beginning with the next image data read. (Reading quality is not applied to image data that has already been read.)



## BiSCNGetImageList

Acquires a data ID list of the reading result of the images saved in the NV memory. If there is no data ID saved, it returns 0 to pListNum.

### Syntax

*nErr* = **BiSCNGetImageList** (*nHandle* , *pListNum* , *pIDList*)

### Argument

- nHandle:** Specifies the handle. This is an INT type.
- pListNum:** Specifies the number of data ID acquired in the data ID list. After executing this function, the actual total number of the data ID acquired is set. If the number of the data ID saved is bigger than the number of data ID specified, the number of data ID required is set and in the case of the error other than this, nothing is set. This is a LPWORD type.
- pIDList:** Specifies the memory address for setting the data ID list. Information should be set with the format below.  
DataID1 (1-65535) , ... , Data IDk  
This is a LPWORD type.

### Return Values

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                                                                                                                          |
|-----------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                                                                                                              |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect.                                                                                             |
| ERR_TIMEOUT                 | -70   | A time out error occurred.                                                                                                                           |
| ERR_ACCESS                  | -80   | Reading/writing with the printer is not possible (The printer's power is not on or the cable connections are faulty or printing or accessing, etc.). |
| ERR_PARAM                   | -90   | Parameter error                                                                                                                                      |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                                                                        |
| ERR_BUFFER_OVER_FLOW        | -140  | Lack of buffer capacity.                                                                                                                             |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.                                                                                              |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                                                                   |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                                                               |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server.                                            |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                                                             |

| Macro Definition<br>(Constant) | Value | Description            |
|--------------------------------|-------|------------------------|
| ERR_LOCKED                     | -1000 | The printer is locked. |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## Caution

If this function is executed for the TM-H6000III, which is not equipped with a scanner, it ends with an ERR\_TIMEOUT.

Data ID saved in the work area cannot be acquired.

## BiSCNGetImageQuality

Acquires the scanning quality of the image set in the printer.

### Syntax

*nErr* = **BiSCNGetImageQuality** (*nHandle* , *pColorDepth* , *pThreshold* , *pColor* , *pExOption*)

### Argument

*nHandle*: Specifies the handle. This is an INT type.

*pColorDepth*: Specifies the memory address where the tonal gradation is set. This is a LPBYTE type.

| Macro Definition (Constant) | Value | Description |
|-----------------------------|-------|-------------|
| EPS_BI_SCN_1BIT             | 1     | 1bit        |
| EPS_BI_SCN_8BIT             | 8     | 8bit        |

*pThreshold*: Specifies the memory address where the density threshold value is set. This is a CHAR type.

*pColor*: Specifies the memory address where color is set. The set value is as shown below. This is a LPBYTE type.

| Macro Definition (Constant) | Value | Description     |
|-----------------------------|-------|-----------------|
| EPS_BI_SCN_MONOCHRO3E       | 48    | Black and White |
| EPS_BI_SCN_COLOR            | 49    | Color           |

*pExOption*: Specifies a memory address to which a density adjustment type is set. Set values are as shown below. This is a LPBYTE type.

| Macro Definition (Constant) | Value | Description                   |
|-----------------------------|-------|-------------------------------|
| EPS_BI_SCN_MANUAL           | 49    | Density is adjusted manually. |
| EPS_BI_SCN_SHARP            | 50    | Sharpening                    |

## Return value

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                                                                                                                          |
|-----------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                                                                                                              |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect.                                                                                             |
| ERR_TIMEOUT                 | -70   | A time out error occurred.                                                                                                                           |
| ERR_ACCESS                  | -80   | Reading/writing with the printer is not possible (The printer's power is not on or the cable connections are faulty or printing or accessing, etc.). |
| ERR_PARAM                   | -90   | Parameter error                                                                                                                                      |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                                                                        |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.                                                                                              |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                                                                   |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                                                               |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server.                                            |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                                                             |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                                                               |



For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

## Caution

If this function is executed for a TM-H6000III that is not equipped with a scanner, it ends with an ERR\_TIMEOUT.

This function is valid for the scanner unit currently selected.

## BiSCNSetImageQuality

Sets the image scanning quality. Furthermore, the value set with this function is valid until the printer's power is turned OFF or until the printer is reset.

### Syntax

*nErr* = **BiSCNSetImageQuality** (*nHandle* , *bColorDepth* , *bThreshold* , *bColor* , *bExOption*)

### Argument

**nHandle:** Specifies the handle. This is an INT type.

**bColorDepth:** Specifies the tonal gradation (the number of bits used for 1 pixel). The valid specification values are 1 or 8. The default value after the printer's power is turned off, or after the printer is reset, is 1. This is a BYTE type.

| Macro Definition (Constant) | Value | Description |
|-----------------------------|-------|-------------|
| EPS_BI_SCN_1BIT             | 1     | 1bit        |
| EPS_BI_SCN_8BIT             | 8     | 8bit        |

**bThreshold:** Specifies the density threshold value. The valid specification range is -128 - 127. The default value after the printer's power is turned off, or after the printer is reset, is 0. If 0 is specified, the printer is set to use the basic density. If -128 is specified, the printer calculates the optimum value automatically and use it as the density threshold value. This is a CHAR type.

**bColor:** Specifies the memory address where color is set. The set value is as shown below. This is a BYTE type.

| Macro Definition (Constant) | Value | Description |
|-----------------------------|-------|-------------|
| EPS_BI_SCN_MONOCHROME       | 48    | Monochrome  |
| EPS_BI_SCN_COLOR            | 49    | Color       |

**bExOption:** Specifies density adjustment types. Values that can be specified are as shown below. This is a BYTE type.

| Macro Definition (Constant) | Value | Description                   |
|-----------------------------|-------|-------------------------------|
| EPS_BI_SCN_MANUAL           | 49    | Density is adjusted manually. |
| EPS_BI_SCN_SHARP            | 50    | Sharpening                    |

## Return value

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                                                                                                                          |
|-----------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                                                                                                              |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect.                                                                                             |
| ERR_TIMEOUT                 | -70   | A time out error occurred.                                                                                                                           |
| ERR_ACCESS                  | -80   | Reading/writing with the printer is not possible (The printer's power is not on or the cable connections are faulty or printing or accessing, etc.). |
| ERR_PARAM                   | -90   | Parameter error                                                                                                                                      |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                                                                        |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.                                                                                              |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                                                                   |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                                                               |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server.                                            |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                                                             |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                                                               |



For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

## Coution

If this function is executed for a TM-H6000III that is not equipped with a scanner, it ends normally, but the image quality is not set.

Since this function does not check whether the scanner of the printer is capable of gray scale reading, be sure to confirm this before using a printer with the information acquired by using the function BiGetPrnCapability.

Only when pColorDepth is EPS\_BI\_SCN\_1BIT(1), the value of \*pThreshold is ignored.

This function is valid for the scanner unit currently selected.

The set reading quality is applied beginning with the next image data read. (Reading quality is not applied to image data that has already been read.)

## BiSCNGetImageRemainingCapacity

Acquires the remaining capacity (in bytes) of the NV memory for saving the reading result of images.

### Syntax

*nErr* = **BiSCNGetImageRemainingCapacity** (*nHandle* , *pSize*)

### Argument

**nHandle:** Specifies the handle. This is an INT type.

**pSize:** Specifies the memory address for setting the remaining capacity of the NV memory for saving the reading result of images. This is a LPDWORD type.

### Return Values

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                                                                                                                          |
|-----------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                                                                                                              |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect.                                                                                             |
| ERR_TIMEOUT                 | -70   | A time out error occurred.                                                                                                                           |
| ERR_ACCESS                  | -80   | Reading/writing with the printer is not possible (The printer's power is not on or the cable connections are faulty or printing or accessing, etc.). |
| ERR_PARAM                   | -90   | Parameter error                                                                                                                                      |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                                                                        |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.                                                                                              |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                                                                   |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                                                               |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server.                                            |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                                                             |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                                                               |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

---

## Caution

If this function is executed for the TM-H6000III, which is not equipped with a scanner, it ends with an ERR\_TIMEOUT.

The remaining capacity is the remaining when subtracting fail block, memory management area, and the reading result of images from all the memory capacity for saving the reading result of images.



## BiSCNGetScanArea

Acquires the image scanning area specified in the printer.

### Syntax

*nErr* = **BiSCNGetScanArea** (*nHandle*, *pStartX*, *pStartY*, *pEndX*, *pEndY*)

### Argument

- nHandle:** Specifies the handle. This is an INT type.
- pStartX:** Specifies the memory address where the starting X coordinate of the scanning area is set. This is a LPBYTE type.
- pStartY:** Specifies the memory address where the starting Y coordinate of the scanning area is set. This is a LPBYTE type.
- pEndX:** Specifies the memory address where the ending X coordinate of the scanning area is set. This is a LPBYTE type.
- pEndY:** Specifies the memory address where the ending Y coordinate of the scanning area is set. This is a LPBYTE type.

### Return value

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                                                                                                                          |
|-----------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                                                                                                              |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect.                                                                                             |
| ERR_TIMEOUT                 | -70   | A time out error occurred.                                                                                                                           |
| ERR_ACCESS                  | -80   | Reading/writing with the printer is not possible (The printer's power is not on or the cable connections are faulty or printing or accessing, etc.). |
| ERR_PARAM                   | -90   | Parameter error                                                                                                                                      |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                                                                        |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.                                                                                              |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                                                                   |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                                                               |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server.                                            |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                                                             |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                                                               |

#### NOTE

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

---

## Comment

If this function is executed for the TM-H6000III, which is not equipped with a scanner, it ends with an ERR\_TIMEOUT.

This function is valid only for scanning check paper.

## *BiSCNSetScanArea*

Sets the image scanning area. Furthermore, the values set with this function remain in effect until the printer's power is turned off or until the printer is reset.

---

### Syntax

*nErr* = **BiSCNSetScanArea** (*nHandle* , *bStartX* , *bStartY* , *bEndX* , *bEndY*)

### Argument

- nHandle:** Specifies the handle. This is an INT type.
- bStartX:** Specifies the starting X coordinate of the scanning area. The valid specification range is 0-254 in mm units.(The valid specification range in the TM-H6000III is 0-99.)  
The default value after the printer's power is turned off or after printer reset is 0.  
This is a BYTE type.
- bStartY:** Specifies the starting Y coordinate of the scanning area.  
The valid specification range is 0~254 in mm units. The default value after the printer's power is turned off or after printer reset is 0.  
This is a BYTE type.
- bEndX:** Specifies the ending X coordinate of the scanning area. The valid specification range is 0-255 in mm units.(The valid specification range in the TM-H6000III is 0-100.)  
If 0 is specified, that model's maximum value is used.  
The default value after the printer's power is turned off or after printer reset is 70.  
This is a BYTE type.
- bEndY:** Specifies the ending Y coordinate of the scanning area. The valid specification range is 0-255 in mm units.  
If 0 is specified, that model's maximum value is used.  
The default value after the printer's power is turned off or after printer reset is 0.  
This is a BYTE type.

## Return value

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                                                                                                                          |
|-----------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                                                                                                              |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect.                                                                                             |
| ERR_TIMEOUT                 | -70   | A time out error occurred.                                                                                                                           |
| ERR_ACCESS                  | -80   | Reading/writing with the printer is not possible (The printer's power is not on or the cable connections are faulty or printing or accessing, etc.). |
| ERR_PARAM                   | -90   | Parameter error                                                                                                                                      |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                                                                        |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.                                                                                              |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                                                                   |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                                                               |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server.                                            |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                                                             |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                                                               |

### NOTE

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

---

## Caution

If this function is executed for the TM-H6000III, which is not equipped with a scanner, it ends normally, but the scan area is not set.

The coordinate reference point (0, 0) is the top right when facing toward the check paper insertion direction.

If  $bStartX \geq bEndX$ , or  $bStartY \geq bEndY$  ( $bEndY$  is not 0), it results in a parameter error.

If a  $bEndX$ ,  $bEndY$  which exceeds the printer's scannable area is specified, the values for the printer's maximum scannable area are set.

The maximum value that can be set may differ depending on the printer model with built-in scanner. Therefore, in the Status API, a check of the scanning area values is not conducted for every model. As a result, the specified value is transmitted as is to the printer and operation is according to the command interpretation specifications of each printer.

Example: If the end X coordinate 101 is specified for the scanning area of the H6000III, (The original valid specification range is 0 ~ 100.)

1)The API transmits 101 as the scanning area's  $bEndX$  coordinate to the printer.

2)The printer regards the value as having exceeded the scannable area and sets the value to the maximum value 100.

This function is valid only for scanning check paper.

The set read area is applied beginning with the next image data read. (The read area is not applied to image data that has already been read.)

When an odd number is specified for the setting value, it will be rounded to an even number.

The starting point  $bStartX$ ,  $bStartY$  will be rounded to the minus side (rounded downwards), and the end point  $bEndX$ ,  $bEndY$  will be rounded to the plus side (rounded upwards).

## BiSCNPreScan

This sets the printer's density threshold value after prescanning of the image and returns the set density threshold value. (An image can be scanned at the threshold value obtained from the prescan operation only in the case that this function is called and the image is scanned without ejecting the paper (BiSCNSetImageQuality).)

---

### Syntax

*nErr* = **BiSCNPreScan** (*nHandle* , *pResultStatus* , *pThreshold*)

### Argument

*nHandle*: Specifies the handle. This is an INT type.

*pResultStatus*: Specifies the memory address where the prescan results status is set. The set value is as shown below. This is a LPBYTE type.

| Bit | ON/OFF | Value | Status             |
|-----|--------|-------|--------------------|
| 0   | -      | 0x00  | Fixed to 0         |
| 1   | -      | 0x00  | Fixed to 0         |
| 2   | -      | 0x00  | Fixed to 0         |
| 3   | -      | 0x00  | Fixed to 0         |
| 4   | -      | 0x00  | Fixed to 0         |
| 5   | ON     | 0x20  | Ends with an error |
|     | OFF    | 0x00  | Ends normally      |
| 6   | -      | 0x40  | Fixed to 1         |
| 7   | -      | 0x00  | Fixed to 0         |

*pThreshold*: This specifies the memory address where the prescanning results, the threshold value of the density of the paper's automatically measured density, is set. The value is set if the prescanning results are successful, and if the prescanning results are not successful, no value is set, so this value becomes indefinite. It is necessary to judge the Prescan results from PresultStatus. This is a CHAR type.

## Return value

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                                                                                                                          |
|-----------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                                                                                                              |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect.                                                                                             |
| ERR_TIMEOUT                 | -70   | A time out error occurred.                                                                                                                           |
| ERR_ACCESS                  | -80   | Reading/writing with the printer is not possible (The printer's power is not on or the cable connections are faulty or printing or accessing, etc.). |
| ERR_PARAM                   | -90   | Parameter error                                                                                                                                      |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                                                                        |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.                                                                                              |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                                                                   |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                                                               |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server.                                            |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                                                             |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                                                               |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## Caution

If this function is executed for the TM-H6000III, which is not equipped with a scanner, it ends with an ERR\_TIMEOUT.

## BiSCNReadImage

Executes image scanning. If 0 is specified for the paper insertion wait time, the printer wait time is canceled.

---

### Syntax

*nErr* = **BiSCNReadImage** (*nHandle* , *wId* , *bSelectSheet* , *bWaitInsertionTime* ,  
*bAddInforDataSize* , *pAddInforData* , *bMemory*)

### Argument

- nHandle:** Specifies the handle. This is an INT type.
- wId:** Specifies the data identifier related to the scanned image. Data identifier can be specified in the range of 1- 65535. This is a WORD type.
- bSelectSheet:** Specifies the paper which is the scanning object. The types that can be specified are as shown below. However, in the current version, this setting is fixed on EPS\_BI\_SCN\_CHECKPAPER, and any other value that is specified is regarded as invalid. This is a BYTE type.

| Macro Definition<br>(Constant) | Value | Description |
|--------------------------------|-------|-------------|
| EPS_BI_SCN_JOURNAL             | 1     | Journal     |
| EPS_BI_SCN_RECEIPT             | 2     | Receipt     |
| EPS_BI_SCN_CARD                | 16    | Card        |
| EPS_BI_SCN_CHECKPAPER          | 32    | Check paper |

- bWaitInsertionTime:** Specifies the paper insertion wait time. 0 ~ 15 [x 60 sec.] (The default is 0.) If 0 is specified, the wait time is 30 seconds. This is a BYTE type.
- bAddInforDataSize:** Specifies the size of character data if character information is added to an image. This is a BYTE type.
- pAddInforData:** Specifies the memory address where character data are set if character information is added to an image. This is a LPBYTE type.
- bMemory:** Specifies whether to save or not save the result of reading images in the NV memory. This is a BYTE type.

| Macro Definition<br>(Constant)  | Value | Description                                             |
|---------------------------------|-------|---------------------------------------------------------|
| EPS_BI_SCN_NVMEMORY<br>_NOTSAVE | 48    | not saved (reading result is<br>saved in the work area) |
| EPS_BI_SCN_NVMEMORY_SAVE        | 49    | saved                                                   |



## Return value

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                                                                                                                          |
|-----------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                                                                                                              |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect.                                                                                             |
| ERR_TIMEOUT                 | -70   | A time out error occurred.                                                                                                                           |
| ERR_ACCESS                  | -80   | Reading/writing with the printer is not possible (The printer's power is not on or the cable connections are faulty or printing or accessing, etc.). |
| ERR_PARAM                   | -90   | Parameter error                                                                                                                                      |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                                                                        |
| ERR_WITHOUT_CB              | -130  | Cannot execute because either BiSCNSetReadBackFunction or BiSCNSetReadBackWnd has not been called.                                                   |
| ERR_PAPERINSERT_TIMEOUT     | -300  | Paper insertion waiting time has passed.                                                                                                             |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.                                                                                              |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                                                                   |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                                                               |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server.                                            |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                                                             |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                                                               |

### NOTE

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

---

## Caution

If this function is executed for the TM-H6000III, which is not equipped with a scanner, it ends normally, but image scanning is not executed.

Before using this function, be sure to register it using either BiSCNSetReadBackFunction or BiSCNSetReadBackWnd.

After image scanning is completed, the check paper insertion read time is reset to the default value 0.

If the data identifier that is already present is specified, the saved image is deleted and replaced with a new image.

Since this function does not check whether NV memory in the printer for saving the reading result of an image is present or not, be sure to confirm it with the information acquired by the function of BiGetPrnCapability before using.

The setting for paper insertion waiting time using bWaitInsertionTime cannot currently be used. The other functions cannot be used until the paper is inserted after BiSCNReadImage is executed.

If the following formats are selected, characters cannot be added to data.

- Noncompressed data in raster format
- Noncompressed data in bit map format

A value of a parameter that can be specified to paper used for scanning differs, depending on the unit currently selected. Effective combinations are listed below. Combinations other than those described below are parameter errors. Refer to BiSelectScanUnit for a setting method of a selected unit.

| <b>bSelectSheet<br/>(Macro Definition)</b> | <b>Selected unit</b>                             |
|--------------------------------------------|--------------------------------------------------|
| EPS_BI_SCN_CHECKPAPER                      | When a selected unit is a unit for check reading |
| EPS_BI_SCN_CARD                            | When a selected unit is a unit for card scanning |

## *BiSCNRetransmissionImage*

Retransmits the image scanning results.

---

### Syntax

*nErr* = **BiSCNRetransmissionImage** (*nHandle*, *wId*, *pBuffSize*, *pBuff*, *pImageXsize*,  
*pStatus*, *pDetail*, *dwTimeout*)

### Argument

- |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>nHandle:</b>     | Specifies the handle. This is an INT type.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>wId:</b>         | Specifies the data identifier related to the scanned image. Data identifier can be specified in the range of 1- 65535.<br>This is a WORD type.                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>pBuffSize:</b>   | Specifies the size of memory where the image data are set. After this function is executed, the size of the actually scanned data is set.<br>This is a LPDWORD type.                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>pBuff:</b>       | Specifies the memory address where the image data are set. This is a LPBYTE type.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>pImageXsize:</b> | Specifies the memory address where the number of image data (bytes) in the X direction is set.<br>After reading, if the number of horizontal data is 128 or more, the actual number of horizontal data is produced by subtracting "128" from the number of horizontal data and multiplying it by 8. If the number of data does not exceed 128, the number set is the actual number of horizontal data. (For example, the number of horizontal data acquired is 198, the actual number of horizontal data is 560 by following the calculation: $(198-128)*8 = 560$ . This is a LPBYTE type. |
| <b>pStatus:</b>     | Specifies the memory address where the read status is stored. Concerning the status that is returned, see the BiSCNSetReadBackFunction image scanning status. This is a LPBYTE type.                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>pDetail:</b>     | Specifies the memory address where detailed information is set when scanning ends with an error. Concerning the status that is returned, see the BiSCNSetReadBackFunction image scanning status. This is a LPBYTE type.                                                                                                                                                                                                                                                                                                                                                                    |
| <b>dwTimeout:</b>   | Specifies the data reading time out time in ms units. This time out is a value that is measured from the point when there is no response from the printer after a rereading request. This is a DWORD type.                                                                                                                                                                                                                                                                                                                                                                                 |

## Return value

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                                                                                                                          |
|-----------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                                                                                                              |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect.                                                                                             |
| ERR_TIMEOUT                 | -70   | A time out error occurred.                                                                                                                           |
| ERR_ACCESS                  | -80   | Reading/writing with the printer is not possible (The printer's power is not on or the cable connections are faulty or printing or accessing, etc.). |
| ERR_PARAM                   | -90   | Parameter error                                                                                                                                      |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                                                                        |
| ERR_WITHOUT_CB              | -130  | Cannot execute because either BiSCNSetReadBackFunction or BiSCNSetReadBackWnd has not been called.                                                   |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.                                                                                              |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                                                                   |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                                                               |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server.                                            |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                                                             |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                                                               |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## Caution

If this function is executed for the TM-H6000III, which is not equipped with a scanner, it ends with an ERR\_TIMEOUT.

If this function is called by the BiSCNReadImage function when no image scanning is being executed or a specified data identifier is not present, the scanning data are not set (the read status shows that it ended in an error).

If the scanning data overflows, the 6th bit of the read status goes ON (read data overflow). In that case, the "required number of bytes" is set in pBuffSize.

Sufficient buffer capacity should be specified in pBuffSize and pBuff. The maximum image data size is 4 megabytes.

## BiSCNDeleteImage

Deletes the reading result of an image of a specified data ID or deletes the reading result of all data IDs saved at a time.

When executing a collective deletion, both the NV memory used for image saving and the reading result of images saved in the work area are deleted.

### Syntax

*nErr* = **BiSCNDeleteImage** (*nHandle*, *wID*)

### Argument

**nHandle:** Specifies the handle. This is an INT type.

**wID:** Specifies data ID to be deleted. A value can be specified in the range of 1 - 65535. If 0 is specified to the data ID, all the reading result of the ID images saved is deleted at the same time. This is a WORD type.

### Return value

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                                                                                                                          |
|-----------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                                                                                                              |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect.                                                                                             |
| ERR_TIMEOUT                 | -70   | A time out error occurred.                                                                                                                           |
| ERR_ACCESS                  | -80   | Reading/writing with the printer is not possible (The printer's power is not on or the cable connections are faulty or printing or accessing, etc.). |
| ERR_NOT_SUPPORT             | -100  | Not supported                                                                                                                                        |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.                                                                                              |
| ERR_EXEC_MICR               | -320  | Cannot call as the MICR is reading                                                                                                                   |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                                                                                                               |
| ERR_PH_NOT_EXIST            | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server.                                            |
| ERR_RESET                   | -400  | Cannot call as the printer is restarting                                                                                                             |
| ERR_LOCKED                  | -1000 | The printer is locked.                                                                                                                               |

#### NOTE

For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

---

## Caution

If this function is executed for the TM-H6000III, which is not equipped with a scanner, it ends normally, but the scanning data is not deleted.

This function is valid only for check paper.

## BiSCNSelectScanUnit

Sets the unit that operates image scanning.

### Syntax

*nErr* = **BiSCNSelectScanUnit** (*nHandle*, *bSelectUnit*)

### Argument

**nHandle:** Specifies the handle. This is an INT type.

**bSelectUnit:** Specifies the unit to scan. This is a BYTE type. The selectable value is as follows.

| Macro Definition<br>(Constant) | Value | Unit                     |
|--------------------------------|-------|--------------------------|
| EPS_BI_SCN_CHECKPAPER          | 48    | Check paper reading unit |
| EPS_BI_SCN_CARD                | 49    | Card reading unit        |

### Return value

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition<br>(Constant) | Value | Description                                                                                                                                          |
|--------------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS                        | 0     | SUCCESS                                                                                                                                              |
| ERR_HANDLE                     | -60   | The handle value specified for the printer is incorrect.                                                                                             |
| ERR_TIMEOUT                    | -70   | A time out error occurred.                                                                                                                           |
| ERR_ACCESS                     | -80   | Reading/writing with the printer is not possible (The printer's power is not on or the cable connections are faulty or printing or accessing, etc.). |
| ERR_PARAM                      | -90   | Parameter error                                                                                                                                      |
| ERR_NOT_SUPPORT                | -100  | Not supported                                                                                                                                        |
| ERR_EXEC_FUNCTION              | -310  | Cannot be used because the other API is being executed.                                                                                              |
| ERR_EXEC_MICR                  | -320  | Cannot call as the MICR is reading                                                                                                                   |
| ERR_EXEC_SCAN                  | -330  | Cannot call as the scanner is scanning                                                                                                               |
| ERR_PH_NOT_EXIST               | -340  | The PortHandler is not running or a communication error between the client of PortHandler and the server.                                            |
| ERR_RESET                      | -400  | Cannot call as the printer is restarting                                                                                                             |
| ERR_LOCKED                     | -1000 | The printer is locked.                                                                                                                               |

#### NOTE

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

---

## Explanation

Sets EPS\_BI\_SCN\_UNIT\_CHECKPAPER for the initial value. The functions below are effective to the unit currently selected.

- BiSCNSetImageFormat
- BiSCNGetScanArea
- BiSCNSetScanArea
- BiSCNGetImageQuality
- BiSCNSetImageQuality
- BiSCNGetCroppingArea
- BiSCNSetCroppingArea
- BiSCNDeleteImage



## *BiSCNSetReadBackFunction*

Executes image scanning by the function `BiSCNReadImage` and registers the callback function's address called when sending notification of the results as well as the memory addresses for setting each type of scanned information.

---

### Syntax

```
nErr = BiSCNSetReadBackFunction (nHandle , int (CALLBACK EXPORT *pScnCB)(void) ,  
                                   pBuffSize , pBuff , plImageXsize , pStatus , pDetail )
```

### Argument

*nHandle*: Specifies the handle. This is an INT type.

*int* (*CALLBACK EXPORT* \**pScnCB*)(*void*):

Specifies the callback function address for sending notification of the results of image scanning.

*pBuffSize*: Specifies the size of memory where image data are to be set. After execution of this function, the actual size of the scanned data is set. This is a LPDWORD type.

*pBuff*: Specifies the memory address where image data are set. This is a LPBYTE type.

*plImageXsize*: Specifies the memory address where the number of data (bytes) of image data in the X direction is set.

If the number of horizontal data is 128 or more, the actual number of horizontal data is produced by subtracting "128" from the number of horizontal data and multiplying it by 8. If the number of data does not exceed 128, the number set is the actual number of horizontal data. (For example, the number of horizontal data acquired is 198, the actual number of horizontal data is 560 by following the calculation:  $(198-128)*8 = 560$ .)

This is a LPBYTE type.

pStatus: Specifies the memory address where the read status is stored. Concerning the returned status, refer to the image scanning status items below. This is a LPBYTE type.

| Bit | ON/OFF | Value | Status                            |
|-----|--------|-------|-----------------------------------|
| 0   | -      | 0x00  | Fixed to 0                        |
| 1   | -      | 0x00  | Fixed to 0                        |
| 2   | -      | 0x00  | Fixed to 0                        |
| 3   | -      | 0x00  | Fixed to 0                        |
| 4   | ON     | 0x10  | Rereading: Disabled (Fixed)       |
|     | OFF    | 0x00  | Rereading: Enabled                |
| 5   | ON     | 0x20  | Reading result: Abnormal end      |
|     | OFF    | 0x00  | Reading result: Normal end        |
| 6   | ON     | 0x40  | Reading data overflow: YES        |
|     | OFF    | 0x00  | Reading data overflow: NO         |
| 7   | ON     | 0x80  | Reading data reception error: YES |
|     | OFF    | 0x00  | Reading data reception error: NO  |

pDetail: Specifies the memory address where detailed information is set after scanning ends with an error. Concerning the returned status, see the detailed image information below. This is a LPBYTE type.

| Value | Description                                                                                                             |
|-------|-------------------------------------------------------------------------------------------------------------------------|
| 40h   | No error.                                                                                                               |
| 41h   | The image scanning result do not exist                                                                                  |
| 44h   | The cover was opened, so image scanning was interrupted                                                                 |
| 45h   | A recoverable error/automatic reset error occurred during image scanning.                                               |
| 46h   | Paper which is not the standard length was inserted (longer than approximately 333 mm).                                 |
| 47h   | Compressed data error (The amount of data increased in data compression processing, and there was insufficient memory.) |
| 48h   | Paper insertion status or paper feed error                                                                              |
| 60h   | Lack of remaining capacity in NV memory for saving reading result of images                                             |
| 61h   | Failure of writing process of reading result of images to the NV memory                                                 |
| 62h   | Failure of deletion process of the NV memory for reading result of images                                               |

## Return value

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                              |
|-----------------------------|-------|----------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                  |
| ERR_NO_MEMORY               | -50   | Memory is insufficient.                                  |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect. |
| ERR_PARAM                   | -90   | Parameter error                                          |
| ERR_NOT_SUPPORT             | -100  | Not supported                                            |
| ERR_EXIST                   | -210  | Data selected is already present                         |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed   |



For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

## Caution

This function should always be called before the BiSCNReadImage function is called. If the BiSCNReadImage function is called before this function, it will result in an error.

If the scanning data overflow, the 6th bit of the read status goes ON (read data overflow). In that case, the "required number of bytes" is set in pBuffSize.

Sufficient buffer capacity should be specified in pBuffSize and pBuff. The maximum image data size is 4 megabytes.

## BiSCNSetReadBackFunctionEx

Executes image scanning by the function BiSCNReadImage and registers the callback function's address called when sending notification of the results as well as the memory addresses for setting each type of scanned information.

### NOTE

This is unavailable when the development environment is VB.

### Syntax

```
nErr = BiSCNSetReadBackFunctionEx (nHandle , int (CALLBACK EXPORT *pScnCB)
                                   (LPSTR lpcPortName) , pBuffSize , pBuff ,
                                   plImageXsize , pStatus ,pDetail )
```

### Argument

|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| nHandle:                                          | Specifies the handle. This is an INT type.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| int (CALLBACK EXPORT *pScnCB)(LPSTR lpcPortName): | Specifies the callback function address for sending notification of the results of image scanning. The port name is set to lpcPortName and a callback argument is called.                                                                                                                                                                                                                                                                                                                                                                                                                                |
| pBuffSize:                                        | Specifies the size of memory where image data are to be set. After execution of this function, the actual size of the scanned data is set. This is a LPDWORD type.                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| pBuff:                                            | Specifies the memory address where image data are set. This is a LPBYTE type.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| plImageXsize:                                     | <p>Specifies the memory address where the number of data (bytes) of image data in the X direction is set.</p> <p>If the number of horizontal data is 128 or more, the actual number of horizontal data is produced by subtracting "128" from the number of horizontal data and multiplying it by 8. If the number of data does not exceed 128, the number set is the actual number of horizontal data. (For example, the number of horizontal data acquired is 198, the actual number of horizontal data is 560 by following the calculation: <math>(198-128)*8 = 560</math>. This is a LPBYTE type.</p> |
| pStatus:                                          | Specifies the memory address where the read status is stored. Concerning the returned status, refer to the image scanning status items below. This is a LPBYTE type.                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| pDetail:                                          | Specifies the memory address where detailed information is set after scanning ends with an error. Concerning the returned status, see the detailed image information below. This is a LPBYTE type.                                                                                                                                                                                                                                                                                                                                                                                                       |

## Return value

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                              |
|-----------------------------|-------|----------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                  |
| ERR_NO_MEMORY               | -50   | Memory is insufficient.                                  |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect. |
| ERR_PARAM                   | -90   | Parameter error                                          |
| ERR_NOT_SUPPORT             | -100  | Not supported                                            |
| ERR_EXIST                   | -210  | Data selected is already present                         |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.  |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## Caution

This function should always be called before the BiSCNReadImage function is called. If the BiSCNReadImage function is called before this function, it will result in an error.

If the scanning data overflow, the 6th bit of the read status goes ON (read data overflow). In that case, the "required number of bytes" is set in pBuffSize.

Sufficient buffer capacity should be specified in pBuffSize and pBuff. The maximum image data size is 4 megabytes.

The difference between this argument and BiSCNSetReadBackFunction is that the port from which the callback is sent can be recognized.

Refer to BiSCNSetReadBackFunction for Scanner reading status.

## *BiSCNSetReadBackWnd*

This function executes image scanning with the BiSCNReadImage function and registers the memory address for the handle of the button where button click events are sent when sending notification of the scanning results as well the memory addresses for setting each type of information.

---

### Syntax

*nErr* = **BiSCNSetReadBackWnd** (*nHandle*, *hWnd*, *pBuffSize*, *pBuff*, *pImageXsize*,  
*pStatus*, *pDetail*)

### Argument

- |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>nHandle</i> :     | Specifies the handle. This is an INT type.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <i>hWnd</i> :        | The button handle. Click events are sent to this button.<br>This is a Long type.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <i>pBuffSize</i> :   | Specifies the size of memory where image data are sent. The actual scanning data size is set after this function is executed. This is a LPDWORD type.                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <i>pBuff</i> :       | Specifies the memory address where image data are set. This is a LPBYTE type.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <i>pImageXsize</i> : | Specifies the memory address where the number of data (bytes) in the X direction of the image data is set.<br>After reading, if the number of horizontal data is 128 or more, the actual number of horizontal data is produced by subtracting "128" from the number of horizontal data and multiplying it by 8. If the number of data does not exceed 128, the number set is the actual number of horizontal data. (For example, the number of horizontal data acquired is 198, the actual number of horizontal data is 560 by following the calculation: $(198-128)*8 = 560$ . This is a LPBYTE type. |
| <i>pStatus</i> :     | Specifies the memory address where the scanning status is stored. See the BiSCNSetReadBackFunction image scanning status concerning the returned status. This is a LPBYTE type.                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <i>pDetail</i> :     | Specifies the memory address where the detailed information is set when scanning ends with an error. See the BiSCNSetReadBackFunction image detailed information concerning the returned status. This is a LPBYTE type.                                                                                                                                                                                                                                                                                                                                                                                |

## Return value

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                              |
|-----------------------------|-------|----------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                  |
| ERR_NO_MEMORY               | -50   | Memory is insufficient.                                  |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect. |
| ERR_PARAM                   | -90   | Parameter error                                          |
| ERR_NOT_SUPPORT             | -100  | Not supported                                            |
| ERR_EXIST                   | -210  | Data selected is already present                         |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.  |



For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

## Caution

This function should always be called before the BiSCNReadImage function is called. If the BiSCNReadImage function is called before this function, it will result in an error.

If the scanning data overflow, the 6th bit of the read status goes ON (read data overflow). In that case, the "required number of bytes" is set in pBuffSize.

Sufficient buffer capacity should be specified in pBuffSize and pBuff. The maximum image data size is 4 megabytes.

## BiSCNCancelReadBack

Cancels the scanning information notice request registered using BiSCNSetReadBackFunction, BiSCNSetReadBackFunctionEx or BiSCNSetReadBackWnd.

---

### Syntax

*nErr* = **BiSCNCancelReadBack** (*nHandle*)

### Argument

*nHandle*: Specifies the handle. This is an INT type.

### Return value

If execution is successful, 0 is returned. If an error occurs, the following error codes (negative values) are returned.

| Macro Definition (Constant) | Value | Description                                              |
|-----------------------------|-------|----------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                  |
| ERR_HANDLE                  | -60   | The handle value specified for the printer is incorrect. |
| ERR_TIMEOUT                 | -70   | Timeout error                                            |
| ERR_ACCESS                  | -80   | R/W cannot be performed on the printer                   |
| ERR_NOT_SUPPORT             | -100  | Not supported                                            |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed.  |
| ERR_LOCKED                  | -1000 | The printer is locked.                                   |



For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.



## BiESCNEnable

Set so that scanner extended functions can be used.

### Syntax

*nErr* = **BiESCNEnable** (*bStoreType*)

### Argument

**bStoreType:** Select a storing method for a cropped image stored using BiESCNStoreImage. This is a BYTE type.

| Macro Definition (Constant) | Value | Description    |
|-----------------------------|-------|----------------|
| CROP_STORE_MEMORY           | 0     | Save in memory |
| CROP_STORE_FILE             | 1     | Save in a file |

### Return value

SUCCESS(0) is returned if the execution is successful. If an error occurs, one of the following error codes (negative value) is returned:

| Macro Definition (Constant) | Value | Description                                        |
|-----------------------------|-------|----------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                            |
| ERR_PARAM                   | -90   | Parameter error                                    |
| ERR_ENABLE                  | -160  | Cannot be used because BiOpenMonPrinter is called. |



For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

### Explanation

- Before calling BiOpenMonPrinter, it is necessary to enable scanner extended functions by calling this argument.
- Secure save table area with BiOpenMonPrinter.
- After calling back image data reading, process the image data acquired by the printer and save it in the WORK AREA.
- Arguments of the scanner extended functions (BiESCN-) can be used.

### Note

If this argument is called after calling BiOpenMonPrinter, the scanner extended functions cannot be used and the way of saving a cropped image cannot be changed.

## BiESCNGetAutoSize

Acquire the value of capAutoSize.

---

### Syntax

*nErr* = **BiESCNGetAutoSize** (*nHandle* , *pCapAutoSize*)

### Argument

*nHandle*: Specifies the handle. This is an INT type.

*pCapAutoSize*: Select a memory address to set a capAutoSize value. This is a LPBYTE type.

| Macro Definition<br>(Constant) | Value | Description                  |
|--------------------------------|-------|------------------------------|
| CROP_AUTOSIZE_ENABLE           | 1     | AutoSize processing enabled  |
| CROP_AUTOSIZE_DISABLE          | 0     | AutoSize processing disabled |

### Return Values

SUCCESS(0) is returned if the execution is successful. If an error occurs, one of the following error codes (negative value) is returned:

| Macro Definition<br>(Constant) | Value | Description                                            |
|--------------------------------|-------|--------------------------------------------------------|
| SUCCESS                        | 0     | SUCCESS                                                |
| ERR_HANDLE                     | -60   | The handle value that selects the printer is incorrect |
| ERR_PARAM                      | -90   | Parameter error                                        |
| ERR_NOT_SUPPORT                | -100  | Not supported                                          |
| ERR_EXEC_SCAN                  | -330  | Cannot call as the scanner is scanning                 |



For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

---

### Explanation

If "1" is selected for capAutoSize, after reading image data, AutoSize processing (cut black part of the image data off) is executed, and the processed image data is saved in the WORK AREA. The width and height of the image data are automatically set to documentWidth and documentHeight.

If "0" is selected for capAutoSize, AutoSize processing and automatic setting for the width and height of the image data are not executed.

## BiESCNSetAutoSize

Select the value of capAutoSize.

### Syntax

*nErr* = **BiESCNSetAutoSize** (*nHandle* , *bCapAutoSize*)

### Argument

*nHandle*: Specifies the handle. This is an INT type.

*bCapAutoSize*: Select a value for a capAutoSize. This is a BYTE type.

| Macro Definition (Constant) | Value | Description                  |
|-----------------------------|-------|------------------------------|
| CROP_AUTOSIZE_ENABLE        | 1     | AutoSize processing enabled  |
| CROP_AUTOSIZE_DISABLE       | 0     | AutoSize processing disabled |

### Return Values

SUCCESS(0) is returned if the execution is successful. If an error occurs, one of the following error codes (negative value) is returned:

| Macro Definition (Constant) | Value | Description                                            |
|-----------------------------|-------|--------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                |
| ERR_HANDLE                  | -60   | The handle value that selects the printer is incorrect |
| ERR_PARAM                   | -90   | Parameter error                                        |
| ERR_NOT_SUPPORT             | -100  | Not supported                                          |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                 |

### NOTE

For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

### Explanation

Acquire a value of capAutoSize (AutoSize processing flag).

If an argument other than CROP\_AUTOSIZE\_ENABLE or CROP\_AUTOSIZE\_DISABLE is selected, the error (ERR\_PARAM) is returned.

The AutoSize processing flag that has been set is used in the next image data reading process (AutoSize processing is not used for the image data that have been already read and saved in the WORK AREA.)

## BiESCNGetCutSize

Acquire the value of cutSize.

---

### Syntax

*nErr* = **BiESCNGetCutSize** (*nHandle* , *pCutSize*)

### Argument

*nHandle*: Specifies the handle. This is an INT type.

*pCutSize*: Select a memory address to set a cutSize value. This is a LPWORD type.

### Return Values

SUCCESS(0) is returned if the execution is successful. If an error occurs, one of the following error codes (negative value) is returned:

| Macro Definition<br>(Constant) | Value | Description                                            |
|--------------------------------|-------|--------------------------------------------------------|
| SUCCESS                        | 0     | SUCCESS                                                |
| ERR_HANDLE                     | -60   | The handle value that selects the printer is incorrect |
| ERR_PARAM                      | -90   | Parameter error                                        |
| ERR_NOT_SUPPORT                | -100  | Not supported                                          |
| ERR_EXEC_FUNCTION              | -310  | Cannot be used because the other API is being executed |
| ERR_EXEC_SCAN                  | -330  | Cannot call as the scanner is scanning                 |

---

### Explanation

Acquire the value of cutSize (size for cutting the left and right sides of an image data).

If a number other than "0" is selected for cutSize, after reading the image data, CutSize processing (cut the left and right sides of the image data for a selected size) is executed, and the processed image data is saved in the WORK AREA.

If "0" is selected for cutSize, cutSize is not executed.

## BiESCNSetCutSize

Select a value of cutSize.

### Syntax

*nErr* = **BiESCNSetCutSize** (*nHandle* , *wCutSize*)

### Argument

**nHandle:** Specifies the handle. This is an INT type.

**wCutSize:** Select size of cutting the left and right sides of the image data (unit: 0.1mm). Selectable range is 0 to 1500. Numbers except "0" : CutSize processing is executed with the selected size. "0" : CutSize processing is not executed. This is a WORD type.

### Return Values

SUCCESS(0) is returned if the execution is successful. If an error occurs, one of the following error codes (negative value) is returned:

| Macro Definition (Constant) | Value | Description                                            |
|-----------------------------|-------|--------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                |
| ERR_HANDLE                  | -60   | The handle value that selects the printer is incorrect |
| ERR_PARAM                   | -90   | Parameter error                                        |
| ERR_NOT_SUPPORT             | -100  | Not supported                                          |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                 |

#### NOTE

For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

### Explanation

Set the value selected by wCutSize to cutSize.

## BiESCNGetRotate

Acquire the value of capRotate.

---

### Syntax

*nErr* = **BiESCNGetRotate** (*nHandle* , *pCapRotate*)

### Argument

*nHandle*: Specifies the handle. This is an INT type.

*pCapRotate*: Select a memory address to set a capRotate value. This is a LPBYTE type.

| Macro Definition (Constant) | Value | Description                |
|-----------------------------|-------|----------------------------|
| CROP_ROTATE_ENABLE          | 1     | Rotate processing enabled  |
| CROP_ROTATE_DISABLE         | 0     | Rotate processing disabled |

### Return Values

SUCCESS(0) is returned if the execution is successful. If an error occurs, one of the following error codes (negative value) is returned:

| Macro Definition (Constant) | Value | Description                                            |
|-----------------------------|-------|--------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                |
| ERR_HANDLE                  | -60   | The handle value that selects the printer is incorrect |
| ERR_PARAM                   | -90   | Parameter error                                        |
| ERR_NOT_SUPPORT             | -100  | Not supported                                          |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                 |



For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

---

### Explanation

Acquire the value of capRotate.

If CROP\_ROTATE\_ENABLE is set to capRotate, after reading image data, Rotate processing (rotates the image data 90° clockwise) is executed, the processed image data is saved in the WORK AREA.

If CROP\_ROTATE\_DISABLE is set to capRotate, Rotate is not executed.

## BiESCNSetRotate

Select a value of capRotate.

### Syntax

*nErr* = **BiESCNSetRotate** (*nHandle* , *bCapRotate*)

### Argument

*nHandle*: Specifies the handle. This is an INT type.

*bCapRotate*: Select a value for capRotate. This is a BYTE type.

| Macro Definition (Constant) | Value | Description                |
|-----------------------------|-------|----------------------------|
| CROP_ROTATE_ENABLE          | 1     | Rotate processing enabled  |
| CROP_ROTATE_DISABLE         | 0     | Rotate processing disabled |

### Return Values

SUCCESS(0) is returned if the execution is successful. If an error occurs, one of the following error codes (negative value) is returned:

| Macro Definition (Constant) | Value | Description                                            |
|-----------------------------|-------|--------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                |
| ERR_HANDLE                  | -60   | The handle value that selects the printer is incorrect |
| ERR_PARAM                   | -90   | Parameter error                                        |
| ERR_NOT_SUPPORT             | -100  | Not supported                                          |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                 |

### NOTE

For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

### Explanation

Set the value of capRotate.

### Note

If the argument other than CROP\_ROTATE\_ENABLE or CROP\_ROTATE\_DISABLE is selected, the error (ERR\_PARAM) is returned.

The Rotate processing flag that has been set is used in the next image data reading process (Rotate processing is not used for the image data that has been already read and saved in the WORK AREA.)

## BiESCNGetDocumentSize

Acquire the values of documentWidth and documentHeight.

---

### Syntax

*nErr* = **BiESCNGetDocumentSize** (*nHandle* , *pDocumentWidth* , *pDocumentHeight*)

### Argument

- nHandle*: Specifies the handle. This is an INT type.
- pDocumentWidth*: Select a memory address to set a value of the width of the image data (unit: 0.1 mm).  
This is a LPWORD type.
- pDocumentHeight*: Select a memory address to set a value of the height of the image data (unit: 0.1 mm).  
This is a LPWORD type.

### Return Values

SUCCESS(0) is returned if the execution is successful. If an error occurs, one of the following error codes (negative value) is returned:

| Macro Definition<br>(Constant) | Value | Description                                            |
|--------------------------------|-------|--------------------------------------------------------|
| SUCCESS                        | 0     | SUCCESS                                                |
| ERR_HANDLE                     | -60   | The handle value that selects the printer is incorrect |
| ERR_PARAM                      | -90   | Parameter error                                        |
| ERR_NOT_SUPPORT                | -100  | Not supported                                          |
| ERR_EXEC_FUNCTION              | -310  | Cannot be used because the other API is being executed |
| ERR_EXEC_SCAN                  | -330  | Cannot call as the scanner is scanning                 |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

---

### Explanation

Acquire the values of documentWidth and documentHeight (the width and height of the image data saved in the WORK AREA) by using the unit of 0.1 mm.

### Note

The unit of the argument is 0.1 mm.

If automatic update by reading the image data or a change with BiESCNSetDocumentSize is not executed, the default value (width=680, height=1520) is acquired.



## BiESCNSetDocumentSize

Select values of documentWidth and documentHeight.

### Syntax

*nErr* = **BiESCNSetDocumentSize** (*nHandle* , *wDocumentWidth* , *wDocumentHeight*)

### Argument

- nHandle:** Specifies the handle. This is an INT type.
- wDocumentWidth:** Select the width of the image data (unit: 0.1 mm).  
Selectable range is 100 to 3000. This is a WORD type.
- wDocumentHeight:** Select the height of the image data (unit: 0.1 mm).  
Selectable range is 100 to 3000. This is a WORD type.

### Return Values

SUCCESS(0) is returned if the execution is successful. If an error occurs, one of the following error codes (negative value) is returned:

| Macro Definition (Constant) | Value | Description                                            |
|-----------------------------|-------|--------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                |
| ERR_HANDLE                  | -60   | The handle value that selects the printer is incorrect |
| ERR_PARAM                   | -90   | Parameter error                                        |
| ERR_NOT_SUPPORT             | -100  | Not supported                                          |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed |
| ERR_EXEC_SCAN               | -330  | Cannot call as the scanner is scanning                 |



For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

### Explanation

Set the width and height selected to documentWidth and documentHeight.

### Note

The argument unit is 0.1mm.

## BiESCNDDefineCropArea

Register CropArea or delete all the CropArea registered.

### Syntax

*nErr* = **BiESCNDDefineCropArea** (*nHandle* , *bCropAreaID* , *wStartX* , *wStartY* , *wEndX* , *wEndY*)

### Argument

**nHandle:** Specifies the handle. This is an INT type.

**bCropAreaID:** Select CropAreaID to be registered. Selectable values are 0 to 255.  
If 2 to 225 is specified, the specified coordinate is set.  
This is a BYTE type.

| Macro Definition (Constant) | Value | Description                                                                                                                                  |
|-----------------------------|-------|----------------------------------------------------------------------------------------------------------------------------------------------|
| CROP_AREA_RESET_ALL         | 0     | All the CropAreas registered are deleted.                                                                                                    |
| CROP_AREA_ENTIRE_IMAGE      | 1     | "0" is set to starting points (X,Y) of CropArea. The values of documentWidth and documentHeight are set to ending points (X,Y) respectively. |

**wStartX:** Select a starting point (X) of CropArea. Selectable values are 0 to documentWidth-1 (unit: 0.1 mm) This is a WORD type.

**wStartY:** Select a starting point (Y) of CropArea. Selectable values are 0 to documentHeight-1 (unit: 0.1 mm) This is a WORD type.

**wEndX:** Select an ending point (X) of CropArea. Selectable values are 1 to documentWidth (unit: 0.1 mm) This is a WORD type.

| Macro Definition (Constant) | Value | Description                                                   |
|-----------------------------|-------|---------------------------------------------------------------|
| CROP_AREA_RIGHT             | 65535 | The value of documentWidth is set to the ending X coordinate. |

**wEndY:** Select an ending point (Y) of CropArea. Selectable values are 1 to documentHeight (unit: 0.1 mm) This is a WORD type.

| Macro Definition (Constant) | Value | Description                                                    |
|-----------------------------|-------|----------------------------------------------------------------|
| CROP_AREA_BOTTOM            | 65535 | The value of documentHeight is set to the ending Y coordinate. |

## Return Values

SUCCESS(0) is returned if the execution is successful. If an error occurs, one of the following error codes (negative value) is returned:

| Macro Definition (Constant) | Value | Description                                            |
|-----------------------------|-------|--------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                |
| ERR_HANDLE                  | -60   | The handle value that selects the printer is incorrect |
| ERR_PARAM                   | -90   | Parameter error                                        |
| ERR_NOT_SUPPORT             | -100  | Not supported                                          |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed |
| ERR_EXEC_SCAN               | -330  | ERR_EXEC_SCAN Cannot call as the scanner is scanning   |



For information on remedies for the Status API execution errors, refer to ["Status API Execution Error" on page 27](#).

## Explanation

Select each coordinate for CropArea and register it to the CropArea definition table of status API by using CropArea ID selected.

If the data of CropAreaID selected has already been defined, the registration is executed by overwriting.

If CROP\_AREA\_RESET\_ALL is selected for CropAreaID, all the data defined in the CropArea definition table are deleted.

## Note

The number of CropArea data that can be defined is up to 255 (limited item).

The argument unit is 0.1 mm.

If wStartX >= wEndX, wStartY >= wEndY, the error (ERR\_PARAM) is returned.

When BiCloseMonPrinter is being executed, all the data defined in the CropArea definition table are deleted.

## BiESCNGetMaxCropAreas

Acquire a maximum number of data of CropArea that can be registered .

---

### Syntax

*nErr* = **BiESCNGetMaxCropAreas** (*nHandle* , *pMaxCropAreas*)

### Argument

**nHandle:** Specifies the handle. This is an INT type.

**pMaxCropAreas:** Select a memory address to set a maximum number of data of CropArea that can be registered. This is a LPBYTE type.

### Return Values

SUCCESS(0) is returned if the execution is successful. If an error occurs, one of the following error codes (negative value) is returned:

| Macro Definition<br>(Constant) | Value | Description                                            |
|--------------------------------|-------|--------------------------------------------------------|
| SUCCESS                        | 0     | SUCCESS                                                |
| ERR_HANDLE                     | -60   | The handle value that selects the printer is incorrect |
| ERR_PARAM                      | -90   | Parameter error                                        |
| ERR_NOT_SUPPORT                | -100  | Not supported                                          |
| ERR_EXEC_FUNCTION              | -310  | Cannot be used because the other API is being executed |
| ERR_EXEC_SCAN                  | -330  | ERR_EXEC_SCAN Cannot call as the scanner is scanning   |



For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

## BiESCNStoreImage

Register a Crop image.

### Syntax

```
nErr = BiESCNStoreImage (nHandle , dwFileIndex , pFileID , pImageTagData ,  
                           bCropAreaID)
```

### Argument

- nHandle:** Specifies the handle. This is an INT type.
- dwFileIndex:** Select FileIndex that is identification data of the Crop image to be saved. NULL can be selected. This is a DWORD type.
- pFileID:** Select FileID that is identification data of the Crop image to be saved. Selectable length of a character string is up to 64 bytes. NULL can be selected. The symbols \ / : , ; \* ? " < > and | cannot be used. This is a LPSTR type.
- pImageTagData:** Select ImageTagData that is identification data of the Crop image to be saved. Selectable length of a character string is up to 64 bytes. NULL can be used. The symbols \ / : , ; \* ? " < > and | cannot be used. This is a LPSTR type.
- bCropAreaID:** Select CropAreaID that has already been defined by using BiESCNDefineCropArea. Selectable values are 1 to 255. This is a BYTE type.

### Return Values

SUCCESS(0) is returned if the execution is successful. If an error occurs, one of the following error codes (negative value) is returned:

| Macro Definition<br>(Constant) | Value | Description                                                                             |
|--------------------------------|-------|-----------------------------------------------------------------------------------------|
| SUCCESS                        | 0     | SUCCESS                                                                                 |
| ERR_NO_MEMORY                  | -50   | Lack of memory                                                                          |
| ERR_HANDLE                     | -60   | The handle value that selects the printer is incorrect                                  |
| ERR_PARAM                      | -90   | Parameter error                                                                         |
| ERR_NOT_SUPPORT                | -100  | Not supported                                                                           |
| ERR_DISK_FULL                  | -170  | Lack of remaining memory                                                                |
| ERR_NO_IMAGE                   | -180  | Image data is not present                                                               |
| ERR_ENTRY_OVER                 | -190  | Number exceeding the maximum number of being able to be registered cannot be registered |
| ERR_CROPAREAID                 | -200  | Crop area selected is not present                                                       |
| ERR_EXIST                      | -210  | Data selected is already present                                                        |

| Macro Definition<br>(Constant) | Value | Description                                                                                                                                                                |
|--------------------------------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ERR_IMAGE_FILEOPEN             | -230  | Failure in opening image data file                                                                                                                                         |
| ERR_IMAGE_UNKNOWNFORMAT        | -240  | Incorrect in formatting image data file                                                                                                                                    |
| ERR_IMAGE_FAILED               | -250  | Failure in creating image data file. One of the following errors is returned                                                                                               |
| ERR_WORKAREA_NO_MEMORY         | -260  | Failure in creating the WORK AREA because of lack of memory.                                                                                                               |
| ERR_WORKAREA_UNKNOWNFORMAT     | -270  | Failure in creating the WORK AREA because image when an error occurs because image data is not present in the WORKAREA or an error occurs during creation of the WORK AREA |
| ERR_WORKAREA_FAILED            | -280  | Failure in creating the WORK AREA                                                                                                                                          |
| ERR_EXEC_FUNCTION              | -310  | Cannot be used because the other API is being executed                                                                                                                     |
| ERR_EXEC_SCAN                  | -330  | ERR_EXEC_SCAN Cannot call as the scanner is scanning                                                                                                                       |



For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

## Explanation

Crop the CropArea from the image data saved in the WORK AREA by using CropAreaID selected and register the data to the Crop image saving table.

The cropped data are the same format as the original image data; however, if they are JPEG format, they are compressed and saved with JPEG standard compression.

If CropArea exceeds the range of image data of the WORK AREA, the excess area is solid white.

The cropped image data are saved in memory or a file by using the saving method selected with BiESCNEnable.

When saving image data in a file, a file name is created by a printer handle and identification data and is saved in the Windows temporary folder.

Example: Printer handle(nHandle)=1, fileIndex=1, fileID="AA", imageTagData="BBB",

When Image format=JPEG:

File name: C:\Windows\Temp\1ESCN1\_AA\_BBB.jpg

When imageTagData=NULL, the file name is as follows:

File name: C:\Windows\Temp\1ESCN1\_AA\_.jpg

## Note

Crop image data that can be saved is up to 255 (limited item). The error (ERR\_ENTRY\_OVER) is returned if a number exceeding the maximum number of image data being able to be registered is set.

If NULL is selected for all identification data, the error (ERR\_PARAM) is returned.

If registered data that match all the selected identification data are already present, the error (ERR\_EXIST) is returned. Capital and small letters are not distinguished for the arguments of pFileID and pImageTagData. If data that is the same except for the difference of capital and small letters is already present, the error (ERR\_EXIST) is returned.

If cropped image data cannot be registered because system memory is lacking or remaining memory on the hard disk is not enough, the error (ERR\_NO\_MEMORY/ERR\_DISK\_FULL) is returned.

When saving in a file, if a file that has the same file name is already present, it is overwritten (the content of the original data is not guaranteed.)

If image data reading cannot be executed, the error (ERR\_NO\_IMAGE) is returned.

When executing BiCloseMonPrinter, all the data defined in Crop image saving table are deleted.

If the format of image data that is read from the printer is raster format

(EPS\_BI\_SCN\_RASTER(2)), the non-supported error

(ERR\_WORKAREA\_UNKNOWNFORMAT) is returned.

## BiESCNRetrievelmage

Acquire Crop image.

---

### Syntax

*nErr* = **BiESCNRetrievelmage** (*nHandle* , *dwFileIndex* , *pFileID* , *pImageTagData* ,  
*pImageSize* , *pImageData*)

### Argument

- nHandle:** Specifies the handle. This is an INT type.
- dwFileIndex:** Select FileIndex that is identification data of the Crop image to be acquired. If NULL is selected, searching is not executed with this identification data. This is a DWORD type.
- pFileID:** Select FileID that is identification data of the Crop image to be acquired. If NULL is selected, searching is not executed with this identification data. The symbols \ / : , ; \* ? " < > and | cannot be used. This is a LPSTR type.
- pImageTagData:** Select ImageTagData that is identification data of the Crop image to be acquired. If NULL is selected, searching is not executed with this identification data. The symbols \ / : , ; \* ? " < > and | cannot be used. This is a LPSTR type.
- pImageSize:** Select memory size that sets Crop image data. After executing this argument, the actual CROP image data size is set. If buffer capacity is not enough, necessary bytes are set; however, in the other error cases or if data is not present, nothing is set. This is a LPDWORD type.
- pImageData:** Select a memory address that sets Crop image data. This is a LPBYTE type.



## Return value

SUCCESS(0) is returned if the execution is successful. If an error occurs, one of the following error codes (negative value) is returned:

| Macro Definition (Constant) | Value | Description                                             |
|-----------------------------|-------|---------------------------------------------------------|
| SUCCESS                     | 0     | SUCCESS                                                 |
| ERR_HANDLE                  | -60   | The handle value that selects the printer is incorrect  |
| ERR_PARAM                   | -90   | Parameter error                                         |
| ERR_NOT_SUPPORT             | -100  | Not supported                                           |
| ERR_BUFFER_OVER_FLOW        | -140  | Lack of buffer capacity                                 |
| ERR_NOT_FOUND               | -220  | Selected data is not present                            |
| ERR_IMAGE_FILEOPEN          | -230  | Failure in opening image data file                      |
| ERR_IMAGE_FILEREAD          | -290  | Failure in reading image data file                      |
| ERR_EXEC_FUNCTION           | -310  | Cannot be used because the other API is being executed. |
| ERR_EXEC_SCAN               | -330  | ERR_EXEC_SCAN Cannot call as the scanner is scanning    |



For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

## Explanation

Acquire Crop image data that match the selected identification data from Crop image save table of status API.

If NULL is selected for all identification data, the error (ERR\_PARAM) is returned.

If Crop image data that match identification data selected are not present, the error (ERR\_NOT\_FOUND) is returned.

If the size of Crop image data is bigger than the memory size selected with pImageSize, the error (ERR\_BUFFER\_OVER\_FLOW) is returned.

If Crop image data that match the selected identification data are present more than once, only the data that has been searched first is acquired.

Example:

If the Crop image data are saved as follows:

- (1) When "dwFileIndex=1,pFileID=NULL,pImageTagData=NULL" is specified,  
fileIndex=1,fileID="A" is acquired.
- (2) When "dwFileIndex=2,pFileID=NULL,pImageTagData=NULL" is specified,  
fileIndex=2,fileID="A" is acquired.
- (3) When "dwFileIndex=NULL,pFileID="B" ,pImageTagData=NULL" is specified,  
fileIndex=1,fileID="B" is acquired.

| In order of registration<br>↓ | dwFileIndex | pFileID    | pImageTagData | ImageData |       |
|-------------------------------|-------------|------------|---------------|-----------|-------|
|                               | 1           | "A"        | NULL          | .....     | ← [1] |
|                               | 1           | "B"        | NULL          | .....     | ← [3] |
|                               | <b>1</b>    | <b>"C"</b> | NULL          | .....     |       |
|                               | 2           | "A"        | NULL          | .....     | ← [2] |
|                               | 2           | "B"        | NULL          | .....     |       |
|                               | 2           | <b>"C"</b> | NULL          | .....     |       |
|                               | 3           | "A"        | "A"           | .....     |       |
|                               | 3           | "B"        | NULL          | .....     |       |

# BiESCNClearImage

Clear the registered Crop image.

## Syntax

*nErr* = **BiESCNClearImage** (*nHandle* , *bFlag* , *dwFileIndex* , *pFileID* , *plmageTagData*)

## Argument

- nHandle:

Specifies the handle. This is an INT type.
- bFlag:

Select the flag for the method of clearing. The Crop image to be cleared can be identified by a combination of flags. This is a BYTE type.

| Macro Definition<br>(Constant) | Value | Description                                                                  |
|--------------------------------|-------|------------------------------------------------------------------------------|
| CROP_CLEAR_ALL_IMAGE           | 0     | Clear all the Crop image data saved                                          |
| CROP_CLEAR_BY_FILEINDEX        | 1     | Clear all the Crop image data that have the values selected to dwFileIndex   |
| CROP_CLEAR_BY_FILEID           | 2     | Clear all the Crop image data that have the values selected to pFileID       |
| CROP_CLEAR_BY_IMAGETAGDATA     | 4     | Clear all the Crop image data that have the values selected to plmageTagData |

Example of selecting:  
When CROP\_ CLEAR\_ BY\_ FILEINDEX + CROP\_ CLEAR\_ BY\_ FILEID + CROP\_ CLEAR\_ BY\_ IMAGETAGDATA is selected to bFlag, all the Crop image data that match all the identification data are cleared.

- dwFileIndex:

Select FileIndex, the identification data of the Crop image to be cleared. This is a DWORD type.
- pFileID:

Select FileID, the identification data of the Crop image to be cleared. The symbols \ / : , ; \* ? "<> and | cannot be used. This is a LPSTR type.
- plmageTagData:

Select ImageTagData, the identification data of the Crop image to be cleared. The symbols \ / : , ; \* ? "<> and | cannot be used. This is a LPSTR type.

## Return Values

SUCCESS(0) is returned if the execution is successful. If an error occurs, one of the following error codes (negative value) is returned:

| Macro Definition<br>(Constant) | Value | Description                                            |
|--------------------------------|-------|--------------------------------------------------------|
| SUCCESS                        | 0     | SUCCESS                                                |
| ERR_HANDLE                     | -60   | The handle value that selects the printer is incorrect |
| ERR_PARAM                      | -90   | Parameter error                                        |
| ERR_NOT_SUPPORT                | -100  | Not supported                                          |
| ERR_NOT_FOUND                  | -220  | Selected data is not present                           |
| ERR_EXEC_FUNCTION              | -310  | Cannot be used because the other API is being executed |
| ERR_EXEC_SCAN                  | -330  | ERR_EXEC_SCAN Cannot call as the scanner is scanning   |



For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.

## Explanation

Clear the Crop image data that match the selected identification data from the saving table of Crop image data of status API. It is possible to clear all by selecting bFlag.

### Note

The error (ERR\_NOT\_FOUND) is returned if the Crop image data that match the selected identification data are not present.

When executing BiCloseMonPrinter, all the data defined in the saving table of the Crop image are cleared.

## BiESCNGetRemainingImages

Acquire the remaining number of data of the Crop image that can be registered.

### Syntax

*nErr* = **BiESCNGetRemainingImages** (*nHandle* , *pRemainingImages*)

### Argument

**nHandle:** Specifies the handle. This is an INT type.

**pRemainingImages:** Select a memory address to set a value of the number of remaining data that can be registered. This is a LPBYTE type.

### Return Values

SUCCESS(0) is returned if the execution is successful. If an error occurs, one of the following error codes (negative value) is returned:

| Macro Definition<br>(Constant) | Value | Description                                            |
|--------------------------------|-------|--------------------------------------------------------|
| SUCCESS                        | 0     | SUCCESS                                                |
| ERR_HANDLE                     | -60   | The handle value that selects the printer is incorrect |
| ERR_PARAM                      | -90   | Parameter error                                        |
| ERR_NOT_SUPPORT                | -100  | Not supported                                          |
| ERR_EXEC_FUNCTION              | -310  | Cannot be used because the other API is being executed |
| ERR_EXEC_SCAN                  | -330  | ERR_EXEC_SCAN Cannot call as the scanner is scanning   |

#### NOTE

For information on remedies for the Status API execution errors, refer to "[Status API Execution Error](#)" on page 27.



# Reference for .NET

This chapter explains Status API and the syntax used in .NET environment.

## Properties

### AutoPowerOffTime

Calls BiAutoPowerOffTime in APD4StatusAPI and acquires or sets the auto power off time.

Access: Read only

Data type: int

#### Explanation

For details, see ["Reference for Win32" on page 41](#). Processing mode is internally set with Get/Set.

For details, see ["BiAutoPowerOffTime" on page 106](#).

### ESCNAutoSize

Calls BiESCNGetAutoSize/ BiESCNSetAutoSize in APD4StatusAPI and acquires or sets the AutoSize processing flag value.

Access: Readable and writable

Data type: com.epson.pos.driver.AutoSize

#### Explanation

Constants defined in com.epson.pos.driver.AutoSize shall be used for the value. For details, see ["Reference for Win32" on page 41](#).

### ESCNCutSize

Calls BiESCNSetCutSize/ BiESCNSetAutoSize in APD4StatusAPI and acquires the values of or sets values for the size of cutting the right and left sides of the image data.

Access: Readable and writable

Data type: int

#### Explanation

For details, see ["Reference for Win32" on page 41](#).

## ESCNDocumentSize

Calls BiESCNGetDocumentSize/ BiESCNSetDocumentSize in APD4StatusAPI and acquires the values of or sets values for the width and height of the image data stored in WORK AREA (unit: 0.1mm).

Access: Readable and writable

Data type: System.Drawing.Size

### Explanation

The values shall be processed by using a System.Drawing.Size class. In the System.Drawing.Size class, the Width property corresponds to DocumentWidth and the Height property corresponds to DocumentHeight.

For details, see ["Reference for Win32" on page 41](#).

## ESCNRemainingImages

Calls BiESCNGetRemainingImages in APD4StatusAPI and acquires the number of the remaining data for the Crop image that can be registered.

Access: Read only

Data type: int

### Explanation

For details, see ["Reference for Win32" on page 41](#).

## ESCNRotate

Calls BiESCNGetRotate/ BiESCNSetRotate in APD4StatusAPI and acquires or sets the processing flag value.

Access: Readable and writable

Data type: com.epson.pos.driver.Rotate

### Explanation

Constants defined in com.epson.pos.driver.Rotate shall be used for the value. For details, see ["Reference for Win32" on page 41](#).



## InkStatus

Calls `BiGetInkStatus` in `APD4StatusAPI` and acquires the current ink status.

Access: Read only

Data type: `com.epson.pos.driver.InkASB`

### Explanation

Constants defined in `com.epson.pos.driver.InkASB` shall be used for the value, see ["BiGetInkStatus" on page 88](#).

## IsValid

Acquires the open status of the printer.

Access: Read only

Data type: `System.Boolean`

### Explanation

Returns either of the following values.

true: Successfully opened.

false: Not opened or failed to be opened.

## LastError

Acquires the error code of the last executed API.

Access: Read only

Data type: `com.epson.pos.driver.ErrorCode`

### Explanation

Can acquire an error code at any time because this module retains the last executed API.

This method is used to judge success or failure because APIs implemented in properties cannot return error codes.

Error codes for errors that may occur in all APIs. For details, see ["Status API Execution Error" on page 27](#).

## OfflineCode

Calls `BiGetOfflineCode` in `APD4StatusAPI` and acquires the bit that indicates the cause of the printer being offline.

Access: Read only

Data type: `System.Byte[]`

### Explanation

For details, see ["BiGetOfflineCode" on page 78](#).

## Status

Calls `BiGetSatus` in `APD4StatusAPI` and acquires the current printer status.

Access: Read only

Data type: `com.epson.pos.driver.ASB`

### Explanation

Constants defined in `com.epson.pos.driver.ASB` shall be used for the value. For details, see ["BiGetStatus" on page 79](#).

## Methods

### OpenMonPrinter

Starts controlling the specified printer.

Calls BiOpenMonPrinter in APD4 Status API. For details, see ["BiOpenMonPrinter" on page 59](#).

---

#### Prototype

ErrorCode **OpenMonPrinter**( OpenType type, String name )

#### Parameters

OpenType type:      Type of name to be specified for name. Constants defined in com.epson.pos.driver.OpenType shall be used for the value.

String name:        Starts controlling the specified printer.

Return value other than APD4 Status API return code

This method returns only an error code defined in com.epson.pos.driver.ErrorCode. (It does not return a handle.)

### CloseMonPrinter

Stops controlling the specified printer.

Calls BiCloseMonPrinter in APD4 Status API. For details, see ["BiCloseMonPrinter" on page 61](#).

---

#### Prototype

ErrorCode **CloseMonPrinter**()

## LockPrinter

Occupies the printer.

Calls BiLockPrinter in APD4 Status API. For details, see ["BiLockPrinter" on page 62](#).

---

### Prototype

ErrorCode **LockPrinter**( int timeout )

### Parameters

int timeout:     Timeout time (in ms units).

## UnlockPrinter

Stops occupying the printer.

Calls BiUnlockPrinter in APD4 Status API. For details, see ["BiUnlockPrinter" on page 64](#).

---

### Prototype

ErrorCode **UnlockPrinter**()

## SetMonInterval

Specifies the time interval for Status Monitor API to read status information from the printer, in ms units.

Calls BiSetMonInterval in APD4 Status API. For details, see ["BiSetMonInterval" on page 65](#).

---

### Prototype

ErrorCode **SetMonInterval**( int noPrnInterval, int prnInterval )

### Parameters

int noPrnInterval:     Unused

int prnInterval:     Printer monitoring interval

## SetMonEtherInterval

Specifies the time interval for Status Monitor API to read status information from the printer on the network, in ms units.

Calls BiSetMonEtherInterval in APD4 Status API. For details, see ["BiSetMonEtherInterval" on page 66](#).

---

### Prototype

ErrorCode **SetMonEtherInterval**( int EtherInterval )

### Parameters

int EtherInterval: Network printer monitoring interval

## DirectIOEx

After sending the specified data to the printer, receives data of the specified length from the printer.

Calls BiDirectIOEx in APD4 Status API. For details, see ["BiDirectIOEx" on page 69](#).

---

### Prototype

ErrorCode **DirectIOEx**( byte[] writeCmd, ref byte[] readBuff, int timeout, bool nullTerminate, byte option )

ErrorCode **DirectIOEx**( byte[] writeCmd, out String response, int timeout, byte option )

ErrorCode **DirectIOEx**( byte[] writeCmd, int timeout )

### Parameters

byte[] writeCmd: Data to be sent to the printer

ref byte[] readBuff: Data received from the printer

int timeout: Timeout time for data transmission and reception (in ms units)

bool nullTerminate: Whether or not to terminate reception when NULL is received

byte option: In the case of "True", reading is complete when NULL is received from the printer. At this time, specify the readBuff size to readLen.  
In the case of "FALSE ", the length of data specified in readLen is read or data is read from the printer until a timeout error is generated.

out String response: Data received from the printer (to be converted into strings)

## ResetPrinter

Resets the printer. When resetting the printer during printing, cancels print jobs and performs printer resetting.

Calls BiResetPrinter in APD4 Status API. For details, see ["BiResetPrinter" on page 73](#).

---

### Prototype

ErrorCode **ResetPrinter**()

## CancelError

Calls BiCancelError in APD4 Status API. Performs recovery from a printer recoverable error.

For details, see ["BiCancelError" on page 75](#).

---

### Prototype

ErrorCode **CancelError**()

## GetType

Acquires the type ID of the printer. Some information cannot be acquired depending on the model. In such a case, "0" is set.

Calls BiGetType in APD4 Status API. For details, see ["BiGetType" on page 77](#).

---

### Prototype

ErrorCode **GetType**( out byte typeid, out byte font, out byte  
exrom, out byte euspecial )

#### Parameters

|                     |                                               |
|---------------------|-----------------------------------------------|
| out byte typeid:    | Type ID of the printer                        |
| out byte font:      | Fonts installed in the printer                |
| out byte exrom:     | Capacity of the printer's extended Flash ROM. |
| out byte euspecial: | Special ID of the printer                     |

## GetRealStatus

Acquires the most recent status of the printer. Individual bits in the status correspond to the contents of the ASB status and constants defined in com.epson.pos.driver. ASB shall be used. Calls BiGetRealStatus in APD4 Status API. For details, see ["BiGetRealStatus" on page 80](#).

---

### Prototype

ErrorCode **GetRealStatus**( out ASB asb )

### Parameters

out ASB asb: Current printer status

## SetStatusBack

Starts status notification through StatusCallback/StatusCallbackEx events. Calls BiSetStatusBackFunctionEx in APD4 Status API. For details, see ["BiSetStatusBackFunctionEx" on page 84](#).

---

### Prototype

ErrorCode **SetStatusBack**()

## CancelStatusBack

Stops status notification through StatusCallback/StatusCallbackEx events. Calls BiCancelStatusBack in APD4 Status API. For details, see ["BiCancelStatusBack" on page 87](#).

---

### Prototype

ErrorCode **CancelStatusBack**()

ErrorCode **CancelStatusBack**()

## SetInkStatusBack

Starts status notification through InkStatusCallback/InkStatusCallbackEx events.

Calls BiSetInkStatusBackFunctionEx in APD4 Status API. For details, see ["BiSetInkStatusBackFunctionEx" on page 91](#).

---

### Prototype

ErrorCode ***SetInkStatusBack()***

## CancelInkStatusBack

Stops status notification through InkStatusCallback/InkStatusCallbackEx events.

Calls BiCancelInkStatusBack in APD4 Status API. For details, see ["BiSetInkStatusBackFunction" on page 89](#).

---

### Prototype

ErrorCode ***CancelInkStatusBack()***

## GetBatteryStatus

Acquires the current printer's battery status.

Calls BiGetBatteryStatus in APD4 Status API. For details, see ["BiGetBatteryStatus" on page 95](#).

---

### Prototype

ErrorCode ***GetBatteryStatus***( ref PowerStatus lpbPowerStatus,  
ref BatteryStatus lpbBatteryStatus )

### Parameters

- |                                     |                                                                                                   |
|-------------------------------------|---------------------------------------------------------------------------------------------------|
| ref PowerStatus lpbPowerStatus:     | Power statusConstants defined in com.epson.pos.driver.PowerStatus shall be used for the value.    |
| ref BatteryStatus lpbBatteryStatus: | Battery levelConstants defined in com.epson.pos.driver.BatteryStatus shall be used for the value. |



## SetBatteryStatusBack

Starts battery status notification through a BatteryStatusCallbackEx event.

Calls BatteryStatusCallbackEx in APD4 Status API. For details, see ["BiSetBatteryStatusBackFunctionEx" on page 97](#).

---

### Prototype

ErrorCode ***SetBatteryStatusBack()***

## CancelBatteryStatusBack

Stops battery status notification through a BatteryStatusCallbackEx event.

Calls BiCancelBatteryStatusBack in APD4 Status API. For details, see ["BiCancelBatteryStatusBack" on page 100](#).

---

### Prototype

ErrorCode ***CancelBatteryStatusBack()***

## SetPresenterEvent

Starts presenter event notification through PresenterCallback/PresenterCallbackEx events.

Calls BiSetPresenterEventBackFunctionEx in APD4 Status API. For details, see ["BiSetPresenterEventBackFunctionEx" on page 103](#).

---

### Prototype

ErrorCode ***SetPresenterEvent()***

## CancelPresenterEvent

Stops presenter event notification through PresenterCallback/PresenterCallbackEx events.

Calls CancelPresenterEvent in APD4 Status API. For details, see ["BiCancelPresenterEventBack" on page 105](#).

---

### Prototype

ErrorCode ***CancelPresenterEvent()***

## PowerOff

Executes the power-off process of the printer.

Calls BiPowerOff in APD4 Status API. For details, see ["BiPowerOff" on page 108](#).

---

### Prototype

ErrorCode ***PowerOff()***

## EjectSheet

Instructs the presenter to eject receipt paper.

Calls BiEjectSheet in APD4 Status API. For details, see ["BiEjectSheet" on page 110](#).

---

### Prototype

ErrorCode ***EjectSheet()***

## GetCounter

Reads the maintenance counter.

Calls BiGetCounter in APD4 Status API. For details, see ["BiGetCounter" on page 111](#).

### Prototype

```
ErrorCode GetCounter( CounterIndex counter, bool cumulative,
                        out int value )
```

```
ErrorCode GetCounter( byte counter, out int value )
```

### Parameters

|                       |                                                                                                                                                         |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| CounterIndex counter: | Maintenance counter number Constants defined in com.epson.pos.driver.CounterIndex shall be used for the value.                                          |
| bool cumulative:      | Whether or not the maintenance counter number specified by counter refers to the cumulative counter<br>true: cumulative counter<br>false: reset counter |
| out int value:        | Maintenance counter value                                                                                                                               |
| byte counter:         | Maintenance counter number                                                                                                                              |

## ResetCounter

Resets the maintenance counter.

Calls BiResetCounter in APD4 Status API. For details, see ["BiResetCounter" on page 113](#).

### Prototype

```
ErrorCode ResetCounter( CounterIndex counter )
```

```
ErrorCode ResetCounter( byte counter )
```

### Parameters

|                       |                                                                                                                |
|-----------------------|----------------------------------------------------------------------------------------------------------------|
| CounterIndex counter: | Maintenance counter number Constants defined in com.epson.pos.driver.CounterIndex shall be used for the value. |
| byte counter:         | Maintenance counter number                                                                                     |

## GetPrnCapability

Acquires information about the printer specified by the printer ID.

Calls BiGetPrnCapability in APD4 Status API. For details, see ["BiGetPrnCapability" on page 115](#).

---

### Prototype

ErrorCode **GetPrnCapability**( byte printerID, out byte[] data )

ErrorCode **GetPrnCapability**( byte printerID, out String data )

### Parameters

byte printerID: ID of the printer from which information is acquired.  
out byte[] data: Printer information  
out String data: Printer information

## OpenDrawer

Activates the drawer. Can be used also when the printer is offline.

Calls BiOpenDrawer in APD4 Status API. For details, see ["BiOpenDrawer" on page 117](#).

---

### Prototype

ErrorCode **OpenDrawer**( Drawer drawer, Pulse pulse )

### Parameters

Drawer drawer: Drawer to be opened Constants defined in com.epson.pos.driver.Drawer shall be used for the value.  
Pulse pulse: Interval up to activation of the drawer Constants defined in com.epson.pos.driver. Pulse shall be used for the value.

ErrorCode **PowerOff**()

## PreparePaperChange

Ejects paper in a backfeed direction to prepare for roll paper change.

Calls BiPreparePaperChange in APD4 Status API. For details, see ["BiPreparePaperChange" on page 119](#).

---

### Prototype

ErrorCode ***PreparePaperChange()***

## RetractSheet

Instructs the presenter to retract receipt paper.

Calls BiRetractSheet in APD4 Status API. For details, see ["BiRetractSheet" on page 120](#).

---

### Prototype

ErrorCode ***RetractSheet()***

## SendDataFile

Registers commands by using the command definition file. For the file format of the command definition file, see the descriptions in the subsequent sections.

---

### Prototype

ErrorCode **SendDataFile**( String filename )

### Parameters

String filename:      Command definition fileFile in the current folder is used if no path is specified.

---

### Explanation

The registered command data is discarded when CloseMonPriner is executed. If the same command name is found to be already registered, aborts command registration and returns an error.

The number of commands that can be registered is restricted only by the available memory space of the system.

Calls BiSendDataFile in APD4 Status API.

For details, see "[BiSendDataFile](#)" on page 121.

## DirectSendRead

Transmits the commands registered through SendDataFile and receives the data specified with the data type name of data to be received.

Calls BiDirectSendRead in APD4 Status API. For details, see ["BiDirectSendRead" on page 123](#).

---

### Prototype

```
ErrorCode DirectSendRead( String cmdName, String readName,
                           ref byte[] readBuf, int timeout, bool
                           nullTerminate )
```

```
ErrorCode DirectSendRead( String cmdName, String readName,
                           out String response, int timeout )
```

---

### Parameters

String cmdName: Command name

String readName: Data type name of data to be received

ref byte[] readBuf: Received data

int timeout: Timeout time for data transmission and data reception (in ms units)

bool nullTerminate: Whether or not to terminate reception when NULL is received

out String response: Received data

## SetDefaultEchoTime

Sets initial values for the number of response confirmation times and for the timeout time per one response confirmation, to the network printer.

When APD4StatusAPI is installed for the first time, the number of confirmation response times is one and the timeout time per one response confirmation is 1 second.

The values set will be enabled the next time OpenMonPrinter is called.

Note that this API is executable only during Ethernet connection.

Calls BiSetDefaultEchoTime in APD4 Status API. For details, see ["BiSetDefaultEchoTime" on page 126](#).

---

### Prototype

ErrorCode **SetDefaultEchoTime**( int count, int timeout )

### Parameters

int count:        Number of response confirmation times

int timeout:     Timeout time per one response confirmation (in ms units)

## SetEtherEchoTime

Sets values for the number of response confirmation times and for the timeout time per one response confirmation, to the network printer. Before this API executes, the values set with SetDefaultEchoTime are used. The values set are valid until OpenMonPrinter is called. Note that this API is enabled only during Ethernet connection.

Calls BiSetEtherEchoTime in APD4 Status API. For details, see ["BiSetEtherEchoTime" on page 127](#).

---

### Prototype

ErrorCode **SetEtherEchoTime**( int count, int timeout )

### Parameters

int count:        Number of response confirmation times

int timeout:     Timeout time per one response confirmation



## MICRCleaning

Cleans the MICR mechanism. After cleaning is complete, roll paper is selected as a printing sheet.

Calls BiMICRCleaning in APD4 Status API. For details, see ["BiMICRCleaning" on page 129](#).

---

### Prototype

ErrorCode **MICRCleaning**()

## MICRGetStatus

Acquires the MICR status.

Calls BiMICRGetStatus in APD4 Status API. For details, see ["BiMICRGetStatus" on page 130](#).

---

### Prototype

ErrorCode **MICRGetStatus**( out byte status )

### Parameters

out byte status:      MICR status

## MICRLoadCheck

Loads the check slip into the print start position.

Calls BiMICRLoadCheck in APD4 Status API. For details, see ["BiMICRLoadCheck" on page 132](#).

---

### Prototype

ErrorCode **MICRLoadCheck()**

## MICRReadCheck

Reads the check slip.

Calls BiMICRReadCheck in APD4 Status API. For details, see ["BiMICRReadCheck" on page 133](#).

---

### Prototype

ErrorCode **MICRReadCheck**( MicrFont readFont, int  
waitInsertionTime )

### Parameters

|                        |                                                                                                                                |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| MicrFont readFont:     | Read fontConstants defined in com.epson.pos.driver.MicrFont shall be used for the value.                                       |
| int waitInsertionTime: | Check slip insertion wait timeIf 255 (the hidden feature) is specified, nothing is specified for the slip insertion wait time. |

## MICREjectCheck

Ejects the check slip.

Calls BiMICREjectCheck in APD4 Status API. For details, see ["BiMICREjectCheck" on page 135](#).

---

### Prototype

ErrorCode **MICREjectCheck()**

## MICRCancelWaitCheckInsertion

Cancels the check slip insertion wait status. Also when called by a printer without MICR, cancels the slip insertion wait status.

Calls BiMICRCancelWaitCheckInsertion in APD4 Status API. For details, see ["BiMICRCancelWaitCheckInsertion" on page 136](#).

---

### Prototype

ErrorCode ***MICRCancelWaitCheckInsertion()***

## MICRRetransmissionCheckData

Executes retransmission of the results of check slip reading.

Calls BiMICRRetransmissionCheckData in APD4 Status API. For details, see ["BiMICRRetransmissionCheckData" on page 137](#).

---

### Prototype

ErrorCode ***MICRRetransmissionCheckData***  
( out String response, out MICRStatus status,  
out MICRDetail detail, int timeout )

### Parameters

|                        |                                     |
|------------------------|-------------------------------------|
| out String response:   | Reading data                        |
| out MICRStatus status: | Reading status                      |
| out MICRDetail detail: | Reading status detailed information |
| int timeout:           | Timeout time (in ms units)          |

## MICRSelectDataHandling

Configures the operation of check slip reading.

Calls BiMICRSelectDataHandling in APD4 Status API. For details, see ["BiMICRSelectDataHandling" on page 139](#).

---

### Prototype

ErrorCode **MICRSelectDataHandling**  
( CharSelect charSel, DetailSelect detailSel, ErrorSelect errorSel )

### Parameters

CharSelect charSel: How to handle characters that cannot be analyzed Constants defined in com.epson.pos.driver.CharSelect shall be used for the value.

DetailSelect detailSel: Availability of detailed information at the time of abnormal termination of reading Constants defined in com.epson.pos.driver.DetailSelect shall be used for the value.

ErrorSelect errorSel: Whether or not to end the MICR function at the time of abnormal termination. Regardless of this parameter setting, the MICR function shall continue at the time of normal termination or at the time of abnormal termination adding reading results. Constants defined in com.epson.pos.driver.ErrorSelect shall be used for the value.

## MICRSetReadBack

Starts MICR data reception notification through MICRReadCallback/MICRReadCallbackEx events.

Calls BiMICRSetReadBackFunctionEx in APD4 Status API. For details, see ["BiMICRSetReadBackFunctionEx" on page 144](#).

---

### Prototype

ErrorCode **MICRSetReadBack()**

## MICRCancelReadBack

Stops MICR data reception notification through MICRReadCallback/MICRReadCallbackEx events.

Calls BiMICRCancelReadBack in APD4 Status API. For details, see "[BiMICRCancelReadBack](#)" on page 148.

---

### Prototype

ErrorCode ***MICRCancelReadBack()***

## SCNClumpPaper

Sets the single sheet into the clump state. After this API executes, the printer is transitioned to the single sheet insertion wait status and the sheet is clumped after being inserted. In the above case, if another sheet is already clumped, nothing is done.

Calls BiSCNClumpPaper in APD4 Status API. For details, see "[BiSCNClumpPaper](#)" on page 149.

---

### Prototype

ErrorCode ***SCNClumpPaper()***

## SCNGetClumpStatus

Acquires the clump status of the single sheet.

Calls BiSCNGetClumpStatus in APD4 Status API. For details, see "[BiSCNGetClumpStatus](#)" on page 150.

---

### Prototype

ErrorCode ***SCNGetClumpStatus***( out byte status )

#### Parameters

out byte status:      Single sheet clump status

## SCNGetCroppingAreas

Acquires Cropping area information from the printer.

Calls BiSCNGetCroppingArea in APD4 Status API. For details, see ["BiSCNGetCroppingArea" on page 152](#).

---

### Prototype

ErrorCode **SCNGetCroppingAreas**( out byte[] areas )

ErrorCode **SCNGetCroppingAreas**( out Hashtable areas )

### Parameters

out byte[] areas: Cropping area information

out Hashtable areas: Cropping area information

## SCNSetCroppingArea

Sets a cropping area. Note that the values set with this API are valid until the powering off or resetting of the printer.

Calls BiSCNSetCroppingArea in APD4 Status API. For details, see ["BiSCNSetCroppingArea" on page 154](#).

---

### Prototype

ErrorCode **SCNSetCroppingArea**( byte areaNo, int startX, int startY, int endX, int endY )

ErrorCode **SCNSetCroppingArea**( byte areaNo, Rectangle area )

### Parameters

byte areaNo: Cropping area number

int startX: Starting X coordinate of the cropping area

int startY: Starting Y coordinate of the cropping area

int endX: Ending X coordinate of the cropping area

int endY: Ending Y coordinate of the cropping area

Rectangle area: Cropping area

## SCNDeleteCroppingArea

Deletes a cropping area set to the printer.

Calls BiSCNDeleteCroppingArea in APD4 Status API. For details, see ["BiSCNDeleteCroppingArea" on page 156](#).

---

### Prototype

ErrorCode **SCNDeleteCroppingArea**( byte areaNo )

### Parameters

byte areaNo:      Number of a cropping area to be deleted. If 0 is specified, deletes all cropping areas.

## SCNGetImageFormat

Acquires the image data format from the printer.

Calls BiSCNGetImageFormat in APD4 Status API. For details, see ["BiSCNGetImageFormat" on page 157](#).

---

### Prototype

ErrorCode **SCNGetImageFormat**( out Format format )

### Parameters

out Format format:    Image data format

## SCNSetImageFormat

Sets the format for the image data to be read. Note that the values set with this API are valid until the powering off or resetting of the printer.

Calls BiSCNSetImageFormat in APD4 Status API. For details, see ["BiSCNSetImageFormat" on page 159](#).

---

### Prototype

ErrorCode **SCNSetImageFormat**( Format format )

### Parameters

Format format: Image data formatThe initial value after powering on or resetting the printer is EPS\_BI\_SCN\_TIFF.

## SCNGetImageList

Acquires data IDs for the image scanning results that exist in the printer's NV memory for storage.

Calls BiSCNGetImageList in APD4 Status API. For details, see ["BiSCNGetImageList" on page 161](#).

---

### Prototype

ErrorCode **SCNGetImageList**( out int[] idList )

### Parameters

out int[] idList: Data IDs held by the printer



## SCNGetImageQuality

Acquires the image scanning quality from the printer.

Calls BiGetImageQuality in APD4 Status API. For details, see "[BiSCNGetImageQuality](#)" on page 163.

---

### Prototype

ErrorCode **SCNGetImageQuality**  
 ( out ColorDepth colorDepth, out double  
 threshold, out Color color, out ExOption exOption )

### Parameters

|                            |                                                                                                                                  |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| out ColorDepth colorDepth: | Tonal gradation (the number of bits per pixel) Constants defined in com.epson.pos.driver.ColorDepth shall be used for the value. |
| out double threshold:      | Density threshold                                                                                                                |
| out Color color:           | Color<br>Constants defined in com.epson.pos.driver.Color shall be used for the value.                                            |
| out ExOption exOption:     | Density adjustment<br>typeConstants defined in com.epson.pos.driver.ExOption shall be used for the value.                        |

## SCNSetImageQuality

Sets the image scanning quality. Note that the values set with this API are valid until the powering off or resetting of the printer.

Calls BiSCNSetImageQuality in APD4 Status API. For details, see ["BiSCNSetImageQuality" on page 165](#).

---

### Prototype

ErrorCode **SCNSetImageQuality**  
( ColorDepth colorDepth, double threshold,  
Color color, ExOption exOption )

### Parameters

ColorDepth colorDepth: Tonal gradation (the number of bits per pixel) Constants defined in com.epson.pos.driver.ColorDepth shall be used for the value.

double threshold: Density threshold

Color color: Color  
Constants defined in com.epson.pos.driver.Color shall be used for the value.

ExOption exOption: Density adjustment type  
Constants defined in com.epson.pos.driver.ExOption shall be used for the value.

## SCNGetImageRemainingCapacity

Acquires the capacity of the unused area in the NV memory for storage, from the printer.

Calls BiSCNGetImageRemainingCapacity in APD4 Status API. For details, see ["BiSCNGetImageRemainingCapacity" on page 167](#).

---

### Prototype

ErrorCode **SCNGetImageRemainingCapacity**( out int size )

### Parameters

out int size: Remaining capacity of the printer's NV memory for storage

## SCNGetScanArea

Acquires the image scan area.

Calls BiSCNGetScanArea in APD4 Status API. For details, see ["BiSCNGetScanArea" on page 169](#).

---

### Prototype

ErrorCode **SCNGetScanArea**( out Rectangle area )

ErrorCode **SCNGetScanArea**( out int startX, out int startY, out int endX, out int endY )

### Parameters

out Rectangle area: Scan area  
 out int startX: Starting X coordinate of the scan area  
 out int startY: Starting Y coordinate of the scan area  
 out int endX: Ending X coordinate of the scan area  
 out int endY: Ending Y coordinate of the scan area

## SCNSetScanArea

Sets an image scan area.

Calls BiSCNSetScanArea in APD4 Status API. For details, see ["BiSCNSetScanArea" on page 171](#).

---

### Prototype

ErrorCode **SCNSetScanArea**( Rectangle area )

ErrorCode **SCNSetScanArea**( int startX, int startY, int endX, int endY )

### Parameters

Rectangle area: Scan area  
 int startX: Starting X coordinate of the scan area  
 int startY: Starting Y coordinate of the scan area  
 int endX: Ending X coordinate of the scan area  
 int endY: Ending Y coordinate of the scan area

## SCNPreScan

After an attempt to scan an image, sets the printer's density threshold and acquires the density threshold set.

Calls BiSCNPreScan in APD4 Status API. For details, see ["BiSCNPreScan" on page 174](#).

---

### Prototype

```
ErrorCode SCNPreScan( out PreScanResult result, out double  
                        threshold )
```

### Parameters

out PreScanResult result: Prescan results status

out double threshold: Density threshold for print paper

## SCNReadImage

Executes image scanning.

Calls BiSCNReadImage in APD4 Status API. For details, see ["BiSCNReadImage" on page 176](#).

---

### Prototype

```
ErrorCode SCNReadImage  
( int id, SelectSheet selectSheet, byte waitInsertionTime,  
  byte[] addInforData, NVMemory memory )
```

### Parameters

int id: Data identifier to be associated with a scanning image

SelectSheet selectSheet: Scan target paperConstants defined in  
com.epson.pos.driver.SelectSheet shall be used for the value.

byte waitInsertionTime: Paper insertion wait time (in ms units)

byte[] addInforData: Character dataSpecified when character data is added to an image.

NVMemory memory: Whether or not to save the results of image scanning into the NV  
memory for storage Constants defined in com.epson.pos.driver.  
NVMemory shall be used for the value.

## SCNRetransmissionImage

Executes retransmission of the results of image scanning.

Calls BiSCNRetransmissionImage in APD4 Status API. For details, see ["BiSCNRetransmissionImage" on page 179](#).

---

### Prototype

```

        ErrorCode SCNRetransmissionImage
            ( int id, out byte[] data, out int imageX, out
              SCNStatus status, out SCNDetail detail, int timeout
            )
    
```

### Parameters

|                       |                                                                                                                   |
|-----------------------|-------------------------------------------------------------------------------------------------------------------|
| int id:               | Data identifier to be associated with a scanning image                                                            |
| out byte[] data:      | Image data                                                                                                        |
| out int imageX:       | Number of image data (bytes) in the X direction                                                                   |
| out SCNStatus status: | Scan status Constants defined in com.epson.pos.driver.SCNStatus shall be used for the value.                      |
| out SCNDetail detail: | Scan status detailed information Constants defined in com.epson.pos.driver.SCNDetail shall be used for the value. |
| int timeout:          | Timeout time for data reading (in ms units)                                                                       |

## SCNDeleteImage

Deletes the image scanning results of data whose data ID is specified.

Calls BiSCNDeleteImage in APD4 Status API. For details, see ["BiSCNDeleteImage" on page 181](#).

---

### Prototype

```

        ErrorCode SCNDeleteImage( int id )
    
```

### Parameters

|         |                               |
|---------|-------------------------------|
| int id: | Data ID of data to be deleted |
|---------|-------------------------------|

## SCNSelectScanUnit

Sets a unit that executes image scanning. Before execution of this API, the default check paper scan unit (PS\_BI\_SCN\_UNIT\_CHECKPAPER) is set.

Calls BiSelectScanUnit in APD4 Status API. For details, see ["BiSCNSelectScanUnit" on page 183](#).

---

### Prototype

ErrorCode **SCNSelectScanUnit**( ScanUnit scanUnit )

### Parameters

ScanUnit scanUnit: Scan unitConstants defined in com.epson.pos.driver.ScanUnit shall be used for the value.

## SCNSetReadBack

Starts scan data reception notification through SCNReadCallback/SCNReadCallbackEx events.

Calls BiSCNSetReadBackFunctionEx in APD4 Status API. For details, see ["BiSCNSetReadBackFunctionEx" on page 188](#).

---

### Prototype

ErrorCode **SCNSetReadBack**()

## SCNCancelReadBack

Stops scan data reception notification through SCNReadCallback/SCNReadCallbackEx events.

Calls BiSCNCancelReadBack in APD4 Status API. For details, see ["BiSCNCancelReadBack" on page 192](#).

---

### Prototype

ErrorCode **SCNCancelReadBack**()

## ESCNEable

Enables the scanner extended functions.

Calls BiESCNEable in APD4 Status API. For details, see ["BiESCNEable" on page 193](#).

---

### Prototype

ErrorCode **ESCNEable**( Storage storage )

### Parameters

Storage storage: Crop image storage method Constants defined in com.epson.pos.driver.Storage shall be used for the value.

## ESCNDefineCropArea

Registers Crop information, by using the specified CropAreaID, into the CropArea definition table of Status API.

Calls BiESCNDefineCropArea in APD4 Status API. For details, see ["BiESCNDefineCropArea" on page 202](#).

---

### Prototype

ErrorCode **ESCNDefineCropArea**( byte areaNo, int startX, int startY, int endX, int endY )

### Parameters

|              |                                             |
|--------------|---------------------------------------------|
| byte areaNo: | CropAreaID of the CropArea to be registered |
| int startX:  | Starting X coordinate of the CropArea       |
| int startY:  | Starting Y coordinate of the CropArea       |
| int endX:    | Ending X coordinate of the CropArea         |
| int endY:    | Ending Y coordinate of the CropArea         |

## ESCNGetMaxCropAreas

Acquire a maximum number of data of CropArea that can be registered.

Calls BiESCNGetMaxCropAreas in APD4 Status API. For details, see ["BiESCNGetMaxCropAreas" on page 204](#).

---

### Prototype

ErrorCode **ESCNGetMaxCropAreas**( out int count )

### Parameters

out int count:           Maximum number of data of CropArea that can be registered.

## ESCNSStoreImage

Registers a Crop image.

Calls BiESCNSStoreImage in APD4 Status API. For details, see ["BiESCNSStoreImage" on page 205](#).

---

### Prototype

ErrorCode **ESCNSStoreImage**( int fileIndex, String fileID, String  
imageTagData, byte cropAreaID )

### Parameters

int fileIndex:           ID of a Crop image to be registered  
String fileID:           File ID of a Crop image to be registered  
                          [ \ / : , ; \* ? " ' < > | ] cannot be used.  
String imageTagData:    Image tag data of a Crop image to be registered  
                          [ \ / : , ; \* ? " ' < > | ] cannot be used.  
byte cropAreaID:        CropAreaID already defined



## ESCNRetrievImage

Acquires Crop image data.

Calls BiESCNRetrievImage in APD4 Status API. For details, see ["BiESCNRetrievImage" on page 208](#).

---

### Prototype

```
ErrorCode ESCNRetrievImage( int fileIndex, String fileID, String
                             imageTagData, out byte[] data )
```

### Parameters

|                      |                                               |
|----------------------|-----------------------------------------------|
| int fileIndex:       | ID of a Crop image to be acquired             |
| String fileID:       | File ID of a Crop image to be acquired        |
| String imageTagData: | Image tag data of a Crop image to be acquired |
| out byte[] data:     | Crop image data                               |

## ESCNClearImage

Deletes a registered Crop image.

Calls BiESCNClearImage in APD4 Status API. For details, see ["BiESCNClearImage" on page 211](#).

---

### Prototype

```
ErrorCode ESCNClearImage( ClearImageFlag flag, int fileIndex,
                             String fileID, String imageTagData )
```

### Parameters

|                      |                                                                                                       |
|----------------------|-------------------------------------------------------------------------------------------------------|
| ClearImageFlag flag: | Delete methodConstants defined in<br>com.epson.pos.driver.ClearImageFlag shall be used for the value. |
| int fileIndex:       | ID of a Crop image to be deleted                                                                      |
| String fileID:       | File ID of a Crop image to be deleted                                                                 |
| String imageTagData: | Image tag data of a Crop image to be deleted                                                          |

## Events

### StatusCallback

Event that handles ASB status notification.

Corresponds to the callback function specified by `BiSetStatusBackFunction` in APD4 Status API.  
For details, see ["BiSetStatusBackFunction" on page 82](#).

---

#### Prototype

***StatusCallbackHandler***( ASB asb )

#### Parameters

ASB asb:                ASB statusConstants defined in `com.epson.pos.driver`.  
                          ASB shall be used for the value.

### StatusCallbackEx

Event that handles ASB status notification.

Corresponds to the callback function specified by `BiSetStatusBackFunctionEx` in APD4 Status API.

For details, see ["BiSetStatusBackFunctionEx" on page 84](#).

---

#### Prototype

***StatusCallbackHandlerEx***( ASB asb, String portName )

#### Parameters

ASB asb:                ASB statusConstants defined in `com.epson.pos.driver`.  
                          ASB shall be used for the value.

String portName:      Port name

## InkStatusCallback

Event that handles ink status notification.

Corresponds to the callback function specified by `BiSetInkStatusBackFunction` in APD4 Status API. For details, see ["BiSetInkStatusBackFunction" on page 89](#).

---

### Prototype

***InkStatusCallback***( InkASB ink )

### Parameters

InkASB ink: Ink statusConstants defined in `com.epson.pos.driver.InkASB` shall be used for the value.

## InkStatusCallbackEx

Event that handles ink status notification.

Corresponds to the callback function specified by `BiSetInkStatusBackFunctionEx` in APD4 Status API. For details, see ["BiSetInkStatusBackFunctionEx" on page 91](#).

---

### Prototype

***InkStatusCallbackEx***( InkASB ink, String portName )

### Parameters

InkASB ink: Ink statusConstants defined in `com.epson.pos.driver.InkASB` shall be used for the value.

String portName: Port name

## BatteryStatusCallbackEx

Event that handles power status notification.

Corresponds to the callback function specified by `BiSetBatteryStatusBackFunctionEx` in APD4 Status API. For details, see "[BiSetBatteryStatusBackFunctionEx](#)" on page 97.

---

### Prototype

```
BatteryStatusCallbackEx( byte bPowerStatus,  
                           byte bBatteryStatus,  
                           String lpcPortName )
```

### Parameters

|                      |                |
|----------------------|----------------|
| byte bPowerStatus:   | Power status   |
| byte bBatteryStatus: | Battery status |
| String lpcPortName:  | Port name      |

## MICRReadCallback

Event that handles MICR data notification.

Corresponds to the callback function specified by `BiMICRSetReadBackFunction` in APD4 Status API.

For details, see "[BiMICRSetReadBackFunction](#)" on page 141.

---

### Prototype

```
MICRReadCallbackHandler( String data, MICRStatus status,  
                           MICRDetail detail )
```

### Parameters

|                    |                                                                                                                                    |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------|
| String data:       | MICR data                                                                                                                          |
| MICRStatus status: | Reading status Constants defined in <code>com.epson.pos.driver.MICRStatus</code> shall be used for the value.                      |
| MICRDetail detail: | Reading status detailed information Constants defined in <code>com.epson.pos.driver.MICRDetail</code> shall be used for the value. |

## MICRReadCallbackEx

Event that handles MICR data notification.

Corresponds to the callback function specified by `BiMICRSetReadBackFunctionEx` in APD4 Status API.

For details, see ["BiMICRSetReadBackFunctionEx" on page 144](#).

---

### Prototype

***MICRReadCallbackHandlerEx***( String data, MICRStatus status,  
MICRDetail detail, String portName )

### Parameters

String data: MICR data

MICRStatus status: Reading status Constants defined in `com.epson.pos.driver.MICRStatus` shall be used for the value.

MICRDetail detail: Reading status detailed information Constants defined in `com.epson.pos.driver.MICRDetail` shall be used for the value.

String portName: Port name

## SCNReadCallback

Event that handles Scan data notification.

Corresponds to the callback function specified by `BiSCNSetReadBackFunction` in APD4 Status API.

For details, see ["BiSCNSetReadBackFunction" on page 185](#).

---

### Prototype

***SCNReadCallbackHandler***( byte[] data, int imageX,  
SCNStatus status, SCNDetail detail )

### Parameters

byte[] data: Scan data

int imageX: Number of image data (bytes) in the X direction

SCNStatus status: Scan status Constants defined in `com.epson.pos.driver.SCNStatus` shall be used for the value.

SCNDetail detail: Scan status detailed information Constants defined in `com.epson.pos.driver.SCNDetail` shall be used for the value.

## SCNReadCallbackEx

Event that handles Scan data notification.

Corresponds to the callback function specified by `BiSCNSetReadBackFunctionEx` in APD4 Status API. For details, see "[BiSCNSetReadBackFunctionEx](#)" on page 188.

---

### Prototype

#### ***SCNReadCallbackHandlerEx***

( byte[] data, int imageX, SCNStatus status,  
SCNDetail detail, String portName )

### Parameters

|                   |                                                                                                                                |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------|
| byte[] data:      | Scan data                                                                                                                      |
| int imageX:       | Number of image data (bytes) in the X direction                                                                                |
| SCNStatus status: | Scan status Constants defined in <code>com.epson.pos.driver.SCNStatus</code> shall be used for the value.                      |
| SCNDetail detail: | Scan status detailed information Constants defined in <code>com.epson.pos.driver.SCNDetail</code> shall be used for the value. |
| String portName:  | Port name                                                                                                                      |

## PresenterCallback

Event that handles presenter event notification

Corresponds to the callback function specified by `BiSetPresenterEventBackFunction` in APD4 Status API.

For details, see ["BiSetPresenterEventBackFunction" on page 101](#).

---

### Prototype

***PresenterCallbackHandler***( byte returncode )

### Parameters

byte returncode:     Operating results of the presenter.

## PresenterCallbackEx

Event that handles presenter event notification

Corresponds to the callback function specified by `BiSetPresenterEventBackFunctionEx` in APD4 Status API.

For details, see ["BiSetPresenterEventBackFunctionEx" on page 103](#).

---

### Prototype

***PresenterCallbackHandlerEx***( byte returncode, String portName )

### Parameters

byte returncode:     Operating results of the presenter.

String portName:     Port name





# Generating Log Files

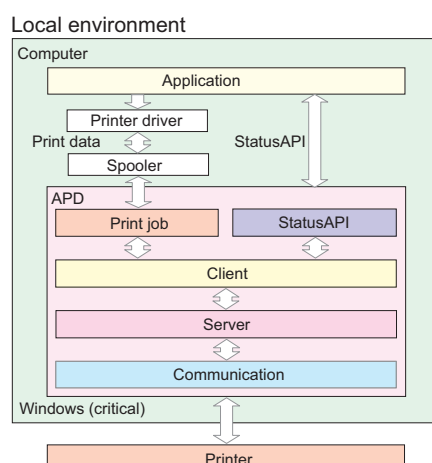
This chapter explains how to output and view log files.

The APD allows you to create a log file which can help you to troubleshoot a problem quickly.

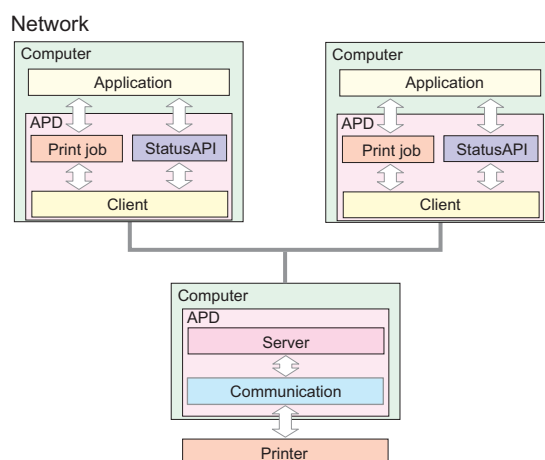
The log file is saved under a name of EpsonPOSPort.log. The main features are as follows.

- When a trouble occurs in a printing system, you can view Windows error information in addition to the APD log.
- A process ID can be acquired. You can identify which log is for which process when multiple processes have been executed.
- Client-server system is supported. Logs of client/server module can be acquired.
- Log file can be generated for each of the following items; Status API, print job, client, server, and communication module.

The following diagram shows where the APD log is acquired. Logs for each module are output as a single log file in the order of acquisition.



The module configuration of client-server system is shown below.

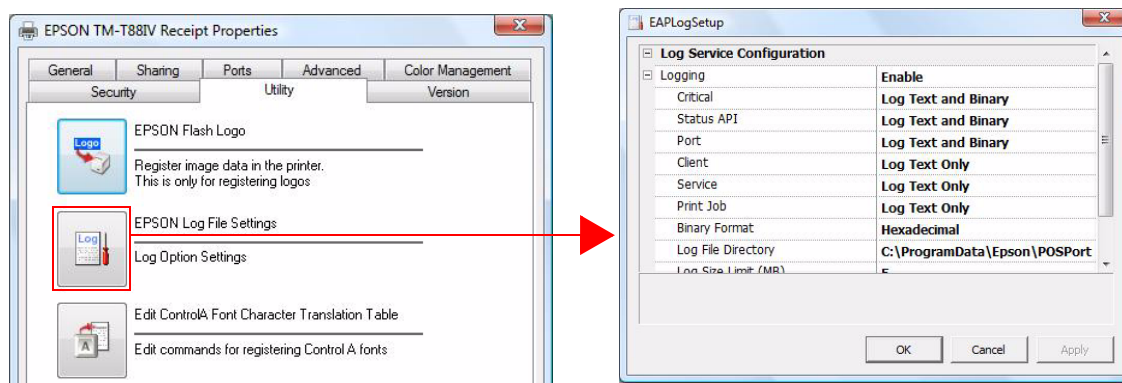


A log file is generated for each computer. The computer's date and time setting is applied to the time stamp.

## Log Files Settings

You can select whether to output the log file or not, which module to be logged, and where to output the log file.

Select the Utility tab on the properties screen, and click the [EPSON Log File Settings] button.



Make the following settings on the tab.

| Setting    |                                                                              | Description                              |
|------------|------------------------------------------------------------------------------|------------------------------------------|
| Logging    | Enable (Default)                                                             | Enables log output.                      |
|            | Disable                                                                      | Disables log output.                     |
| Critical   | Select how the Windows error information is output.                          |                                          |
|            | Log Text Only                                                                | Outputs the log as text data.            |
|            | Log Text and Binary (Default)                                                | Outputs the log as text and binary data. |
| Status API | Select how the Status API log is output.                                     |                                          |
|            | Do Not log                                                                   | A Status API log is not output.          |
|            | Log Text Only                                                                | Outputs the log as text data.            |
|            | Log Text and Binary (Default)                                                | Outputs the log as text and binary data. |
| Port       | Select how the log of the communication port is output.                      |                                          |
|            | Do Not log                                                                   | A communications port log is not output. |
|            | Log Text Only                                                                | Outputs the log as text data.            |
|            | Log Text and Binary (Default)                                                | Outputs the log as text and binary data. |
| Client     | Select how the log of the application on the client-server system is output. |                                          |
|            | Do Not log                                                                   | A client log is not output.              |
|            | Log Text Only (Default)                                                      | Outputs the log as text data.            |
|            | Log Text and Binary                                                          | Outputs the log as text and binary data. |
| Service    | Select how the log of the server on the client-server system is output.      |                                          |
|            | Do Not log                                                                   | A service log is not output.             |
|            | Log Text Only (Default)                                                      | Outputs the log as text data.            |
|            | Log Text and Binary                                                          | Outputs the log as text and binary data. |

| Setting             | Description                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Print Job           | Select how the log of print jobs is output.                                                                                                                                                                                                                                                                                                                                                        |
|                     | Do Not log                                                                                                                                                                                                                                                                                                                                                                                         |
|                     | Log Text Only (Default)                                                                                                                                                                                                                                                                                                                                                                            |
|                     | Log Text and Binary                                                                                                                                                                                                                                                                                                                                                                                |
| Binary Format       | Configures the binary data format.                                                                                                                                                                                                                                                                                                                                                                 |
|                     | Hexadecimal (Default)                                                                                                                                                                                                                                                                                                                                                                              |
|                     | Base64                                                                                                                                                                                                                                                                                                                                                                                             |
| Log File Directory  | Specify where to output the log file.<br>(Default)<br>Windows XP: C:\Documents and Settings\All Users\Application Data\Epson\POSPort<br>Windows 7 / Vista: C:\ProgramData\Epson\POSPort                                                                                                                                                                                                            |
| Log Size Limit (MB) | Specify the upper limit of the log file size.<br>When the upper limit is exceeded, the log file is compressed using zip format and saved as a BAK file. The subsequent log information is saved as a new log file. A sequential number is added to the name of the BAK files. (example: EpsonPOSPort1.bak).<br>Specify the number of log files to be backed up.<br>(Range: 1 to 1024 , Default: 5) |
| Backup File Count   | Specify the number of log files to be backed up. (Range 1 to 9 , Default: 1)                                                                                                                                                                                                                                                                                                                       |

**NOTE**

Output function of hexadecimal dumping list is not supported.

## Viewing Log Files

A log file is viewed as follows.

```

2008/02/28 11:02:12.722 {00000bf8:00000e08} [API] -> :BiOpenMonPrinter,00000002,EPSON TM-T88IV Receipt,4. 1. 0. 0

```

Output date                      Log classification                      Detailed information

| Log Data              | Explanation                                                                                               |
|-----------------------|-----------------------------------------------------------------------------------------------------------|
| Output Date           | YYYY/MM/DD hh:mm:ss.sss                                                                                   |
| Process ID, Thread ID | {Process ID: Thread ID}                                                                                   |
| Log classification    | Shows of which module the log file is. (See <a href="#">"Log classification" on page 260.</a> )           |
| Log type              | -> Call function<br><- Return function<br>-- Execute function (call, return)<br>** Occurrence of an event |

| Log Data             | Explanation                                                                                                                                              |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Detailed information | Information for each module and log type<br>When a function is executed:<br>Function name (parameter 1, ---, parameter n) <return> (execution time (ms)) |

## Log classification

| Module     | Log classification | Contents of detailed information                                                                                               |
|------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Critical   | !!!                | Important events and errors on Windows                                                                                         |
| Status API | API                | Status API call function and its parameter information, or called Status API function and its parameter and return information |
| Port       | PRT                | Port controls, events specific to the interface, and input/output data information                                             |
| Client     | CLI                | Process information of the application on the client-server system.                                                            |
| Server     | SVR                | Process information of the server on the client-server system.                                                                 |
| Print Job  | SPL                | Port open/close information and input/output to/from the port information                                                      |

## Log output example

```

2008/02/28 11:02:12.722 {00000bf8:00000e08} [API] ->      :BiOpenMonPrinter,00000001,EPSON TM-T88IV Receipt,4.
1. 2. 0
2008/02/28 11:02:12.722 {00000bf8:00000e08} [CLI] -> Open('pipe://TM/ESDPRT001', 0x01473460)
2008/02/28 11:02:12.722 {000006dc:00000cd0} [SVR] -> 0036d4e8::Open(0, TM/ESDPRT001)
2008/02/28 11:02:12.722 {000006dc:00000cd0} [SVR] <- 0036d4e8::Open(8, TM/ESDPRT004) <00000000>
2008/02/28 11:02:12.722 {00000bf8:00000e08} [CLI] ** (TM/ESDPRT001)Event(0x00010003) 4:
2008/02/28 11:02:12.722 {000006dc:00000cdc} [SVR] -- 0036d4e8::RegisterCallback(8, 00010001) <PHR_SUCCESS>
2008/02/28 11:02:12.722 {00000bf8:00000e08} [CLI] <- Open('pipe://TM/ESDPRT001', 1) <00000000>
2008/02/28 11:02:12.722 {00000bf8:00000e08} [CLI] -> RegisterCallback(1, 0x00040002, 0x01396e00, 0x0177f2f0)
2008/02/28 11:02:12.722 {000006dc:00000c7c} [SVR] -- 0036d4e8::RegisterCallback(8, 00040002) <PHR_SUCCESS>
2008/02/28 11:02:12.722 {00000bf8:00000e08} [CLI] <- RegisterCallback(1, 0x00040002, 0x01396e00, 0x0177f2f0)
<00000000>

```

# Appendix

## Model Information

This document explains the information acquired by Status API for the different printer models.

### BA-T500

#### ASB Status

| Macro Definitions   | ON/<br>OFF | Value      | Status                                 |
|---------------------|------------|------------|----------------------------------------|
| ASB_NO_RESPONSE     | ON         | 0x00000001 | No printer response                    |
|                     | OFF        | 0x00000000 | Printer response                       |
| ASB_PRINT_SUCCESS   | ON         | 0x00000002 | Print complete                         |
|                     | OFF        | 0x00000000 | -                                      |
| ASB_OFF_LINE        | ON         | 0x00000008 | Offline status                         |
|                     | OFF        | 0x00000000 | Online status                          |
| ASB_PLATEN_OPEN     | ON         | 0x00000020 | Platen is open                         |
|                     | OFF        | 0x00000000 | Platen is closed                       |
| ASB_PAPER_FEED      | ON         | 0x00000040 | Paper feed switch is feeding paper     |
|                     | OFF        | 0x00000000 | Paper feed switch is not feeding paper |
| ASB_WAIT_ON_LINE    | ON         | 0x00000100 | Waiting for online recovery            |
|                     | OFF        | 0x00000000 | Not waiting for online recovery        |
| ASB_PANEL_SWITCH    | ON         | 0x00000200 | Panel switch is ON                     |
|                     | OFF        | 0x00000000 | Panel switch is OFF                    |
| ASB_MECHANICAL_ERR  | ON         | 0x00000400 | Mechanical error generated             |
|                     | OFF        | 0x00000000 | Mechanical error not generated         |
| ASB_AUTOCUTTER_ERR  | ON         | 0x00000800 | Auto cutter error generated            |
|                     | OFF        | 0x00000000 | Auto cutter error not generated        |
| ASB_UNRECOVER_ERR   | ON         | 0x00002000 | Unrecoverable error generated          |
|                     | OFF        | 0x00000000 | Unrecoverable error not generated      |
| ASB_AUTORECOVER_ERR | ON         | 0x00004000 | Auto recovery error generated          |
|                     | OFF        | 0x00000000 | Auto recovery error not generated      |

| Macro Definitions      | ON/<br>OFF | Value      | Status                                       |
|------------------------|------------|------------|----------------------------------------------|
| ASB_RECEIPT_NEAR_END   | ON         | 0x00020000 | No paper in the roll paper near end detector |
|                        | OFF        | 0x00000000 | Paper in the roll paper near end detector    |
| ASB_RECEIPT_END        | ON         | 0x00080000 | No paper in the roll paper end detector      |
|                        | OFF        | 0x00000000 | Paper in the roll paper end detector         |
| ASB_SPOOLER_IS_STOPPED | ON         | 0x80000000 | Stop the spooler                             |
|                        | OFF        | 0x00000000 | Operation the spooler                        |

## EU-T300

## ASB Status

| Macro Definitions      | ON/<br>OFF | Value      | Status                                       |
|------------------------|------------|------------|----------------------------------------------|
| ASB_NO_RESPONSE        | ON         | 0x00000001 | No printer response                          |
|                        | OFF        | 0x00000000 | Printer response                             |
| ASB_PRINT_SUCCESS      | ON         | 0x00000002 | Print complete                               |
|                        | OFF        | 0x00000000 | -                                            |
| ASB_OFF_LINE           | ON         | 0x00000008 | Offline status                               |
|                        | OFF        | 0x00000000 | Online status                                |
| ASB_PLATEN_OPEN        | ON         | 0x00000020 | Platen is open                               |
|                        | OFF        | 0x00000000 | Platen is closed                             |
| ASB_PAPER_FEED         | ON         | 0x00000040 | Paper feed switch is feeding paper           |
|                        | OFF        | 0x00000000 | Paper feed switch is not feeding paper       |
| ASB_WAIT_ON_LINE       | ON         | 0x00000100 | Waiting for online recovery                  |
|                        | OFF        | 0x00000000 | Not waiting for online recovery              |
| ASB_PANEL_SWITCH       | ON         | 0x00000200 | Panel switch is ON                           |
|                        | OFF        | 0x00000000 | Panel switch is OFF                          |
| ASB_MECHANICAL_ERR     | ON         | 0x00000400 | Mechanical error generated                   |
|                        | OFF        | 0x00000000 | Mechanical error not generated               |
| ASB_AUTOCUTTER_ERR     | ON         | 0x00000800 | Auto cutter error generated                  |
|                        | OFF        | 0x00000000 | Auto cutter error not generated              |
| ASB_UNRECOVER_ERR      | ON         | 0x00002000 | Unrecoverable error generated                |
|                        | OFF        | 0x00000000 | Unrecoverable error not generated            |
| ASB_AUTORECOVER_ERR    | ON         | 0x00004000 | Auto recovery error generated                |
|                        | OFF        | 0x00000000 | Auto recovery error not generated            |
| ASB_RECEIPT_NEAR_END   | ON         | 0x00020000 | No paper in the roll paper near end detector |
|                        | OFF        | 0x00000000 | Paper in the roll paper near end detector    |
| ASB_RECEIPT_END        | ON         | 0x00080000 | No paper in the roll paper end detector      |
|                        | OFF        | 0x00000000 | Paper in the roll paper end detector         |
| ASB_SPOOLER_IS_STOPPED | ON         | 0x80000000 | Stop the spooler                             |
|                        | OFF        | 0x00000000 | Operation the spooler                        |

## ASB Status

| Macro Definitions          | ON/<br>OFF | Value      | Status                                             |
|----------------------------|------------|------------|----------------------------------------------------|
| ASB_NO_RESPONSE            | ON         | 0x00000001 | No printer response                                |
|                            | OFF        | 0x00000000 | Printer response                                   |
| ASB_PRINT_SUCCESS          | ON         | 0x00000002 | Print complete                                     |
|                            | OFF        | 0x00000000 | -                                                  |
| ASB_PRESENTER_COVER        | ON         | 0x00000004 | Presenter cover is open                            |
|                            | OFF        | 0x00000000 | Presenter cover is closed                          |
| ASB_OFF_LINE               | ON         | 0x00000008 | Offline status                                     |
|                            | OFF        | 0x00000000 | Online status                                      |
| ASB_PLATEN_OPEN            | ON         | 0x00000020 | Platen is open                                     |
|                            | OFF        | 0x00000000 | Platen is closed                                   |
| ASB_PAPER_FEED             | ON         | 0x00000040 | Paper feed switch is feeding paper                 |
|                            | OFF        | 0x00000000 | Paper feed switch is not feeding paper             |
| ASB_WAIT_ON_LINE           | ON         | 0x00000100 | Waiting for online recovery                        |
|                            | OFF        | 0x00000000 | Not waiting for online recovery                    |
| ASB_PANEL_SWITCH           | ON         | 0x00000200 | Panel switch is ON                                 |
|                            | OFF        | 0x00000000 | Panel switch is OFF                                |
| ASB_MECHANICAL_ERR         | ON         | 0x00000400 | Mechanical error generated                         |
|                            | OFF        | 0x00000000 | Mechanical error not generated                     |
| ASB_AUTOCUTTER_ERR         | ON         | 0x00000800 | Auto cutter error generated                        |
|                            | OFF        | 0x00000000 | Auto cutter error not generated                    |
| ASB_UNRECOVER_ERR          | ON         | 0x00002000 | Unrecoverable error generated                      |
|                            | OFF        | 0x00000000 | Unrecoverable error not generated                  |
| ASB_AUTORECOVER_ERR        | ON         | 0x00004000 | Auto recovery error generated                      |
|                            | OFF        | 0x00000000 | Auto recovery error not generated                  |
| ASB_RECEIPT_NEAR_END_FIRST | ON         | 0x00020000 | Paper in the roll paper near first end detector    |
|                            | OFF        | 0x00000000 | No paper in the roll paper near first end detector |
| ASB_RECEIPT_END            | ON         | 0x00080000 | No paper in the roll paper end detector            |
|                            | OFF        | 0x00000000 | Paper in the roll paper end detector               |



| Macro Definitions           | ON/<br>OFF | Value      | Status                                              |
|-----------------------------|------------|------------|-----------------------------------------------------|
| ASB_RECEIPT_NEAR_END_SECOND | ON         | 0x00400000 | Paper in the roll paper near second end detector    |
|                             | OFF        | 0x00000000 | No paper in the roll paper near second end detector |
| ASB_PRESENTER_TE            | ON         | 0x01000000 | Presenter T/E receipt end                           |
|                             | OFF        | 0x00000000 | Presenter T/E receipt not end                       |
| ASB_PRESENTER_TT            | ON         | 0x02000000 | Presenter T/T receipt end                           |
|                             | OFF        | 0x00000000 | Presenter T/T receipt not end                       |
| ASB_SPOOLER_IS_STOPPED      | ON         | 0x80000000 | Stop the spooler                                    |
|                             | OFF        | 0x00000000 | Operation the spooler                               |

## Offline Cause

| Code | Status                                                                      |
|------|-----------------------------------------------------------------------------|
| 00h  | No offline cause.                                                           |
| 20h  | Platen is open.                                                             |
| 21h  | Paper FEED button is pressed.                                               |
| 22h  | No paper.                                                                   |
| 23h  | Presenter is open. (not located in the standby position)                    |
| 40h  | Auto cutter error occurs.                                                   |
| 41h  | Platen open error occurs.(Platen is open during printing)                   |
| 42h  | Black Mark detection error occurs.                                          |
| 43h  | Presenter error occurs.                                                     |
| 60h  | CPU execution error occurs.                                                 |
| 61h  | Low voltage error occurs. (Lower than the specified power supply voltage)   |
| 62h  | High voltage error occurs. (Higher than the specified power supply voltage) |
| 63h  | Memory read/write error occurs.                                             |
| 64h  | Drive circuit connection abnormal error occurs.                             |

---

## Maintenance Counter

| Counter Number<br>(readno) | Resetability | Counter<br>(readcounter)                              | Unit  |
|----------------------------|--------------|-------------------------------------------------------|-------|
| 20 (14H)                   | Resetable    | Number of line feeds (for roll paper)                 | Lines |
| 21 (15H)                   | Resetable    | Number of times head is energized<br>(for roll paper) | Times |
| 50 (32H)                   | Resetable    | Number of autocutter operations                       | Times |
| 61 (3DH)                   | Resetable    | Number of paper presenter operations                  | Times |
| 70 (46H)                   | Resetable    | Printer operation time                                | Hours |
| 148 (94H)                  | Cumulative   | Number of line feeds (for roll paper)                 | Lines |
| 149 (95H)                  | Cumulative   | Number of times head is energized<br>(for roll paper) | Times |
| 178 (B2H)                  | Cumulative   | Number of autocutter operations                       | Times |
| 189 (BDH)                  | Cumulative   | Number of paper presenter operations                  | Times |
| 198 (C6H)                  | Cumulative   | Printer operation time                                | Hours |

## EU-T500

## ASB Status

| Macro Definitions          | ON/<br>OFF | Value      | Status                                             |
|----------------------------|------------|------------|----------------------------------------------------|
| ASB_NO_RESPONSE            | ON         | 0x00000001 | No printer response                                |
|                            | OFF        | 0x00000000 | Printer response                                   |
| ASB_PRINT_SUCCESS          | ON         | 0x00000002 | Print complete                                     |
|                            | OFF        | 0x00000000 | -                                                  |
| ASB_PRESENTER_COVER        | ON         | 0x00000004 | Presenter cover is open                            |
|                            | OFF        | 0x00000000 | Presenter cover is closed                          |
| ASB_OFF_LINE               | ON         | 0x00000008 | Offline status                                     |
|                            | OFF        | 0x00000000 | Online status                                      |
| ASB_PLATEN_OPEN            | ON         | 0x00000020 | Platen is open                                     |
|                            | OFF        | 0x00000000 | Platen is closed                                   |
| ASB_PAPER_FEED             | ON         | 0x00000040 | Paper feed switch is feeding paper                 |
|                            | OFF        | 0x00000000 | Paper feed switch is not feeding paper             |
| ASB_WAIT_ON_LINE           | ON         | 0x00000100 | Waiting for online recovery                        |
|                            | OFF        | 0x00000000 | Not waiting for online recovery                    |
| ASB_PANEL_SWITCH           | ON         | 0x00000200 | Panel switch is ON                                 |
|                            | OFF        | 0x00000000 | Panel switch is OFF                                |
| ASB_MECHANICAL_ERR         | ON         | 0x00000400 | Mechanical error generated                         |
|                            | OFF        | 0x00000000 | Mechanical error not generated                     |
| ASB_AUTOCUTTER_ERR         | ON         | 0x00000800 | Auto cutter error generated                        |
|                            | OFF        | 0x00000000 | Auto cutter error not generated                    |
| ASB_UNRECOVER_ERR          | ON         | 0x00002000 | Unrecoverable error generated                      |
|                            | OFF        | 0x00000000 | Unrecoverable error not generated                  |
| ASB_AUTORECOVER_ERR        | ON         | 0x00004000 | Auto recovery error generated                      |
|                            | OFF        | 0x00000000 | Auto recovery error not generated                  |
| ASB_RECEIPT_NEAR_END_FIRST | ON         | 0x00020000 | Paper in the roll paper near first end detector    |
|                            | OFF        | 0x00000000 | No paper in the roll paper near first end detector |
| ASB_RECEIPT_END            | ON         | 0x00080000 | No paper in the roll paper end detector            |
|                            | OFF        | 0x00000000 | Paper in the roll paper end detector               |

| Macro Definitions           | ON/<br>OFF | Value      | Status                                              |
|-----------------------------|------------|------------|-----------------------------------------------------|
| ASB_RECEIPT_NEAR_END_SECOND | ON         | 0x00400000 | Paper in the roll paper near second end detector    |
|                             | OFF        | 0x00000000 | No paper in the roll paper near second end detector |
| ASB_PRESENTER_TE            | ON         | 0x01000000 | Presenter T/E receipt end                           |
|                             | OFF        | 0x00000000 | Presenter T/E receipt not end                       |
| ASB_PRESENTER_TT            | ON         | 0x02000000 | Presenter T/T receipt end                           |
|                             | OFF        | 0x00000000 | Presenter T/T receipt not end                       |
| ASB_RETRACTOR_R1JAM         | ON         | 0x04000000 | Presenter receipt end R1JAM                         |
|                             | OFF        | 0x00000000 | -                                                   |
| ASB_RETRACTOR_R2JAM         | ON         | 0x20000000 | Retractor receipt end R2JAM                         |
|                             | OFF        | 0x00000000 | -                                                   |
| ASB_RETRACTOR_SENSOR3       | ON         | 0x40000000 | Receipt end retractor box                           |
|                             | OFF        | 0x00000000 | -                                                   |
| ASB_SPOOLER_IS_STOPPED      | ON         | 0x80000000 | Stop the spooler                                    |
|                             | OFF        | 0x00000000 | Operation the spooler                               |

## Offline Cause

| Code | Status                                                                       |
|------|------------------------------------------------------------------------------|
| 00h  | No offline cause.                                                            |
| 20h  | Platen is open.                                                              |
| 21h  | Paper FEED button is pressed.                                                |
| 22h  | No paper.                                                                    |
| 23h  | Presenter is open. (not located in the standby position)                     |
| 40h  | Auto cutter error occurs.                                                    |
| 41h  | Platen open error occurs.(Platen is open during printing)                    |
| 42h  | Black Mark detection error occurs.                                           |
| 43h  | Presenter error occurs.                                                      |
| 60h  | CPU execution error occurs.                                                  |
| 61h  | Low voltage error occurs. (Lower than the specified power supply voltage)    |
| 62h  | High voltage error occurs. (Higher than the specified power supply voltage). |
| 63h  | Memory read/write error occurs.                                              |
| 64h  | Drive circuit connection abnormal error occurs.                              |

## Maintenance Counter

| Counter Number<br>(readno) | Resetability | Counter<br>(readcounter)                              | Unit  |
|----------------------------|--------------|-------------------------------------------------------|-------|
| 20 (14H)                   | Resetable    | Number of line feeds (for roll paper)                 | Lines |
| 21 (15H)                   | Resetable    | Number of times head is energized<br>(for roll paper) | Times |
| 50 (32H)                   | Resetable    | Number of autocutter operations                       | Times |
| 61 (3DH)                   | Resetable    | Number of paper presenter operations                  | Times |
| 62 (3EH)                   | Resetable    | Number of Paper retractor operations                  | Times |
| 70 (46H)                   | Resetable    | Printer operation time                                | Hours |
| 148 (94H)                  | Cumulative   | Number of line feeds (for roll paper)                 | Lines |
| 149 (95H)                  | Cumulative   | Number of times head is energized<br>(for roll paper) | Times |
| 178 (B2H)                  | Cumulative   | Number of autocutter operations                       | Times |
| 189 (BDH)                  | Cumulative   | Number of paper presenter operations                  | Times |
| 190 (BEH)                  | Cumulative   | Number of Paper retractor operations                  | Times |
| 198 (C6H)                  | Cumulative   | Printer operation time                                | Hours |

## ASB Status

| Macro Definitions   | ON/<br>OFF | Value      | Status                                 |
|---------------------|------------|------------|----------------------------------------|
| ASB_NO_RESPONSE     | ON         | 0x00000001 | No printer response                    |
|                     | OFF        | 0x00000000 | Printer response                       |
| ASB_PRINT_SUCCESS   | ON         | 0x00000002 | Print complete                         |
|                     | OFF        | 0x00000000 | -                                      |
| ASB_OFF_LINE        | ON         | 0x00000008 | Offline status                         |
|                     | OFF        | 0x00000000 | Online status                          |
| ASB_COVER_OPEN      | ON         | 0x00000020 | Cover is open                          |
|                     | OFF        | 0x00000000 | Cover is closed                        |
| ASB_PAPER_FEED      | ON         | 0x00000040 | Paper feed switch is feeding paper     |
|                     | OFF        | 0x00000000 | Paper feed switch is not feeding paper |
| ASB_PANEL_SWITCH    | ON         | 0x00000200 | Panel switch is ON                     |
|                     | OFF        | 0x00000000 | Panel switch is OFF                    |
| ASB_MECHANICAL_ERR  | ON         | 0x00000400 | Mechanical error generated             |
|                     | OFF        | 0x00000000 | Mechanical error not generated         |
| ASB_AUTOCUTTER_ERR  | ON         | 0x00000800 | Auto cutter error generated            |
|                     | OFF        | 0x00000000 | Auto cutter error not generated        |
| ASB_UNRECOVER_ERR   | ON         | 0x00002000 | Unrecoverable error generated          |
|                     | OFF        | 0x00000000 | Unrecoverable error not generated      |
| ASB_AUTORECOVER_ERR | ON         | 0x00004000 | Auto recovery error generated          |
|                     | OFF        | 0x00000000 | Auto recovery error not generated      |
| ASB_SLIP_TOF        | ON         | 0x00200000 | No paper in TOF detector               |
|                     | OFF        | 0x00000000 | Paper in TOF detector                  |
| ASB_SLIP_BOF        | ON         | 0x00400000 | No paper in BOF detector               |
|                     | OFF        | 0x00000000 | Paper in BOF detector                  |
| ASB_PAPER_SELECTED  | ON         | 0x01000000 | Roll paper is selected                 |
|                     | OFF        | 0x00000000 | Cut-sheet is selected                  |
| ASB_SLIP_STATUS     | ON         | 0x02000000 | Paper status, printing is impossible   |
|                     | OFF        | 0x00000000 | Paper status, printing is possible     |
| ASB_ASF_SELECTED    | ON         | 0x04000000 | ASF selected as the active sheet       |
|                     | OFF        | 0x00000000 | Cut-sheet selected as the active sheet |
| ASB_PAPER_INSWAIT   | ON         | 0x40000000 | Waiting for cut sheets to be loaded    |
|                     | OFF        | 0x00000000 | -                                      |

| Macro Definitions      | ON/<br>OFF | Value      | Status                   |
|------------------------|------------|------------|--------------------------|
| ASB_RELEASE_OPEN       | ON         | 0x40000000 | Open the release lever   |
|                        | OFF        | 0x00000000 | Closes the release lever |
| ASB_SPOOLER_IS_STOPPED | ON         | 0x80000000 | Stop the spooler         |
|                        | OFF        | 0x00000000 | Operation the spooler    |

## Ink status

| Macro Definitions    | ON/<br>OFF | Value  | Status                     |
|----------------------|------------|--------|----------------------------|
| INK_ASB_NEAR_END     | ON         | 0x0001 | Remaining ink level is low |
|                      | OFF        | 0x0000 | -                          |
| INK_ASB_END          | ON         | 0x0002 | Exchange the ink cartridge |
|                      | OFF        | 0x0000 | -                          |
| INK_ASB_NO_CARTRIDGE | ON         | 0x0004 | No ink cartridge           |
|                      | OFF        | 0x0000 | Ink cartridge present      |
| INK_ASB_CLEANING     | ON         | 0x0020 | Cleaning                   |
|                      | OFF        | 0x0000 | -                          |

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## Offline Cause

### First Byte

| Bit | ON/<br>OFF | Value | Status                            |
|-----|------------|-------|-----------------------------------|
| 0   | ON         | 0x01  | CPU execution error generated     |
|     | OFF        | 0x00  | CPU execution error not generated |
| 1   | ON         | 0x02  | ROM error generated               |
|     | OFF        | 0x00  | ROM error not generated           |
| 2   | ON         | 0x04  | G/A error generated               |
|     | OFF        | 0x00  | G/A error not generated           |
| 3   | -          | 0x00  | Reserved (fixed to 0)             |
| 4   | -          | 0x00  | Reserved (fixed to 0)             |
| 5   | -          | 0x00  | Reserved (fixed to 0)             |
| 6   | -          | 0x40  | Fixed (fixed to 1)                |
| 7   | -          | 0x00  | Fixed (fixed to 0)                |

### Second Byte

| Bit | ON/<br>OFF | Value | Status                           |
|-----|------------|-------|----------------------------------|
| 0   | ON         | 0x01  | High voltage error generated     |
|     | OFF        | 0x00  | High voltage error not generated |
| 1   | ON         | 0x02  | Low voltage error generated      |
|     | OFF        | 0x00  | Low voltage error not generated  |
| 2   | ON         | 0x04  | Overcurrent error generated      |
|     | OFF        | 0x00  | Overcurrent error not generated  |
| 3   | -          | 0x00  | Reserved (fixed to 0)            |
| 4   | -          | 0x00  | Reserved (fixed to 0)            |
| 5   | -          | 0x00  | Reserved (fixed to 0)            |
| 6   | -          | 0x40  | Fixed (fixed to 1)               |
| 7   | -          | 0x00  | Fixed (fixed to 0)               |



## Third Byte

| Bit | ON/<br>OFF | Value | Status                         |
|-----|------------|-------|--------------------------------|
| 0   | ON         | 0x01  | Thermistor error generated     |
|     | OFF        | 0x00  | Thermistor error not generated |
| 1   | ON         | 0x02  | Head high voltage error        |
|     | OFF        | 0x00  | No head high voltage error     |
| 2   | ON         | 0x04  | Head low voltage error         |
|     | OFF        | 0x00  | No head low voltage error      |
| 3   | ON         | 0x08  | RTC error                      |
|     | OFF        | 0x00  | No RTC error                   |
| 4   | ON         | 0x10  | Carriage drive count error     |
|     | OFF        | 0x00  | No carriage drive count error  |
| 5   | ON         | 0x20  | Pump drive count error         |
|     | OFF        | 0x00  | No carriage drive count error  |
| 6   | -          | 0x40  | Fixed (fixed to 1)             |
| 7   | -          | 0x00  | Fixed (fixed to 0)             |

## Fourth Byte

| Bit | ON/<br>OFF | Value | Status                                     |
|-----|------------|-------|--------------------------------------------|
| 0   | ON         | 0x01  | Auto cutter error generated                |
|     | OFF        | 0x00  | Auto cutter error not generated            |
| 1   | -          | 0x00  | Reserved (fixed to 0)                      |
| 2   | -          | 0x00  | Reserved (fixed to 0)                      |
| 3   | -          | 0x00  | Reserved (fixed to 0)                      |
| 4   | ON         | 0x10  | Carriage home position detection error     |
|     | OFF        | 0x00  | No carriage home position detection error  |
| 5   | ON         | 0x20  | Unsynchronized carriage detection error    |
|     | OFF        | 0x00  | No unsynchronized carriage detection error |
| 6   | -          | 0x40  | Fixed (fixed to 1)                         |
| 7   | -          | 0x00  | Fixed (fixed to 0)                         |

## Fifth Byte

| Bit | ON/<br>OFF | Value | Status                                    |
|-----|------------|-------|-------------------------------------------|
| 0   | -          | 0x00  | Reserved (fixed to 0)                     |
| 1   | ON         | 0x02  | High head temperature error generated     |
|     | OFF        | 0x00  | High head temperature error not generated |
| 2   | ON         | 0x04  | Low head temperature error generated      |
|     | OFF        | 0x00  | Low head temperature error not generated  |
| 3   | ON         | 0x08  | Motor drive temperature error             |
|     | OFF        | 0x00  | No motor drive temperature error          |
| 4   | -          | 0x00  | Reserved (fixed to 0)                     |
| 5   | -          | 0x00  | Reserved (fixed to 0)                     |
| 6   | -          | 0x40  | Fixed (fixed to 1)                        |
| 7   | -          | 0x00  | Fixed (fixed to 0)                        |

## Maintenance Counter

| Counter Number<br>(readno) | Resetability | Counter<br>(readcounter)               | Unit  |
|----------------------------|--------------|----------------------------------------|-------|
| 30 (1EH)                   | Resetable    | Number of line feeds (for roll paper)  | Lines |
| 31 (1FH)                   | Resetable    | Average number of head shots (color 1) | Shots |
| 32 (20H)                   | Resetable    | Average number of head shots (color 2) | Shots |
| 33 (21H)                   | Resetable    | Number of carriage operations          | Times |
| 34 (22H)                   | Resetable    | Number of pump operations              | Times |
| 35 (23H)                   | Resetable    | Number of line feeds (for slip)        | Lines |
| 36 (24H)                   | Resetable    | Average number of head shots (color 3) | Shots |
| 37 (25H)                   | Resetable    | Average number of head shots (color 4) | Shots |
| 38 (26H)                   | Resetable    | Number of an Ink Cartridge replacing   | Times |
| 39 (27H)                   | Resetable    | Number of manual cleaning              | Times |
| 50 (32H)                   | Resetable    | Number of autocutter operations        | Times |
| 51 (33H)                   | Resetable    | Number of Release                      | Times |
| 70 (46H)                   | Resetable    | Printer operation time                 | Hours |
| 158 (9EH)                  | Cumulative   | Number of line feeds (for roll paper)  | Lines |
| 159 (9FH)                  | Cumulative   | Average number of head shots (color 1) | Shots |
| 160 (A0H)                  | Cumulative   | Average number of head shots (color 2) | Shots |
| 161 (A1H)                  | Cumulative   | Number of carriage operations          | Times |
| 162 (A2H)                  | Cumulative   | Number of pump operations              | Times |
| 163 (A3H)                  | Cumulative   | Number of line feeds (for slip)        | Lines |
| 164 (A4H)                  | Cumulative   | Average number of head shots (color 3) | Shots |
| 165 (A5H)                  | Cumulative   | Average number of head shots (color 4) | Shots |
| 166 (A6H)                  | Cumulative   | Number of an Ink Cartridge replacing   | Times |
| 167 (A7H)                  | Cumulative   | Number of manual cleaning              | Times |
| 178 (B2H)                  | Cumulative   | Number of autocutter operations        | Times |
| 179 (B3H)                  | Cumulative   | Number of Release                      | Times |
| 198 (C6H)                  | Cumulative   | Printer operation time                 | Hours |

## ASB Status

| Macro Definitions    | ON/<br>OFF | Value      | Status                                                 |
|----------------------|------------|------------|--------------------------------------------------------|
| ASB_NO_RESPONSE      | ON         | 0x00000001 | No printer response                                    |
|                      | OFF        | 0x00000000 | Printer response                                       |
| ASB_PRINT_SUCCESS    | ON         | 0x00000002 | Print complete                                         |
|                      | OFF        | 0x00000000 | -                                                      |
| ASB_DRAWER_KICK      | ON         | 0x00000004 | Status of the drawer kick number 3 connector pin = "H" |
|                      | OFF        | 0x00000000 | Status of the drawer kick number 3 connector pin = "L" |
| ASB_OFF_LINE         | ON         | 0x00000008 | Offline status                                         |
|                      | OFF        | 0x00000000 | Online status                                          |
| ASB_COVER_OPEN       | ON         | 0x00000020 | Cover is open                                          |
|                      | OFF        | 0x00000000 | Cover is closed                                        |
| ASB_PAPER_FEED       | ON         | 0x00000040 | Paper feed switch is feeding paper                     |
|                      | OFF        | 0x00000000 | Paper feed switch is not feeding paper                 |
| ASB_MECHANICAL_ERR   | ON         | 0x00000400 | Mechanical error generated                             |
|                      | OFF        | 0x00000000 | Mechanical error not generated                         |
| ASB_AUTOCUTTER_ERR   | ON         | 0x00000800 | Auto cutter error generated                            |
|                      | OFF        | 0x00000000 | Auto cutter error not generated                        |
| ASB_UNRECOVER_ERR    | ON         | 0x00002000 | Unrecoverable error generated                          |
|                      | OFF        | 0x00000000 | Unrecoverable error not generated                      |
| ASB_AUTORECOVER_ERR  | ON         | 0x00004000 | Auto recovery error generated                          |
|                      | OFF        | 0x00000000 | Auto recovery error not generated                      |
| ASB_RECEIPT_NEAR_END | ON         | 0x00020000 | No paper in the roll paper near end detector           |
|                      | OFF        | 0x00000000 | Paper in the roll paper near end detector              |
| ASB_RECEIPT_END      | ON         | 0x00080000 | No paper in the roll paper end detector                |
|                      | OFF        | 0x00000000 | Paper in the roll paper end detector                   |
| ASB_SLIP_TOF         | ON         | 0x00200000 | No paper in TOF detector                               |
|                      | OFF        | 0x00000000 | Paper in TOF detector                                  |
| ASB_SLIP_BOF         | ON         | 0x00400000 | No paper in BOF detector                               |
|                      | OFF        | 0x00000000 | Paper in BOF detector                                  |
| ASB_SLIP_SELECTED    | ON         | 0x01000000 | Slip unselected                                        |
|                      | OFF        | 0x00000000 | Slip selected: (active sheet = slip)                   |

| Macro Definitions      | ON/<br>OFF | Value      | Status                      |
|------------------------|------------|------------|-----------------------------|
| ASB_PRINT_SLIP         | ON         | 0x02000000 | Slip printing is impossible |
|                        | OFF        | 0x00000000 | Slip printing is possible   |
| ASB_SPOOLER_IS_STOPPED | ON         | 0x80000000 | Stop the spooler            |
|                        | OFF        | 0x00000000 | Operation the spooler       |

## Maintenance Counter

| Counter Number<br>(readno) | Resetability | Counter<br>(readcounter)                                 | Unit       |
|----------------------------|--------------|----------------------------------------------------------|------------|
| 10 (0AH)                   | Resetable    | Number of line feeds (for slip paper)                    | Lines      |
| 11 (0BH)                   | Resetable    | Number of printed characters<br>(for the face of a slip) | Characters |
| 20 (14H)                   | Resetable    | Number of line feeds (for roll paper)                    | Lines      |
| 21 (15H)                   | Resetable    | Number of times head is energized<br>(for roll paper)    | Times      |
| 50 (32H)                   | Resetable    | Number of autocutter operations                          | Times      |
| 60 (3CH)                   | Resetable    | Number of MICR reads                                     | Times      |
| 70 (46H)                   | Resetable    | Printer operation time                                   | Hours      |
| 138 (8AH)                  | Cumulative   | Number of line feeds (for slip paper)                    | Lines      |
| 139 (8BH)                  | Cumulative   | Number of printed characters<br>(for the face of a slip) | Characters |
| 148 (94H)                  | Cumulative   | Number of line feeds (for roll paper)                    | Lines      |
| 149 (95H)                  | Cumulative   | Number of times head is energized<br>(for roll paper)    | Times      |
| 178 (B2H)                  | Cumulative   | Number of autocutter operations                          | Times      |
| 179 (B3H)                  | Cumulative   | Number of Release                                        | Times      |
| 188 (BCH)                  | Cumulative   | Number of MICR reads                                     | Times      |
| 198 (C6H)                  | Cumulative   | Printer operation time                                   | Hours      |

## ASB Status

| Macro Definitions    | ON/<br>OFF | Value      | Status                                                 |
|----------------------|------------|------------|--------------------------------------------------------|
| ASB_NO_RESPONSE      | ON         | 0x00000001 | No printer response                                    |
|                      | OFF        | 0x00000000 | Printer response                                       |
| ASB_PRINT_SUCCESS    | ON         | 0x00000002 | Print complete                                         |
|                      | OFF        | 0x00000000 | -                                                      |
| ASB_DRAWER_KICK      | ON         | 0x00000004 | Status of the drawer kick number 3 connector pin = "H" |
|                      | OFF        | 0x00000000 | Status of the drawer kick number 3 connector pin = "L" |
| ASB_OFF_LINE         | ON         | 0x00000008 | Offline status                                         |
|                      | OFF        | 0x00000000 | Online status                                          |
| ASB_COVER_OPEN       | ON         | 0x00000020 | Cover is open                                          |
|                      | OFF        | 0x00000000 | Cover is closed                                        |
| ASB_PAPER_FEED       | ON         | 0x00000040 | Paper feed switch is feeding paper                     |
|                      | OFF        | 0x00000000 | Paper feed switch is not feeding paper                 |
| ASB_MECHANICAL_ERR   | ON         | 0x00000400 | Mechanical error generated                             |
|                      | OFF        | 0x00000000 | Mechanical error not generated                         |
| ASB_AUTOCUTTER_ERR   | ON         | 0x00000800 | Auto cutter error generated                            |
|                      | OFF        | 0x00000000 | Auto cutter error not generated                        |
| ASB_UNRECOVER_ERR    | ON         | 0x00002000 | Unrecoverable error generated                          |
|                      | OFF        | 0x00000000 | Unrecoverable error not generated                      |
| ASB_AUTORECOVER_ERR  | ON         | 0x00004000 | Auto recovery error generated                          |
|                      | OFF        | 0x00000000 | Auto recovery error not generated                      |
| ASB_RECEIPT_NEAR_END | ON         | 0x00020000 | No paper in the roll paper near end detector           |
|                      | OFF        | 0x00000000 | Paper in the roll paper near end detector              |
| ASB_RECEIPT_END      | ON         | 0x00080000 | No paper in the roll paper end detector                |
|                      | OFF        | 0x00000000 | Paper in the roll paper end detector                   |
| ASB_SLIP_TOF         | ON         | 0x00200000 | No paper in TOF detector                               |
|                      | OFF        | 0x00000000 | Paper in TOF detector                                  |
| ASB_SLIP_BOF         | ON         | 0x00400000 | No paper in BOF detector                               |
|                      | OFF        | 0x00000000 | Paper in BOF detector                                  |
| ASB_SLIP_SELECTED    | ON         | 0x01000000 | Slip unselected                                        |
|                      | OFF        | 0x00000000 | Slip selected: (active sheet = slip)                   |

| Macro Definitions      | ON/<br>OFF | Value      | Status                      |
|------------------------|------------|------------|-----------------------------|
| ASB_PRINT_SLIP         | ON         | 0x02000000 | Slip printing is impossible |
|                        | OFF        | 0x00000000 | Slip printing is possible   |
| ASB_SPOOLER_IS_STOPPED | ON         | 0x80000000 | Stop the spooler            |
|                        | OFF        | 0x00000000 | Operation the spooler       |

## Maintenance Counter

| Counter Number<br>(readno) | Resetability | Counter<br>(readcounter)                                 | Unit       |
|----------------------------|--------------|----------------------------------------------------------|------------|
| 10 (0AH)                   | Resetable    | Number of line feeds (for slip paper)                    | Lines      |
| 11 (0BH)                   | Resetable    | Number of printed characters<br>(for the face of a slip) | Characters |
| 20 (14H)                   | Resetable    | Number of line feeds (for roll paper)                    | Lines      |
| 21 (15H)                   | Resetable    | Number of times head is energized<br>(for roll paper)    | Times      |
| 50 (32H)                   | Resetable    | Number of autocutter operations                          | Times      |
| 60 (3CH)                   | Resetable    | Number of MICR reads                                     | Times      |
| 70 (46H)                   | Resetable    | Printer operation time                                   | Hours      |
| 138 (8AH)                  | Cumulative   | Number of line feeds (for slip paper)                    | Lines      |
| 139 (8BH)                  | Cumulative   | Number of printed characters<br>(for the face of a slip) | Characters |
| 148 (94H)                  | Cumulative   | Number of line feeds (for roll paper)                    | Lines      |
| 149 (95H)                  | Cumulative   | Number of times head is energized<br>(for roll paper)    | Times      |
| 178 (B2H)                  | Cumulative   | Number of autocutter operations                          | Times      |
| 179 (B3H)                  | Cumulative   | Number of Release                                        | Times      |
| 188 (BCH)                  | Cumulative   | Number of MICR reads                                     | Times      |
| 198 (C6H)                  | Cumulative   | Printer operation time                                   | Hours      |

## ASB Status

| Macro Definitions    | ON/<br>OFF | Value      | Status                                                 |
|----------------------|------------|------------|--------------------------------------------------------|
| ASB_NO_RESPONSE      | ON         | 0x00000001 | No printer response                                    |
|                      | OFF        | 0x00000000 | Printer response                                       |
| ASB_PRINT_SUCCESS    | ON         | 0x00000002 | Print complete                                         |
|                      | OFF        | 0x00000000 | -                                                      |
| ASB_DRAWER_KICK      | ON         | 0x00000004 | Status of the drawer kick number 3 connector pin = "H" |
|                      | OFF        | 0x00000000 | Status of the drawer kick number 3 connector pin = "L" |
| ASB_OFF_LINE         | ON         | 0x00000008 | Offline status                                         |
|                      | OFF        | 0x00000000 | Online status                                          |
| ASB_COVER_OPEN       | ON         | 0x00000020 | Cover is open                                          |
|                      | OFF        | 0x00000000 | Cover is closed                                        |
| ASB_PAPER_FEED       | ON         | 0x00000040 | Paper feed switch is feeding paper                     |
|                      | OFF        | 0x00000000 | Paper feed switch is not feeding paper                 |
| ASB_WAIT_ON_LINE     | ON         | 0x00000100 | Waiting for online recovery                            |
|                      | OFF        | 0x00000000 | Not waiting for online recovery                        |
| ASB_PANEL_SWITCH     | ON         | 0x00000200 | Panel switch is ON                                     |
|                      | OFF        | 0x00000000 | Panel switch is OFF                                    |
| ASB_MECHANICAL_ERR   | ON         | 0x00000400 | Mechanical error generated                             |
|                      | OFF        | 0x00000000 | Mechanical error not generated                         |
| ASB_AUTOCUTTER_ERR   | ON         | 0x00000800 | Auto cutter error generated                            |
|                      | OFF        | 0x00000000 | Auto cutter error not generated                        |
| ASB_UNRECOVER_ERR    | ON         | 0x00002000 | Unrecoverable error generated                          |
|                      | OFF        | 0x00000000 | Unrecoverable error not generated                      |
| ASB_AUTORECOVER_ERR  | ON         | 0x00004000 | Auto recovery error generated                          |
|                      | OFF        | 0x00000000 | Auto recovery error not generated                      |
| ASB_RECEIPT_NEAR_END | ON         | 0x00020000 | No paper in the roll paper near end detector           |
|                      | OFF        | 0x00000000 | Paper in the roll paper near end detector              |
| ASB_RECEIPT_END      | ON         | 0x00080000 | No paper in the roll paper end detector                |
|                      | OFF        | 0x00000000 | Paper in the roll paper end detector                   |
| ASB_SLIP_TOF         | ON         | 0x00200000 | No paper in TOF detector                               |
|                      | OFF        | 0x00000000 | Paper in TOF detector                                  |
| ASB_SLIP_BOF         | ON         | 0x00400000 | No paper in BOF detector                               |
|                      | OFF        | 0x00000000 | Paper in BOF detector                                  |



| Macro Definitions       | ON/<br>OFF | Value      | Status                                      |
|-------------------------|------------|------------|---------------------------------------------|
| ASB_SLIP_SELECTED       | ON         | 0x01000000 | Slip unselected                             |
|                         | OFF        | 0x00000000 | Slip selected: (active sheet = slip)        |
| ASB_PRINT_SLIP          | ON         | 0x02000000 | Slip printing is impossible                 |
|                         | OFF        | 0x00000000 | Slip printing is possible                   |
| ASB_VALIDATION_SELECTED | ON         | 0x04000000 | Validation not selected as the active sheet |
|                         | OFF        | 0x00000000 | Validation selected as the active sheet     |
| ASB_PRINT_VALIDATION    | ON         | 0x08000000 | Validation printing is impossible           |
|                         | OFF        | 0x00000000 | Validation printing is possible             |
| ASB_VALIDATION_NO_PAPER | ON         | 0x40000000 | Validation sensor: paper not present        |
|                         | OFF        | 0x00000000 | Validation sensor: paper present            |
| ASB_SPOOLER_IS_STOPPED  | ON         | 0x80000000 | Stop the spooler                            |
|                         | OFF        | 0x00000000 | Operation the spooler                       |

## Maintenance Counter

| Counter Number<br>(readno) | Resetability | Counter<br>(readcounter)                                               | Unit       |
|----------------------------|--------------|------------------------------------------------------------------------|------------|
| 10 (0AH)                   | Resetable    | Number of line feeds (for slip paper)                                  | Lines      |
| 11 (0BH)                   | Resetable    | Number of printed characters<br>(for the face of a slip)               | Characters |
| 20 (14H)                   | Resetable    | Number of line feeds (for roll paper)                                  | Lines      |
| 21 (15H)                   | Resetable    | Number of times head is energized<br>(for roll paper)                  | Times      |
| 40 (28H)                   | Resetable    | Number of head movements back and forth<br>(for the back of a slip)    | Times      |
| 41 (29H)                   | Resetable    | Number of printed characters<br>(for the back of a slip)               | Characters |
| 50 (32H)                   | Resetable    | Number of autocutter operations                                        | Times      |
| 60 (3CH)                   | Resetable    | Number of MICR reads                                                   | Times      |
| 61 (3DH)                   | Resetable    | Number of scans of an image<br>(for the slip image scanner)            | Times      |
| 62 (3EH)                   | Resetable    | Amount of paper fed for scanned images<br>(for the slip image scanner) | Steps      |
| 63 (3FH)                   | Resetable    | Number of scans of an image<br>(for the card image scanner)            | Times      |
| 64 (40H)                   | Resetable    | Amount of paper fed for scanned images<br>(for the card image scanner) | Steps      |
| 70 (46H)                   | Resetable    | Printer operation time                                                 | Hours      |
| 138 (8AH)                  | Cumulative   | Number of line feeds (for slip paper)                                  | Lines      |
| 139 (8BH)                  | Cumulative   | Number of printed characters<br>(for the face of a slip)               | Characters |
| 148 (94H)                  | Cumulative   | Number of line feeds (for roll paper)                                  | Lines      |
| 149 (95H)                  | Cumulative   | Number of times head is energized<br>(for roll paper)                  | Times      |
| 168 (A8H)                  | Cumulative   | Number of head movements back and forth<br>(for the back of a slip)    | Times      |
| 169 (A9H)                  | Cumulative   | Number of printed characters<br>(for the back of a slip)               | Characters |
| 178 (B2H)                  | Cumulative   | Number of autocutter operations                                        | Times      |
| 188 (BCH)                  | Cumulative   | Number of MICR reads                                                   | Times      |
| 189 (BDH)                  | Cumulative   | Number of scans of an image<br>(for the slip image scanner)            | Times      |
| 190 (BEH)                  | Cumulative   | Amount of paper fed for scanned images<br>(for the slip image scanner) | Steps      |
| 191 (BFH)                  | Cumulative   | Number of scans of an image<br>(for the card image scanner)            | Times      |

| Counter Number<br>(readno) | Resetability | Counter<br>(readcounter)                                               | Unit  |
|----------------------------|--------------|------------------------------------------------------------------------|-------|
| 192 (C0H)                  | Cumulative   | Amount of paper fed for scanned images<br>(for the card image scanner) | Steps |
| 198 (C6H)                  | Cumulative   | Printer operation time                                                 | Hours |

## ASB Status

| Macro Definitions    | ON/<br>OFF | Value      | Status                                                 |
|----------------------|------------|------------|--------------------------------------------------------|
| ASB_NO_RESPONSE      | ON         | 0x00000001 | No printer response                                    |
|                      | OFF        | 0x00000000 | Printer response                                       |
| ASB_PRINT_SUCCESS    | ON         | 0x00000002 | Print complete                                         |
|                      | OFF        | 0x00000000 | -                                                      |
| ASB_DRAWER_KICK      | ON         | 0x00000004 | Status of the drawer kick number 3 connector pin = "H" |
|                      | OFF        | 0x00000000 | Status of the drawer kick number 3 connector pin = "L" |
| ASB_OFF_LINE         | ON         | 0x00000008 | Offline status                                         |
|                      | OFF        | 0x00000000 | Online status                                          |
| ASB_COVER_OPEN       | ON         | 0x00000020 | Cover is open                                          |
|                      | OFF        | 0x00000000 | Cover is closed                                        |
| ASB_PAPER_FEED       | ON         | 0x00000040 | Paper feed switch is feeding paper                     |
|                      | OFF        | 0x00000000 | Paper feed switch is not feeding paper                 |
| ASB_WAIT_ON_LINE     | ON         | 0x00000100 | Waiting for online recovery                            |
|                      | OFF        | 0x00000000 | Not waiting for online recovery                        |
| ASB_PANEL_SWITCH     | ON         | 0x00000200 | Panel switch is ON                                     |
|                      | OFF        | 0x00000000 | Panel switch is OFF                                    |
| ASB_MECHANICAL_ERR   | ON         | 0x00000400 | Mechanical error generated                             |
|                      | OFF        | 0x00000000 | Mechanical error not generated                         |
| ASB_AUTOCUTTER_ERR   | ON         | 0x00000800 | Auto cutter error generated                            |
|                      | OFF        | 0x00000000 | Auto cutter error not generated                        |
| ASB_UNRECOVER_ERR    | ON         | 0x00002000 | Unrecoverable error generated                          |
|                      | OFF        | 0x00000000 | Unrecoverable error not generated                      |
| ASB_AUTORECOVER_ERR  | ON         | 0x00004000 | Auto recovery error generated                          |
|                      | OFF        | 0x00000000 | Auto recovery error not generated                      |
| ASB_RECEIPT_NEAR_END | ON         | 0x00020000 | No paper in the roll paper near end detector           |
|                      | OFF        | 0x00000000 | Paper in the roll paper near end detector              |
| ASB_RECEIPT_END      | ON         | 0x00080000 | No paper in the roll paper end detector                |
|                      | OFF        | 0x00000000 | Paper in the roll paper end detector                   |
| ASB_SLIP_TOF         | ON         | 0x00200000 | No paper in TOF detector                               |
|                      | OFF        | 0x00000000 | Paper in TOF detector                                  |
| ASB_SLIP_BOF         | ON         | 0x00400000 | No paper in BOF detector                               |
|                      | OFF        | 0x00000000 | Paper in BOF detector                                  |

| Macro Definitions       | ON/<br>OFF | Value      | Status                                      |
|-------------------------|------------|------------|---------------------------------------------|
| ASB_SLIP_SELECTED       | ON         | 0x01000000 | Slip unselected                             |
|                         | OFF        | 0x00000000 | Slip selected: (active sheet = slip)        |
| ASB_PRINT_SLIP          | ON         | 0x02000000 | Slip printing is impossible                 |
|                         | OFF        | 0x00000000 | Slip printing is possible                   |
| ASB_VALIDATION_SELECTED | ON         | 0x04000000 | Validation not selected as the active sheet |
|                         | OFF        | 0x00000000 | Validation selected as the active sheet     |
| ASB_PRINT_VALIDATION    | ON         | 0x08000000 | Validation printing is impossible           |
|                         | OFF        | 0x00000000 | Validation printing is possible             |
| ASB_VALIDATION_NO_PAPER | ON         | 0x40000000 | Validation sensor: paper not present        |
|                         | OFF        | 0x00000000 | Validation sensor: paper present            |
| ASB_SPOOLER_IS_STOPPED  | ON         | 0x80000000 | Stop the spooler                            |
|                         | OFF        | 0x00000000 | Operation the spooler                       |

## Maintenance Counter

| Counter Number<br>(readno) | Resetability | Counter<br>(readcounter)                                               | Unit       |
|----------------------------|--------------|------------------------------------------------------------------------|------------|
| 10 (0AH)                   | Resetable    | Number of line feeds (for slip paper)                                  | Lines      |
| 11 (0BH)                   | Resetable    | Number of printed characters<br>(for the face of a slip)               | Characters |
| 20 (14H)                   | Resetable    | Number of line feeds (for roll paper)                                  | Lines      |
| 21 (15H)                   | Resetable    | Number of times head is energized<br>(for roll paper)                  | Times      |
| 40 (28H)                   | Resetable    | Number of head movements back and forth<br>(for the back of a slip)    | Times      |
| 41 (29H)                   | Resetable    | Number of printed characters<br>(for the back of a slip)               | Characters |
| 50 (32H)                   | Resetable    | Number of autocutter operations                                        | Times      |
| 60 (3CH)                   | Resetable    | Number of MICR reads                                                   | Times      |
| 61 (3DH)                   | Resetable    | Number of scans of an image<br>(for the slip image scanner)            | Times      |
| 62 (3EH)                   | Resetable    | Amount of paper fed for scanned images<br>(for the slip image scanner) | Steps      |
| 63 (3FH)                   | Resetable    | Number of scans of an image<br>(for the card image scanner)            | Times      |
| 64 (40H)                   | Resetable    | Amount of paper fed for scanned images<br>(for the card image scanner) | Steps      |
| 70 (46H)                   | Resetable    | Printer operation time                                                 | Hours      |
| 138 (8AH)                  | Cumulative   | Number of line feeds (for slip paper)                                  | Lines      |
| 139 (8BH)                  | Cumulative   | Number of printed characters<br>(for the face of a slip)               | Characters |
| 148 (94H)                  | Cumulative   | Number of line feeds (for roll paper)                                  | Lines      |
| 149 (95H)                  | Cumulative   | Number of times head is energized<br>(for roll paper)                  | Times      |
| 168 (A8H)                  | Cumulative   | Number of head movements back and forth<br>(for the back of a slip)    | Times      |
| 169 (A9H)                  | Cumulative   | Number of printed characters<br>(for the back of a slip)               | Characters |
| 178 (B2H)                  | Cumulative   | Number of autocutter operations                                        | Times      |
| 188 (BCH)                  | Cumulative   | Number of MICR reads                                                   | Times      |
| 189 (BDH)                  | Cumulative   | Number of scans of an image<br>(for the slip image scanner)            | Times      |
| 190 (BEH)                  | Cumulative   | Amount of paper fed for scanned images<br>(for the slip image scanner) | Steps      |
| 191 (BFH)                  | Cumulative   | Number of scans of an image<br>(for the card image scanner)            | Times      |

| Counter Number<br>(readno) | Resetability | Counter<br>(readcounter)                                               | Unit  |
|----------------------------|--------------|------------------------------------------------------------------------|-------|
| 192 (C0H)                  | Cumulative   | Amount of paper fed for scanned images<br>(for the card image scanner) | Steps |
| 198 (C6H)                  | Cumulative   | Printer operation time                                                 | Hours |

## ASB Status

| Macro Definitions      | ON/<br>OFF | Value      | Status                                                 |
|------------------------|------------|------------|--------------------------------------------------------|
| ASB_NO_RESPONSE        | ON         | 0x00000001 | No printer response                                    |
|                        | OFF        | 0x00000000 | Printer response                                       |
| ASB_PRINT_SUCCESS      | ON         | 0x00000002 | Print complete                                         |
|                        | OFF        | 0x00000000 | -                                                      |
| ASB_DRAWER_KICK        | ON         | 0x00000004 | Status of the drawer kick number 3 connector pin = "H" |
|                        | OFF        | 0x00000000 | Status of the drawer kick number 3 connector pin = "L" |
| ASB_OFF_LINE           | ON         | 0x00000008 | Offline status                                         |
|                        | OFF        | 0x00000000 | Online status                                          |
| ASB_COVER_OPEN         | ON         | 0x00000020 | Cover is open                                          |
|                        | OFF        | 0x00000000 | Cover is closed                                        |
| ASB_PAPER_FEED         | ON         | 0x00000040 | Paper feed switch is feeding paper                     |
|                        | OFF        | 0x00000000 | Paper feed switch is not feeding paper                 |
| ASB_WAIT_ON_LINE       | ON         | 0x00000100 | Waiting for online recovery                            |
|                        | OFF        | 0x00000000 | Not waiting for online recovery                        |
| ASB_PANEL_SWITCH       | ON         | 0x00000200 | Panel switch is ON                                     |
|                        | OFF        | 0x00000000 | Panel switch is OFF                                    |
| ASB_MECHANICAL_ERR     | ON         | 0x00000400 | Mechanical error generated                             |
|                        | OFF        | 0x00000000 | Mechanical error not generated                         |
| ASB_AUTOCUTTER_ERR     | ON         | 0x00000800 | Auto cutter error generated                            |
|                        | OFF        | 0x00000000 | Auto cutter error not generated                        |
| ASB_UNRECOVER_ERR      | ON         | 0x00002000 | Unrecoverable error generated                          |
|                        | OFF        | 0x00000000 | Unrecoverable error not generated                      |
| ASB_AUTORECOVER_ERR    | ON         | 0x00004000 | Auto recovery error generated                          |
|                        | OFF        | 0x00000000 | Auto recovery error not generated                      |
| ASB_RECEIPT_NEAR_END   | ON         | 0x00020000 | No paper in the roll paper near end detector           |
|                        | OFF        | 0x00000000 | Paper in the roll paper near end detector              |
| ASB_RECEIPT_END        | ON         | 0x00080000 | No paper in the roll paper end detector                |
|                        | OFF        | 0x00000000 | Paper in the roll paper end detector                   |
| ASB_SPOOLER_IS_STOPPED | ON         | 0x80000000 | Stop the spooler                                       |
|                        | OFF        | 0x00000000 | Operation the spooler                                  |



## Ink Status

| Macro Definitions     | ON/<br>OFF | Value  | Ink status                               |
|-----------------------|------------|--------|------------------------------------------|
| INK_ASB_NEAR_END      | ON         | 0x0001 | Remaining ink level is low (color no. 1) |
|                       | OFF        | 0x0000 | -                                        |
| INK_ASB_END           | ON         | 0x0002 | Exchange the ink cartridge (color no. 1) |
|                       | OFF        | 0x0000 | -                                        |
| INK_ASB_NO_CARTRIDGE  | ON         | 0x0004 | No ink cartridge (color no. 1)           |
|                       | OFF        | 0x0000 | Ink cartridge present (color no. 1)      |
| INK_ASB_NO_CARTRIDGE2 | ON         | 0x0008 | No ink cartridge (color no. 2)           |
|                       | OFF        | 0x0000 | Ink cartridge present (color no. 2)      |
| INK_ASB_CLEANING      | ON         | 0x0020 | Cleaning                                 |
|                       | OFF        | 0x0000 | -                                        |
| INK_ASB_NEAR_END2     | ON         | 0x0100 | Remaining ink level is low (color no. 2) |
|                       | OFF        | 0x0000 | -                                        |
| INK_ASB_END2          | ON         | 0x0200 | Exchange the ink cartridge (color no. 2) |
|                       | OFF        | 0x0000 | -                                        |

## Offline Cause

### First Byte

| Bit | ON/<br>OFF | Value | Status                            |
|-----|------------|-------|-----------------------------------|
| 0   | ON         | 0x01  | CPU execution error generated     |
|     | OFF        | 0x00  | CPU execution error not generated |
| 1   | ON         | 0x02  | ROM error generated               |
|     | OFF        | 0x00  | ROM error not generated           |
| 2   | ON         | 0x04  | G/A error generated               |
|     | OFF        | 0x00  | G/A error not generated           |
| 3   | -          | 0x00  | Reserved (fixed to 0)             |
| 4   | -          | 0x00  | Reserved (fixed to 0)             |
| 5   | -          | 0x00  | Reserved (fixed to 0)             |
| 6   | -          | 0x40  | Fixed (fixed to 1)                |
| 7   | -          | 0x00  | Fixed (fixed to 0)                |

## Second Byte

| Bit | ON/<br>OFF | Value | Status                           |
|-----|------------|-------|----------------------------------|
| 0   | ON         | 0x01  | High voltage error generated     |
|     | OFF        | 0x00  | High voltage error not generated |
| 1   | ON         | 0x02  | Low voltage error generated      |
|     | OFF        | 0x00  | Low voltage error not generated  |
| 2   | ON         | 0x04  | Overcurrent error generated      |
|     | OFF        | 0x00  | Overcurrent error not generated  |
| 3   | -          | 0x00  | Reserved (fixed to 0)            |
| 4   | -          | 0x00  | Reserved (fixed to 0)            |
| 5   | -          | 0x00  | Reserved (fixed to 0)            |
| 6   | -          | 0x40  | Fixed (fixed to 1)               |
| 7   | -          | 0x00  | Fixed (fixed to 0)               |

## Third Byte

| Bit | ON/<br>OFF | Value | Status                                                        |
|-----|------------|-------|---------------------------------------------------------------|
| 0   | ON         | 0x01  | Internal circuit connection error (thermostat)                |
|     | OFF        | 0x00  | No internal circuit connection error (thermostat)             |
| 1   | ON         | 0x02  | Internal circuit connection error (head high voltage)         |
|     | OFF        | 0x00  | No internal circuit connection error (head high voltage)      |
| 2   | ON         | 0x04  | Internal circuit connection error (head low voltage)          |
|     | OFF        | 0x00  | No internal circuit connection error (head low voltage)       |
| 3   | ON         | 0x08  | Internal circuit connection error (EEPROM)                    |
|     | OFF        | 0x00  | No internal circuit connection error (EEPROM)                 |
| 4   | ON         | 0x10  | Carriage drive count error                                    |
|     | OFF        | 0x00  | No carriage drive count error                                 |
| 5   | ON         | 0x20  | Internal circuit connection error (number of pump driving)    |
|     | OFF        | 0x00  | No internal circuit connection error (number of pump driving) |
| 6   | -          | 0x40  | Fixed (fixed to 1)                                            |
| 7   | -          | 0x00  | Fixed (fixed to 0)                                            |

## Fourth Byte

| Bit | ON/<br>OFF | Value | Status                                                  |
|-----|------------|-------|---------------------------------------------------------|
| 0   | ON         | 0x01  | Auto cutter error generated                             |
|     | OFF        | 0x00  | Auto cutter error not generated                         |
| 1   | ON         | 0x02  | Roll paper cover open error<br>(when (Msw8-8) is on)    |
|     | OFF        | 0x00  | No roll paper cover open error<br>(when (Msw8-8) is on) |
| 2   | -          | 0x00  | Reserved (fixed to 0)                                   |
| 3   | -          | 0x00  | Reserved (fixed to 0)                                   |
| 4   | ON         | 0x10  | Carriage home position detection error                  |
|     | OFF        | 0x00  | No carriage home position detection error               |
| 5   | ON         | 0x20  | Unsynchronized carriage detection error                 |
|     | OFF        | 0x00  | No unsynchronized carriage detection error              |
| 6   | -          | 0x40  | Fixed (fixed to 1)                                      |
| 7   | -          | 0x00  | Fixed (fixed to 0)                                      |

## Fifth Byte

| Bit | OFF | Value | Status                                                   |
|-----|-----|-------|----------------------------------------------------------|
| 0   | ON  | 0x01  | Roll paper cover open error<br>(when (Msw8-8) is off)    |
|     | OFF | 0x00  | No roll paper cover open error<br>(when (Msw8-8) is off) |
| 1   | ON  | 0x02  | High head temperature error generated                    |
|     | OFF | 0x00  | High head temperature error not generated                |
| 2   | ON  | 0x04  | Low head temperature error generated                     |
|     | OFF | 0x00  | Low head temperature error not generated                 |
| 3   | -   | 0x00  | Reserved (fixed to 0)                                    |
| 4   | -   | 0x00  | Reserved (fixed to 0)                                    |
| 5   | -   | 0x00  | Reserved (fixed to 0)                                    |
| 6   | -   | 0x40  | Fixed (fixed to 1)                                       |
| 7   | -   | 0x00  | Fixed (fixed to 0)                                       |

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## Maintenance Counter

| Counter Number<br>(readno) | Resetability | Counter<br>(readcounter)               | Unit  |
|----------------------------|--------------|----------------------------------------|-------|
| 30 (1EH)                   | Resetable    | Number of line feeds (for roll paper)  | Lines |
| 31 (1FH)                   | Resetable    | Average number of head shots (color 1) | Shots |
| 32 (20H)                   | Resetable    | Average number of head shots (color 2) | Shots |
| 33 (21H)                   | Resetable    | Number of carriage operations          | Times |
| 34 (22H)                   | Resetable    | Number of pump operations              | Times |
| 50 (32H)                   | Resetable    | Number of autocutter operations        | Times |
| 70 (46H)                   | Resetable    | Printer operation time                 | Hours |
| 158 (9EH)                  | Cumulative   | Number of line feeds (for roll paper)  | Lines |
| 159 (9FH)                  | Cumulative   | Average number of head shots (color 1) | Shots |
| 160 (A0H)                  | Cumulative   | Average number of head shots (color 2) | Shots |
| 161 (A1H)                  | Cumulative   | Number of carriage operations          | Times |
| 162 (A2H)                  | Cumulative   | Number of pump operations              | Times |
| 178 (B2H)                  | Cumulative   | Number of autocutter operations        | Times |
| 198 (C6H)                  | Cumulative   | Printer operation time                 | Hours |

## TM-J7100

## ASB Status

| Macro Definitions    | ON/<br>OFF | Value      | Status                                                 |
|----------------------|------------|------------|--------------------------------------------------------|
| ASB_NO_RESPONSE      | ON         | 0x00000001 | No printer response                                    |
|                      | OFF        | 0x00000000 | Printer response                                       |
| ASB_PRINT_SUCCESS    | ON         | 0x00000002 | Print complete                                         |
|                      | OFF        | 0x00000000 | -                                                      |
| ASB_DRAWER_KICK      | ON         | 0x00000004 | Status of the drawer kick number 3 connector pin = "H" |
|                      | OFF        | 0x00000000 | Status of the drawer kick number 3 connector pin = "L" |
| ASB_OFF_LINE         | ON         | 0x00000008 | Offline status                                         |
|                      | OFF        | 0x00000000 | Online status                                          |
| ASB_COVER_OPEN       | ON         | 0x00000020 | Cover is open                                          |
|                      | OFF        | 0x00000000 | Cover is closed                                        |
| ASB_PAPER_FEED       | ON         | 0x00000040 | Paper feed switch is feeding paper                     |
|                      | OFF        | 0x00000000 | Paper feed switch is not feeding paper                 |
| ASB_PANEL_SWITCH     | ON         | 0x00000200 | Panel switch is ON                                     |
|                      | OFF        | 0x00000000 | Panel switch is OFF                                    |
| ASB_MECHANICAL_ERR   | ON         | 0x00000400 | Mechanical error generated                             |
|                      | OFF        | 0x00000000 | Mechanical error not generated                         |
| ASB_AUTOCUTTER_ERR   | ON         | 0x00000800 | Auto cutter error generated                            |
|                      | OFF        | 0x00000000 | Auto cutter error not generated                        |
| ASB_UNRECOVER_ERR    | ON         | 0x00002000 | Unrecoverable error generated                          |
|                      | OFF        | 0x00000000 | Unrecoverable error not generated                      |
| ASB_AUTORECOVER_ERR  | ON         | 0x00004000 | Auto recovery error generated                          |
|                      | OFF        | 0x00000000 | Auto recovery error not generated                      |
| ASB_RECEIPT_NEAR_END | ON         | 0x00020000 | No paper in the roll paper near end detector           |
|                      | OFF        | 0x00000000 | Paper in the roll paper near end detector              |
| ASB_RECEIPT_END      | ON         | 0x00080000 | No paper in the roll paper end detector                |
|                      | OFF        | 0x00000000 | Paper in the roll paper end detector                   |
| ASB_SLIP_TOF         | ON         | 0x00200000 | No paper in TOF detector                               |
|                      | OFF        | 0x00000000 | Paper in TOF detector                                  |
| ASB_SLIP_BOF         | ON         | 0x00400000 | No paper in BOF detector                               |
|                      | OFF        | 0x00000000 | Paper in BOF detector                                  |
| ASB_SLIP_SELECTED    | ON         | 0x01000000 | Slip unselected                                        |
|                      | OFF        | 0x00000000 | Slip selected: (active sheet = slip)                   |

| Macro Definitions      | ON/<br>OFF | Value      | Status                      |
|------------------------|------------|------------|-----------------------------|
| ASB_PRINT_SLIP         | ON         | 0x02000000 | Slip printing is impossible |
|                        | OFF        | 0x00000000 | Slip printing is possible   |
| ASB_SPOOLER_IS_STOPPED | ON         | 0x80000000 | Stop the spooler            |
|                        | OFF        | 0x00000000 | Operation the spooler       |

## Ink Status

| Macro Definitions     | ON/<br>OFF | Value  | Ink status                               |
|-----------------------|------------|--------|------------------------------------------|
| INK_ASB_NEAR_END      | ON         | 0x0001 | Remaining ink level is low (color no. 1) |
|                       | OFF        | 0x0000 | -                                        |
| INK_ASB_END           | ON         | 0x0002 | Exchange the ink cartridge (color no. 1) |
|                       | OFF        | 0x0000 | -                                        |
| INK_ASB_NO_CARTRIDGE  | ON         | 0x0004 | No ink cartridge (color no. 1)           |
|                       | OFF        | 0x0000 | Ink cartridge present (color no. 1)      |
| INK_ASB_NO_CARTRIDGE2 | ON         | 0x0008 | No ink cartridge (color no. 2)           |
|                       | OFF        | 0x0000 | Ink cartridge present (color no. 2)      |
| INK_ASB_CLEANING      | ON         | 0x0020 | Cleaning                                 |
|                       | OFF        | 0x0000 | -                                        |
| INK_ASB_NEAR_END2     | ON         | 0x0100 | Remaining ink level is low (color no. 2) |
|                       | OFF        | 0x0000 | -                                        |
| INK_ASB_END2          | ON         | 0x0200 | Exchange the ink cartridge (color no. 2) |
|                       | OFF        | 0x0000 | -                                        |

## Offline Cause

### First Byte

| Bit | ON/<br>OFF | Value | Status                            |
|-----|------------|-------|-----------------------------------|
| 0   | ON         | 0x01  | CPU execution error generated     |
|     | OFF        | 0x00  | CPU execution error not generated |
| 1   | ON         | 0x02  | ROM error generated               |
|     | OFF        | 0x00  | ROM error not generated           |
| 2   | ON         | 0x04  | G/A error generated               |
|     | OFF        | 0x00  | G/A error not generated           |
| 3   | -          | 0x00  | Reserved (fixed to 0)             |
| 4   | -          | 0x00  | Reserved (fixed to 0)             |
| 5   | -          | 0x00  | Reserved (fixed to 0)             |
| 6   | -          | 0x40  | Fixed (fixed to 1)                |
| 7   | -          | 0x00  | Fixed (fixed to 0)                |

### Second Byte

| Bit | ON/<br>OFF | Value | Status                           |
|-----|------------|-------|----------------------------------|
| 0   | ON         | 0x01  | High voltage error generated     |
|     | OFF        | 0x00  | High voltage error not generated |
| 1   | ON         | 0x02  | Low voltage error generated      |
|     | OFF        | 0x00  | Low voltage error not generated  |
| 2   | ON         | 0x04  | Overcurrent error generated      |
|     | OFF        | 0x00  | Overcurrent error not generated  |
| 3   | -          | 0x00  | Reserved (fixed to 0)            |
| 4   | -          | 0x00  | Reserved (fixed to 0)            |
| 5   | -          | 0x00  | Reserved (fixed to 0)            |
| 6   | -          | 0x40  | Fixed (fixed to 1)               |
| 7   | -          | 0x00  | Fixed (fixed to 0)               |

### Third Byte

| Bit | ON/<br>OFF | Value | Status                                                        |
|-----|------------|-------|---------------------------------------------------------------|
| 0   | ON         | 0x01  | Internal circuit connection error (thermostat)                |
|     | OFF        | 0x00  | No internal circuit connection error (thermostat)             |
| 1   | ON         | 0x02  | Internal circuit connection error (head high voltage)         |
|     | OFF        | 0x00  | No internal circuit connection error (head high voltage)      |
| 2   | ON         | 0x04  | Internal circuit connection error (head low voltage)          |
|     | OFF        | 0x00  | No internal circuit connection error (head low voltage)       |
| 3   | ON         | 0x08  | Internal circuit connection error (EEPROM)                    |
|     | OFF        | 0x00  | No internal circuit connection error (EEPROM)                 |
| 4   | ON         | 0x10  | Carriage drive count error                                    |
|     | OFF        | 0x00  | No carriage drive count error                                 |
| 5   | ON         | 0x20  | Internal circuit connection error (number of pump driving)    |
|     | OFF        | 0x00  | No internal circuit connection error (number of pump driving) |
| 6   | -          | 0x40  | Fixed (fixed to 1)                                            |
| 7   | -          | 0x00  | Fixed (fixed to 0)                                            |

### Fourth Byte

| Bit | ON/<br>OFF | Value | Status                                               |
|-----|------------|-------|------------------------------------------------------|
| 0   | ON         | 0x01  | Auto cutter error generated                          |
|     | OFF        | 0x00  | Auto cutter error not generated                      |
| 1   | ON         | 0x02  | Roll paper cover open error (when (Msw8-8) is on)    |
|     | OFF        | 0x00  | No roll paper cover open error (when (Msw8-8) is on) |
| 2   | -          | 0x00  | Reserved (fixed to 0)                                |
| 3   | -          | 0x00  | Reserved (fixed to 0)                                |
| 4   | ON         | 0x10  | Carriage home position detection error               |
|     | OFF        | 0x00  | No carriage home position detection error            |
| 5   | ON         | 0x20  | Unsynchronized carriage detection error              |
|     | OFF        | 0x00  | No unsynchronized carriage detection error           |
| 6   | -          | 0x40  | Fixed (fixed to 1)                                   |
| 7   | -          | 0x00  | Fixed (fixed to 0)                                   |



## Fifth Byte

| Bit | OFF | Value | Status                                                   |
|-----|-----|-------|----------------------------------------------------------|
| 0   | ON  | 0x01  | Roll paper cover open error<br>(when (Msw8-8) is off)    |
|     | OFF | 0x00  | No roll paper cover open error<br>(when (Msw8-8) is off) |
| 1   | ON  | 0x02  | High head temperature error generated                    |
|     | OFF | 0x00  | High head temperature error not generated                |
| 2   | ON  | 0x04  | Low head temperature error generated                     |
|     | OFF | 0x00  | Low head temperature error not generated                 |
| 3   | -   | 0x00  | Reserved (fixed to 0)                                    |
| 4   | -   | 0x00  | Reserved (fixed to 0)                                    |
| 5   | -   | 0x00  | Reserved (fixed to 0)                                    |
| 6   | -   | 0x40  | Fixed (fixed to 1)                                       |
| 7   | -   | 0x00  | Fixed (fixed to 0)                                       |

## Maintenance Counter

| Counter Number<br>(readno) | Resetability | Counter<br>(readcounter)               | Unit  |
|----------------------------|--------------|----------------------------------------|-------|
| 30 (1EH)                   | Resetable    | Number of line feeds (for roll paper)  | Lines |
| 31 (1FH)                   | Resetable    | Average number of head shots (color 1) | Shots |
| 32 (20H)                   | Resetable    | Average number of head shots (color 2) | Shots |
| 33 (21H)                   | Resetable    | Number of carriage operations          | Times |
| 34 (22H)                   | Resetable    | Number of pump operations              | Times |
| 35 (23H)                   | Resetable    | Number of line feeds (for slip)        | Lines |
| 50 (32H)                   | Resetable    | Number of autocutter operations        | Times |
| 60 (3CH)                   | Resetable    | Number of MICR reads                   | Times |
| 61 (3DH)                   | Resetable    | Number of endorsement printing         | Times |
| 70 (46H)                   | Resetable    | Printer operation time                 | Hours |
| 158 (9EH)                  | Cumulative   | Number of line feeds (for roll paper)  | Lines |
| 159 (9FH)                  | Cumulative   | Average number of head shots (color 1) | Shots |
| 160 (A0H)                  | Cumulative   | Average number of head shots (color 2) | Shots |
| 161 (A1H)                  | Cumulative   | Number of carriage operations          | Times |
| 162 (A2H)                  | Cumulative   | Number of pump operations              | Times |
| 163 (A3H)                  | Cumulative   | Number of line feeds (for slip)        | Lines |
| 178 (B2H)                  | Cumulative   | Number of autocutter operations        | Times |
| 188 (BCH)                  | Cumulative   | Number of MICR reads                   | Times |
| 189 (BDH)                  | Cumulative   | Number of endorsement printing         | Times |
| 198 (C6H)                  | Cumulative   | Printer operation time                 | Hours |

## ASB Status

| Macro Definitions    | ON/<br>OFF | Value      | Status                                                 |
|----------------------|------------|------------|--------------------------------------------------------|
| ASB_NO_RESPONSE      | ON         | 0x00000001 | No printer response                                    |
|                      | OFF        | 0x00000000 | Printer response                                       |
| ASB_PRINT_SUCCESS    | ON         | 0x00000002 | Print complete                                         |
|                      | OFF        | 0x00000000 | -                                                      |
| ASB_DRAWER_KICK      | ON         | 0x00000004 | Status of the drawer kick number 3 connector pin = "H" |
|                      | OFF        | 0x00000000 | Status of the drawer kick number 3 connector pin = "L" |
| ASB_OFF_LINE         | ON         | 0x00000008 | Offline status                                         |
|                      | OFF        | 0x00000000 | Online status                                          |
| ASB_COVER_OPEN       | ON         | 0x00000020 | Cover is open                                          |
|                      | OFF        | 0x00000000 | Cover is closed                                        |
| ASB_PAPER_FEED       | ON         | 0x00000040 | Paper feed switch is feeding paper                     |
|                      | OFF        | 0x00000000 | Paper feed switch is not feeding paper                 |
| ASB_PANEL_SWITCH     | ON         | 0x00000200 | Panel switch is ON                                     |
|                      | OFF        | 0x00000000 | Panel switch is OFF                                    |
| ASB_MECHANICAL_ERR   | ON         | 0x00000400 | Mechanical error generated                             |
|                      | OFF        | 0x00000000 | Mechanical error not generated                         |
| ASB_AUTOCUTTER_ERR   | ON         | 0x00000800 | Auto cutter error generated                            |
|                      | OFF        | 0x00000000 | Auto cutter error not generated                        |
| ASB_UNRECOVER_ERR    | ON         | 0x00002000 | Unrecoverable error generated                          |
|                      | OFF        | 0x00000000 | Unrecoverable error not generated                      |
| ASB_AUTORECOVER_ERR  | ON         | 0x00004000 | Auto recovery error generated                          |
|                      | OFF        | 0x00000000 | Auto recovery error not generated                      |
| ASB_RECEIPT_NEAR_END | ON         | 0x00020000 | No paper in the roll paper near end detector           |
|                      | OFF        | 0x00000000 | Paper in the roll paper near end detector              |
| ASB_RECEIPT_END      | ON         | 0x00080000 | No paper in the roll paper end detector                |
|                      | OFF        | 0x00000000 | Paper in the roll paper end detector                   |
| ASB_SLIP_TOF         | ON         | 0x00200000 | No paper in TOF detector                               |
|                      | OFF        | 0x00000000 | Paper in TOF detector                                  |
| ASB_SLIP_BOF         | ON         | 0x00400000 | No paper in BOF detector                               |
|                      | OFF        | 0x00000000 | Paper in BOF detector                                  |
| ASB_SLIP_SELECTED    | ON         | 0x01000000 | Slip unselected                                        |
|                      | OFF        | 0x00000000 | Slip selected: (active sheet = slip)                   |

| Macro Definitions      | ON/<br>OFF | Value      | Status                      |
|------------------------|------------|------------|-----------------------------|
| ASB_PRINT_SLIP         | ON         | 0x02000000 | Slip printing is impossible |
|                        | OFF        | 0x00000000 | Slip printing is possible   |
| ASB_SPOOLER_IS_STOPPED | ON         | 0x80000000 | Stop the spooler            |
|                        | OFF        | 0x00000000 | Operation the spooler       |

## Ink Status

| Macro Definitions     | ON/<br>OFF | Value  | Ink status                               |
|-----------------------|------------|--------|------------------------------------------|
| INK_ASB_NEAR_END      | ON         | 0x0001 | Remaining ink level is low (color no. 1) |
|                       | OFF        | 0x0000 | -                                        |
| INK_ASB_END           | ON         | 0x0002 | Exchange the ink cartridge (color no. 1) |
|                       | OFF        | 0x0000 | -                                        |
| INK_ASB_NO_CARTRIDGE  | ON         | 0x0004 | No ink cartridge (color no. 1)           |
|                       | OFF        | 0x0000 | Ink cartridge present (color no. 1)      |
| INK_ASB_NO_CARTRIDGE2 | ON         | 0x0008 | No ink cartridge (color no. 2)           |
|                       | OFF        | 0x0000 | Ink cartridge present (color no. 2)      |
| INK_ASB_CLEANING      | ON         | 0x0020 | Cleaning                                 |
|                       | OFF        | 0x0000 | -                                        |
| INK_ASB_NEAR_END2     | ON         | 0x0100 | Remaining ink level is low (color no. 2) |
|                       | OFF        | 0x0000 | -                                        |
| INK_ASB_END2          | ON         | 0x0200 | Exchange the ink cartridge (color no. 2) |
|                       | OFF        | 0x0000 | -                                        |

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## Offline Cause

### First Byte

| Bit | ON/<br>OFF | Value | Status                            |
|-----|------------|-------|-----------------------------------|
| 0   | ON         | 0x01  | CPU execution error generated     |
|     | OFF        | 0x00  | CPU execution error not generated |
| 1   | ON         | 0x02  | ROM error generated               |
|     | OFF        | 0x00  | ROM error not generated           |
| 2   | ON         | 0x04  | G/A error generated               |
|     | OFF        | 0x00  | G/A error not generated           |
| 3   | -          | 0x00  | Reserved                          |
| 4   | -          | 0x00  | Reserved                          |
| 5   | -          | 0x00  | Reserved                          |
| 6   | -          | 0x40  | Fixed (fixed to 1)                |
| 7   | -          | 0x00  | Fixed (fixed to 0)                |

### Second Byte

| Bit | ON/<br>OFF | Value | Status                           |
|-----|------------|-------|----------------------------------|
| 0   | ON         | 0x01  | High voltage error generated     |
|     | OFF        | 0x00  | High voltage error not generated |
| 1   | ON         | 0x02  | Low voltage error generated      |
|     | OFF        | 0x00  | Low voltage error not generated  |
| 2   | -          | 0x00  | Reserved                         |
| 3   | -          | 0x00  | Reserved                         |
| 4   | -          | 0x00  | Reserved                         |
| 5   | -          | 0x00  | Reserved                         |
| 6   | -          | 0x40  | Fixed (fixed to 1)               |
| 7   | -          | 0x00  | Fixed (fixed to 0)               |

## Third Byte

| Bit | ON/<br>OFF | Value | Status                                                        |
|-----|------------|-------|---------------------------------------------------------------|
| 0   | ON         | 0x01  | Internal circuit connection error (thermostat)                |
|     | OFF        | 0x00  | No internal circuit connection error (thermostat)             |
| 1   | ON         | 0x02  | Internal circuit connection error (head high voltage)         |
|     | OFF        | 0x00  | No internal circuit connection error (head high voltage)      |
| 2   | ON         | 0x04  | Internal circuit connection error (head low voltage)          |
|     | OFF        | 0x00  | No internal circuit connection error (head low voltage)       |
| 3   | ON         | 0x08  | Internal circuit connection error (EEPROM)                    |
|     | OFF        | 0x00  | No internal circuit connection error (EEPROM)                 |
| 4   | -          | 0x00  | Reserved                                                      |
| 5   | ON         | 0x20  | Internal circuit connection error (number of pump driving)    |
|     | OFF        | 0x00  | No internal circuit connection error (number of pump driving) |
| 6   | -          | 0x40  | Fixed (fixed to 1)                                            |
| 7   | -          | 0x00  | Fixed (fixed to 0)                                            |

## Fourth Byte

| Bit | ON/<br>OFF | Value | Status                                               |
|-----|------------|-------|------------------------------------------------------|
| 0   | ON         | 0x01  | Auto cutter error generated                          |
|     | OFF        | 0x00  | Auto cutter error not generated                      |
| 1   | ON         | 0x02  | Roll paper cover open error (when (Msw8-8) is on)    |
|     | OFF        | 0x00  | No roll paper cover open error (when (Msw8-8) is on) |
| 2   | ON         | 0x04  | Cut sheet ejection error                             |
|     | OFF        | 0x00  | No cut sheet ejection error                          |
| 3   | -          | 0x00  | Reserved (fixed to 0)                                |
| 4   | ON         | 0x10  | Carriage home position detection error               |
|     | OFF        | 0x00  | No carriage home position detection error            |
| 5   | ON         | 0x20  | Unsynchronized carriage detection error              |
|     | OFF        | 0x00  | No unsynchronized carriage detection error           |
| 6   | -          | 0x40  | Fixed (fixed to 1)                                   |
| 7   | -          | 0x00  | Fixed (fixed to 0)                                   |

## Fifth Byte

| Bit | OFF | Value | Status                                                   |
|-----|-----|-------|----------------------------------------------------------|
| 0   | ON  | 0x01  | Roll paper cover open error<br>(when (Msw8-8) is off)    |
|     | OFF | 0x00  | No roll paper cover open error<br>(when (Msw8-8) is off) |
| 1   | ON  | 0x02  | High head temperature error generated                    |
|     | OFF | 0x00  | High head temperature error not generated                |
| 2   | ON  | 0x04  | Low head temperature error generated                     |
|     | OFF | 0x00  | Low head temperature error not generated                 |
| 3   | -   | 0x00  | Reserved                                                 |
| 4   | -   | 0x00  | Reserved                                                 |
| 5   | -   | 0x00  | Reserved                                                 |
| 6   | -   | 0x40  | Fixed (fixed to 1)                                       |
| 7   | -   | 0x00  | Fixed (fixed to 0)                                       |

## Maintenance Counter

| Counter Number<br>(readno) | Resetability | Counter<br>(readcounter)               | Unit  |
|----------------------------|--------------|----------------------------------------|-------|
| 30 (1EH)                   | Resetable    | Number of line feeds (for roll paper)  | Lines |
| 31 (1FH)                   | Resetable    | Average number of head shots (color 1) | Shots |
| 32 (20H)                   | Resetable    | Average number of head shots (color 2) | Shots |
| 33 (21H)                   | Resetable    | Number of carriage operations          | Times |
| 34 (22H)                   | Resetable    | Number of pump operations              | Times |
| 35 (23H)                   | Resetable    | Number of line feeds (for slip)        | Lines |
| 50 (32H)                   | Resetable    | Number of autocutter operations        | Times |
| 70 (46H)                   | Resetable    | Printer operation time                 | Hours |
| 158 (9EH)                  | Cumulative   | Number of line feeds (for roll paper)  | Lines |
| 159 (9FH)                  | Cumulative   | Average number of head shots (color 1) | Shots |
| 160 (A0H)                  | Cumulative   | Average number of head shots (color 2) | Shots |
| 161 (A1H)                  | Cumulative   | Number of carriage operations          | Times |
| 162 (A2H)                  | Cumulative   | Number of pump operations              | Times |
| 163 (A3H)                  | Cumulative   | Number of line feeds (for slip)        | Lines |
| 178 (B2H)                  | Cumulative   | Number of autocutter operations        | Times |
| 198 (C6H)                  | Cumulative   | Printer operation time                 | Hours |

## TM-L60II

## ASB Status

| Macro Definitions      | ON/<br>OFF | Value      | Status                                                 |
|------------------------|------------|------------|--------------------------------------------------------|
| ASB_NO_RESPONSE        | ON         | 0x00000001 | No printer response                                    |
|                        | OFF        | 0x00000000 | Printer response                                       |
| ASB_PRINT_SUCCESS      | ON         | 0x00000002 | Print complete                                         |
|                        | OFF        | 0x00000000 | -                                                      |
| ASB_DRAWER_KICK        | ON         | 0x00000004 | Status of the drawer kick number 3 connector pin = "H" |
|                        | OFF        | 0x00000000 | Status of the drawer kick number 3 connector pin = "L" |
| ASB_OFF_LINE           | ON         | 0x00000008 | Offline status                                         |
|                        | OFF        | 0x00000000 | Online status                                          |
| ASB_COVER_OPEN         | ON         | 0x00000020 | Cover is open                                          |
|                        | OFF        | 0x00000000 | Cover is closed                                        |
| ASB_PAPER_FEED         | ON         | 0x00000040 | Paper feed switch is feeding paper                     |
|                        | OFF        | 0x00000000 | Paper feed switch is not feeding paper                 |
| ASB_LABEL_ERR          | ON         | 0x00000400 | A label detection error has occurred                   |
|                        | OFF        | 0x00000000 | A label detection error has not occurred               |
| ASB_UNRECOVER_ERR      | ON         | 0x00002000 | Unrecoverable error generated                          |
|                        | OFF        | 0x00000000 | Unrecoverable error not generated                      |
| ASB_AUTORECOVER_ERR    | ON         | 0x00004000 | Auto recovery error generated                          |
|                        | OFF        | 0x00000000 | Auto recovery error not generated                      |
| ASB_RECEIPT_NEAR_END   | ON         | 0x00020000 | No paper in the roll paper near end detector           |
|                        | OFF        | 0x00000000 | Paper in the roll paper near end detector              |
| ASB_RECEIPT_END        | ON         | 0x00080000 | No paper in the roll paper end detector                |
|                        | OFF        | 0x00000000 | Paper in the roll paper end detector                   |
| ASB_SPOOLER_IS_STOPPED | ON         | 0x80000000 | Stop the spooler                                       |
|                        | OFF        | 0x00000000 | Operation the spooler                                  |

## ASB Status

| Macro Definitions    | ON/<br>OFF | Value      | Status                                                 |
|----------------------|------------|------------|--------------------------------------------------------|
| ASB_NO_RESPONSE      | ON         | 0x00000001 | No printer response                                    |
|                      | OFF        | 0x00000000 | Printer response                                       |
| ASB_PRINT_SUCCESS    | ON         | 0x00000002 | Print complete                                         |
|                      | OFF        | 0x00000000 | -                                                      |
| ASB_DRAWER_KICK      | ON         | 0x00000004 | Status of the drawer kick number 3 connector pin = "H" |
|                      | OFF        | 0x00000000 | Status of the drawer kick number 3 connector pin = "L" |
| ASB_OFF_LINE         | ON         | 0x00000008 | Offline status                                         |
|                      | OFF        | 0x00000000 | Online status                                          |
| ASB_COVER_OPEN       | ON         | 0x00000020 | Cover is open                                          |
|                      | OFF        | 0x00000000 | Cover is closed                                        |
| ASB_PAPER_FEED       | ON         | 0x00000040 | Paper feed switch is feeding paper                     |
|                      | OFF        | 0x00000000 | Paper feed switch is not feeding paper                 |
| ASB_WAIT_ON_LINE     | ON         | 0x00000100 | Waiting for online recovery                            |
|                      | OFF        | 0x00000000 | Not waiting for online recovery                        |
| ASB_PANEL_SWITCH     | ON         | 0x00000200 | Panel switch is ON                                     |
|                      | OFF        | 0x00000000 | Panel switch is OFF                                    |
| ASB_MECHANICAL_ERR   | ON         | 0x00000400 | Mechanical error generated                             |
|                      | OFF        | 0x00000000 | Mechanical error not generated                         |
| ASB_AUTOCUTTER_ERR   | ON         | 0x00000800 | Auto cutter error generated                            |
|                      | OFF        | 0x00000000 | Auto cutter error not generated                        |
| ASB_UNRECOVER_ERR    | ON         | 0x00002000 | Unrecoverable error generated                          |
|                      | OFF        | 0x00000000 | Unrecoverable error not generated                      |
| ASB_AUTORECOVER_ERR  | ON         | 0x00004000 | Auto recovery error generated                          |
|                      | OFF        | 0x00000000 | Auto recovery error not generated                      |
| ASB_RECEIPT_NEAR_END | ON         | 0x00020000 | No paper in the roll paper near end detector           |
|                      | OFF        | 0x00000000 | Paper in the roll paper near end detector              |



| Macro Definitions      | ON/<br>OFF | Value      | Status                                  |
|------------------------|------------|------------|-----------------------------------------|
| ASB_RECEIPT_END        | ON         | 0x00080000 | No paper in the roll paper end detector |
|                        | OFF        | 0x00000000 | Paper in the roll paper end detector    |
| ASB_SPOOLER_IS_STOPPED | ON         | 0x80000000 | Stop the spooler                        |
|                        | OFF        | 0x00000000 | Operation the spooler                   |

## Offline Cause

### First Byte

| Bit | ON/<br>OFF | Value | Status                            |
|-----|------------|-------|-----------------------------------|
| 0   | ON         | 0x01  | CPU execution error generated     |
|     | OFF        | 0x00  | CPU execution error not generated |
| 1   | ON         | 0x02  | ROM error generated               |
|     | OFF        | 0x00  | ROM error not generated           |
| 2   | ON         | 0x04  | G/A error generated               |
|     | OFF        | 0x00  | G/A error not generated           |
| 3   | -          | 0x00  | Reserved (fixed to 0)             |
| 4   | -          | 0x00  | Reserved (fixed to 0)             |
| 5   | -          | 0x00  | Reserved (fixed to 0)             |
| 6   | -          | 0x40  | Fixed (fixed to 1)                |
| 7   | -          | 0x00  | Fixed (fixed to 0)                |

### Second Byte

| Bit | ON/<br>OFF | Value | Status                           |
|-----|------------|-------|----------------------------------|
| 0   | ON         | 0x01  | High voltage error generated     |
|     | OFF        | 0x00  | High voltage error not generated |
| 1   | ON         | 0x02  | Low voltage error generated      |
|     | OFF        | 0x00  | Low voltage error not generated  |
| 2   | ON         | 0x04  | Overcurrent error generated      |
|     | OFF        | 0x00  | Overcurrent error not generated  |
| 3   | -          | 0x00  | Reserved (fixed to 0)            |
| 4   | -          | 0x00  | Reserved (fixed to 0)            |
| 5   | -          | 0x00  | Reserved (fixed to 0)            |
| 6   | -          | 0x40  | Fixed (fixed to 1)               |
| 7   | -          | 0x00  | Fixed (fixed to 0)               |

### Third Byte

| Bit | ON/<br>OFF | Value | Status                         |
|-----|------------|-------|--------------------------------|
| 0   | ON         | 0x01  | Thermistor error generated     |
|     | OFF        | 0x00  | Thermistor error not generated |
| 1   | -          | 0x00  | Reserved                       |
| 2   | -          | 0x00  | Reserved                       |
| 3   | -          | 0x00  | Reserved                       |
| 4   | -          | 0x00  | Reserved                       |
| 5   | -          | 0x00  | Reserved                       |
| 6   | -          | 0x40  | Fixed (fixed to 1)             |
| 7   | -          | 0x00  | Fixed (fixed to 0)             |

### Fourth Byte

| Bit | ON/<br>OFF | Value | Status                                                                           |
|-----|------------|-------|----------------------------------------------------------------------------------|
| 0   | ON         | 0x01  | Auto cutter error generated                                                      |
|     | OFF        | 0x00  | Auto cutter error not generated                                                  |
| 1   | ON         | 0x02  | Roll paper cover open error generated<br>(when specifying recoverable error)     |
|     | OFF        | 0x00  | Roll paper cover open error not generated<br>(when specifying recoverable error) |
| 2   | ON         | 0x04  | Paper layout error generated                                                     |
|     | OFF        | 0x00  | Paper layout error not generated                                                 |
| 3   | -          | 0x00  | Reserved (fixed to 0)                                                            |
| 4   | -          | 0x00  | Reserved (fixed to 0)                                                            |
| 5   | -          | 0x00  | Reserved (fixed to 0)                                                            |
| 6   | -          | 0x40  | Fixed (fixed to 1)                                                               |
| 7   | -          | 0x00  | Fixed (fixed to 0)                                                               |

## Fifth Byte

| Bit | ON/<br>OFF | Value | Status                                                                             |
|-----|------------|-------|------------------------------------------------------------------------------------|
| 0   | ON         | 0x01  | Roll paper cover open error generated<br>(when specifying auto recovery error)     |
|     | OFF        | 0x00  | Roll paper cover open error not generated<br>(when specifying auto recovery error) |
| 1   | ON         | 0x02  | High head temperature error generated                                              |
|     | OFF        | 0x00  | High head temperature error not generated                                          |
| 2   | -          | 0x00  | Reserved (fixed to 0)                                                              |
| 3   | -          | 0x00  | Reserved (fixed to 0)                                                              |
| 4   | -          | 0x00  | Reserved (fixed to 0)                                                              |
| 5   | -          | 0x00  | Reserved (fixed to 0)                                                              |
| 6   | -          | 0x40  | Fixed (fixed to 1)                                                                 |
| 7   | -          | 0x00  | Fixed (fixed to 0)                                                                 |

## Maintenance Counter

| Counter Number<br>(readno) | Resetability | Counter<br>(readcounter)                              | Unit  |
|----------------------------|--------------|-------------------------------------------------------|-------|
| 20 (14H)                   | Resetable    | Number of line feeds (for roll paper)                 | Lines |
| 21 (15H)                   | Resetable    | Number of times head is energized<br>(for roll paper) | Times |
| 50 (32H)                   | Resetable    | Number of autocutter operations                       | Times |
| 70 (46H)                   | Resetable    | Printer operation time                                | Hours |
| 148 (94H)                  | Cumulative   | Number of line feeds (for roll paper)                 | Lines |
| 149 (95H)                  | Cumulative   | Number of times head is energized<br>(for roll paper) | Times |
| 178 (B2H)                  | Cumulative   | Number of autocutter operations                       | Times |
| 198 (C6H)                  | Cumulative   | Printer operation time                                | Hours |

## ASB Status

| Macro Definitions     | ON/<br>OFF | Value      | Status                                                 |
|-----------------------|------------|------------|--------------------------------------------------------|
| ASB_NO_RESPONSE       | ON         | 0x00000001 | No printer response                                    |
|                       | OFF        | 0x00000000 | Printer response                                       |
| ASB_PRINT_SUCCESS     | ON         | 0x00000002 | Print complete                                         |
|                       | OFF        | 0x00000000 | -                                                      |
| ASB_DRAWER_KICK       | ON         | 0x00000004 | Status of the drawer kick number 3 connector pin = "H" |
|                       | OFF        | 0x00000000 | Status of the drawer kick number 3 connector pin = "L" |
| ASB_OFF_LINE          | ON         | 0x00000008 | Offline status                                         |
|                       | OFF        | 0x00000000 | Online status                                          |
| ASB_COVER_OPEN        | ON         | 0x00000020 | Cover is open                                          |
|                       | OFF        | 0x00000000 | Cover is closed                                        |
| ASB_PAPER_FEED        | ON         | 0x00000040 | Paper feed switch is feeding paper                     |
|                       | OFF        | 0x00000000 | Paper feed switch is not feeding paper                 |
| ASB_WAIT_ON_LINE      | ON         | 0x00000100 | Waiting for online recovery                            |
|                       | OFF        | 0x00000000 | Not waiting for online recovery                        |
| ASB_PANEL_SWITCH      | ON         | 0x00000200 | Panel switch is ON                                     |
|                       | OFF        | 0x00000000 | Panel switch is OFF                                    |
| ASB_RECOVER_ERR       | ON         | 0x00000400 | Recoverable error has occurred                         |
|                       | OFF        | 0x00000000 | Recoverable error has not occurred                     |
| ASB_UNRECOVER_ERR     | ON         | 0x00002000 | Unrecoverable error generated                          |
|                       | OFF        | 0x00000000 | Unrecoverable error not generated                      |
| ASB_AUTORECOVER_ERR   | ON         | 0x00004000 | Auto recovery error generated                          |
|                       | OFF        | 0x00000000 | Auto recovery error not generated                      |
| ASB_RECEIPT_NEAR_END  | ON         | 0x00020000 | No paper in the roll paper near end detector           |
|                       | OFF        | 0x00000000 | Paper in the roll paper near end detector              |
| ASB_RECEIPT_END       | ON         | 0x00080000 | No paper in the roll paper end detector                |
|                       | OFF        | 0x00000000 | Paper in the roll paper end detector                   |
| ASB_WAIT_REMOVE_LABEL | ON         | 0x01000000 | Waiting to remove label                                |
|                       | OFF        | 0x00000000 | -                                                      |

| Macro Definitions      | ON/<br>OFF | Value      | Status                                 |
|------------------------|------------|------------|----------------------------------------|
| ASB_NO_LABEL           | ON         | 0x04000000 | No paper in the label peeling detector |
|                        | OFF        | 0x00000000 | Paper is in the label peeling detector |
| ASB_SPOOLER_IS_STOPPED | ON         | 0x80000000 | Stop the spooler                       |
|                        | OFF        | 0x00000000 | Operation the spooler                  |

## Offline Cause

### First Byte

| Bit | ON/<br>OFF | Value | Status                            |
|-----|------------|-------|-----------------------------------|
| 0   | ON         | 0x01  | CPU execution error generated     |
|     | OFF        | 0x00  | CPU execution error not generated |
| 1   | ON         | 0x02  | ROM error generated               |
|     | OFF        | 0x00  | ROM error not generated           |
| 2   | ON         | 0x04  | G/A error generated               |
|     | OFF        | 0x00  | G/A error not generated           |
| 3   | -          | 0x00  | Reserved (fixed to 0)             |
| 4   | -          | 0x00  | Reserved (fixed to 0)             |
| 5   | -          | 0x00  | Reserved (fixed to 0)             |
| 6   | -          | 0x40  | Fixed (fixed to 1)                |
| 7   | -          | 0x00  | Fixed (fixed to 0)                |

### Second Byte

| Bit | ON/<br>OFF | Value | Status                           |
|-----|------------|-------|----------------------------------|
| 0   | ON         | 0x01  | High voltage error generated     |
|     | OFF        | 0x00  | High voltage error not generated |
| 1   | ON         | 0x02  | Low voltage error generated      |
|     | OFF        | 0x00  | Low voltage error not generated  |
| 2   | ON         | 0x04  | Overcurrent error generated      |
|     | OFF        | 0x00  | Overcurrent error not generated  |
| 3   | -          | 0x00  | Reserved                         |
| 4   | -          | 0x00  | Reserved                         |
| 5   | -          | 0x00  | Reserved                         |
| 6   | -          | 0x40  | Fixed (fixed to 1)               |
| 7   | -          | 0x00  | Fixed (fixed to 0)               |

### Third Byte

| Bit | ON/<br>OFF | Value | Status                         |
|-----|------------|-------|--------------------------------|
| 0   | ON         | 0x01  | Thermistor error generated     |
|     | OFF        | 0x00  | Thermistor error not generated |
| 1   | -          | 0x00  | Reserved                       |
| 2   | -          | 0x00  | Reserved                       |
| 3   | -          | 0x00  | Reserved                       |
| 4   | -          | 0x00  | Reserved                       |
| 5   | -          | 0x00  | Reserved                       |
| 6   | -          | 0x40  | Fixed (fixed to 1)             |
| 7   | -          | 0x00  | Fixed (fixed to 0)             |

### Fourth Byte

| Bit | ON/<br>OFF | Value | Status                                                                           |
|-----|------------|-------|----------------------------------------------------------------------------------|
| 0   | -          | 0x00  | Reserved                                                                         |
| 1   | ON         | 0x02  | Roll paper cover open error generated<br>(when specifying recoverable error)     |
|     | OFF        | 0x00  | Roll paper cover open error not generated<br>(when specifying recoverable error) |
| 2   | ON         | 0x04  | Paper layout error generated                                                     |
|     | OFF        | 0x00  | Paper layout error not generated                                                 |
| 3   | -          | 0x00  | Reserved                                                                         |
| 4   | -          | 0x00  | Reserved                                                                         |
| 5   | -          | 0x00  | Reserved                                                                         |
| 6   | -          | 0x40  | Fixed (fixed to 1)                                                               |
| 7   | -          | 0x00  | Fixed (fixed to 0)                                                               |

## Fifth Byte

| Bit | ON/<br>OFF | Value | Status                                                                             |
|-----|------------|-------|------------------------------------------------------------------------------------|
| 0   | ON         | 0x01  | Roll paper cover open error generated<br>(when specifying auto recovery error)     |
|     | OFF        | 0x00  | Roll paper cover open error not generated<br>(when specifying auto recovery error) |
| 1   | ON         | 0x02  | High head temperature error generated                                              |
|     | OFF        | 0x00  | High head temperature error not generated                                          |
| 2   | -          | 0x00  | Reserved                                                                           |
| 3   | -          | 0x00  | Reserved                                                                           |
| 4   | -          | 0x00  | Reserved                                                                           |
| 5   | -          | 0x00  | Reserved                                                                           |
| 6   | -          | 0x40  | Fixed (fixed to 1)                                                                 |
| 7   | -          | 0x00  | Fixed (fixed to 0)                                                                 |

## Maintenance Counter

| Counter Number<br>(readno) | Resetability | Counter<br>(readcounter)                              | Unit  |
|----------------------------|--------------|-------------------------------------------------------|-------|
| 20 (14H)                   | Resetable    | Number of line feeds (for roll paper)                 | Lines |
| 21 (15H)                   | Resetable    | Number of times head is energized<br>(for roll paper) | Times |
| 70 (46H)                   | Resetable    | Printer operation time                                | Hours |
| 148 (94H)                  | Cumulative   | Number of line feeds (for roll paper)                 | Lines |
| 149 (95H)                  | Cumulative   | Number of times head is energized<br>(for roll paper) | Times |
| 198 (C6H)                  | Cumulative   | Printer operation time                                | Hours |

## ASB Status

| Macro Definitions      | ON/<br>OFF | Value      | Status                                 |
|------------------------|------------|------------|----------------------------------------|
| ASB_NO_RESPONSE        | ON         | 0x00000001 | No printer response                    |
|                        | OFF        | 0x00000000 | Printer response                       |
| ASB_PRINT_SUCCESS      | ON         | 0x00000002 | Print complete                         |
|                        | OFF        | 0x00000000 | -                                      |
| ASB_BATTERY_OFFLINE    | ON         | 0x00000004 | Offline due to a weak battery          |
|                        | OFF        | 0x00000000 | -                                      |
| ASB_OFF_LINE           | ON         | 0x00000008 | Offline status                         |
|                        | OFF        | 0x00000000 | Online status                          |
| ASB_COVER_OPEN         | ON         | 0x00000020 | Cover is open                          |
|                        | OFF        | 0x00000000 | Cover is closed                        |
| ASB_PAPER_FEED         | ON         | 0x00000040 | Paper feed switch is feeding paper     |
|                        | OFF        | 0x00000000 | Paper feed switch is not feeding paper |
| ASB_PANEL_SWITCH       | ON         | 0x00000200 | Panel switch is ON                     |
|                        | OFF        | 0x00000000 | Panel switch is OFF                    |
| ASB_AUTOCUTTER_ERR     | ON         | 0x00000800 | Auto cutter error generated            |
|                        | OFF        | 0x00000000 | Auto cutter error not generated        |
| ASB_UNRECOVER_ERR      | ON         | 0x00002000 | Unrecoverable error generated          |
|                        | OFF        | 0x00000000 | Unrecoverable error not generated      |
| ASB_AUTORECOVER_ERR    | ON         | 0x00004000 | Auto recovery error generated          |
|                        | OFF        | 0x00000000 | Auto recovery error not generated      |
| ASB_PAPER_END          | ON         | 0x00040000 | Roll paper is not detected             |
|                        | OFF        | 0x00000000 | Roll paper is detected                 |
| ASB_SPOOLER_IS_STOPPED | ON         | 0x80000000 | Stop the spooler                       |
|                        | OFF        | 0x00000000 | Operation the spooler                  |



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## Maintenance Counter

| Counter Number<br>(readno) | Resetability | Counter<br>(readcounter)                              | Unit  |
|----------------------------|--------------|-------------------------------------------------------|-------|
| 20 (14H)                   | Resetable    | Number of line feeds (for roll paper)                 | Lines |
| 21 (15H)                   | Resetable    | Number of times head is energized<br>(for roll paper) | Times |
| 50 (32H)                   | Resetable    | Number of autocutter operations                       | Times |
| 70 (46H)                   | Resetable    | Printer operation time                                | Hours |
| 148 (94H)                  | Cumulative   | Number of line feeds (for roll paper)                 | Lines |
| 149 (95H)                  | Cumulative   | Number of times head is energized<br>(for roll paper) | Times |
| 178 (B2H)                  | Cumulative   | Number of autocutter operations                       | Times |
| 198 (C6H)                  | Cumulative   | Printer operation time                                | Hours |

## ASB Status

| Macro Definitions      | ON/<br>OFF | Value      | Status                                 |
|------------------------|------------|------------|----------------------------------------|
| ASB_NO_RESPONSE        | ON         | 0x00000001 | No printer response                    |
|                        | OFF        | 0x00000000 | Printer response                       |
| ASB_PRINT_SUCCESS      | ON         | 0x00000002 | Print complete                         |
|                        | OFF        | 0x00000000 | -                                      |
| ASB_BATTERY_OFFLINE    | ON         | 0x00000004 | Offline due to a weak battery          |
|                        | OFF        | 0x00000000 | -                                      |
| ASB_OFF_LINE           | ON         | 0x00000008 | Offline status                         |
|                        | OFF        | 0x00000000 | Online status                          |
| ASB_COVER_OPEN         | ON         | 0x00000020 | Cover is open                          |
|                        | OFF        | 0x00000000 | Cover is closed                        |
| ASB_PAPER_FEED         | ON         | 0x00000040 | Paper feed switch is feeding paper     |
|                        | OFF        | 0x00000000 | Paper feed switch is not feeding paper |
| ASB_PANEL_SWITCH       | ON         | 0x00000200 | Panel switch is ON                     |
|                        | OFF        | 0x00000000 | Panel switch is OFF                    |
| ASB_AUTOCUTTER_ERR     | ON         | 0x00000800 | Auto cutter error generated            |
|                        | OFF        | 0x00000000 | Auto cutter error not generated        |
| ASB_UNRECOVER_ERR      | ON         | 0x00002000 | Unrecoverable error generated          |
|                        | OFF        | 0x00000000 | Unrecoverable error not generated      |
| ASB_AUTORECOVER_ERR    | ON         | 0x00004000 | Auto recovery error generated          |
|                        | OFF        | 0x00000000 | Auto recovery error not generated      |
| ASB_PAPER_END          | ON         | 0x00040000 | Roll paper is not detected             |
|                        | OFF        | 0x00000000 | Roll paper is detected                 |
| ASB_WAIT_REMOVE_LABEL  | ON         | 0x01000000 | Waiting to remove label                |
|                        | OFF        | 0x00000000 | -                                      |
| ASB_NO_LABEL           | ON         | 0x04000000 | No paper in the label peeling detector |
|                        | OFF        | 0x00000000 | Paper is in the label peeling detector |
| ASB_SPOOLER_IS_STOPPED | ON         | 0x80000000 | Stop the spooler                       |
|                        | OFF        | 0x00000000 | Operation the spooler                  |

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## Maintenance Counter

| Counter Number<br>(readno) | Resetability | Counter<br>(readcounter)                              | Unit  |
|----------------------------|--------------|-------------------------------------------------------|-------|
| 20 (14H)                   | Resetable    | Number of line feeds (for roll paper)                 | Lines |
| 21 (15H)                   | Resetable    | Number of times head is energized<br>(for roll paper) | Times |
| 70 (46H)                   | Resetable    | Printer operation time                                | Hours |
| 148 (94H)                  | Cumulative   | Number of line feeds (for roll paper)                 | Lines |
| 149 (95H)                  | Cumulative   | Number of times head is energized<br>(for roll paper) | Times |
| 198 (C6H)                  | Cumulative   | Printer operation time                                | Hours |

## ASB Status

| Macro Definitions      | ON/<br>OFF | Value      | Status                                                 |
|------------------------|------------|------------|--------------------------------------------------------|
| ASB_NO_RESPONSE        | ON         | 0x00000001 | No printer response                                    |
|                        | OFF        | 0x00000000 | Printer response                                       |
| ASB_PRINT_SUCCESS      | ON         | 0x00000002 | Print complete                                         |
|                        | OFF        | 0x00000000 | -                                                      |
| ASB_DRAWER_KICK        | ON         | 0x00000004 | Status of the drawer kick number 3 connector pin = "H" |
|                        | OFF        | 0x00000000 | Status of the drawer kick number 3 connector pin = "L" |
| ASB_OFF_LINE           | ON         | 0x00000008 | Offline status                                         |
|                        | OFF        | 0x00000000 | Online status                                          |
| ASB_COVER_OPEN         | ON         | 0x00000020 | Cover is open                                          |
|                        | OFF        | 0x00000000 | Cover is closed                                        |
| ASB_PAPER_FEED         | ON         | 0x00000040 | Paper feed switch is feeding paper                     |
|                        | OFF        | 0x00000000 | Paper feed switch is not feeding paper                 |
| ASB_AUTOCUTTER_ERR     | ON         | 0x00000800 | Auto cutter error generated                            |
|                        | OFF        | 0x00000000 | Auto cutter error not generated                        |
| ASB_UNRECOVER_ERR      | ON         | 0x00002000 | Unrecoverable error generated                          |
|                        | OFF        | 0x00000000 | Unrecoverable error not generated                      |
| ASB_AUTORECOVER_ERR    | ON         | 0x00004000 | Auto recovery error generated                          |
|                        | OFF        | 0x00000000 | Auto recovery error not generated                      |
| ASB_RECEIPT_NEAR_END   | ON         | 0x00020000 | No paper in the roll paper near end detector           |
|                        | OFF        | 0x00000000 | Paper in the roll paper near end detector              |
| ASB_RECEIPT_END        | ON         | 0x00080000 | No paper in the roll paper end detector                |
|                        | OFF        | 0x00000000 | Paper in the roll paper end detector                   |
| ASB_SPOOLER_IS_STOPPED | ON         | 0x80000000 | Stop the spooler                                       |
|                        | OFF        | 0x00000000 | Operation the spooler                                  |

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## Maintenance Counter

| Counter Number<br>(readno) | Resetability | Counter<br>(readcounter)                              | Unit  |
|----------------------------|--------------|-------------------------------------------------------|-------|
| 20 (14H)                   | Resetable    | Number of line feeds (for roll paper)                 | Lines |
| 21 (15H)                   | Resetable    | Number of times head is energized<br>(for roll paper) | Times |
| 50 (32H)                   | Resetable    | Number of autocutter operations                       | Times |
| 70 (46H)                   | Resetable    | Printer operation time                                | Hours |
| 148 (94H)                  | Cumulative   | Number of line feeds (for roll paper)                 | Lines |
| 149 (95H)                  | Cumulative   | Number of times head is energized<br>(for roll paper) | Times |
| 178 (B2H)                  | Cumulative   | Number of autocutter operations                       | Times |
| 198 (C6H)                  | Cumulative   | Printer operation time                                | Hours |

## ASB Status

| Macro Definitions      | ON/<br>OFF | Value      | Status                                                 |
|------------------------|------------|------------|--------------------------------------------------------|
| ASB_NO_RESPONSE        | ON         | 0x00000001 | No printer response                                    |
|                        | OFF        | 0x00000000 | Printer response                                       |
| ASB_PRINT_SUCCESS      | ON         | 0x00000002 | Print complete                                         |
|                        | OFF        | 0x00000000 | -                                                      |
| ASB_DRAWER_KICK        | ON         | 0x00000004 | Status of the drawer kick number 3 connector pin = "H" |
|                        | OFF        | 0x00000000 | Status of the drawer kick number 3 connector pin = "L" |
| ASB_OFF_LINE           | ON         | 0x00000008 | Offline status                                         |
|                        | OFF        | 0x00000000 | Online status                                          |
| ASB_COVER_OPEN         | ON         | 0x00000020 | Cover is open                                          |
|                        | OFF        | 0x00000000 | Cover is closed                                        |
| ASB_PAPER_FEED         | ON         | 0x00000040 | Paper feed switch is feeding paper                     |
|                        | OFF        | 0x00000000 | Paper feed switch is not feeding paper                 |
| ASB_AUTOCUTTER_ERR     | ON         | 0x00000800 | Auto cutter error generated                            |
|                        | OFF        | 0x00000000 | Auto cutter error not generated                        |
| ASB_UNRECOVER_ERR      | ON         | 0x00002000 | Unrecoverable error generated                          |
|                        | OFF        | 0x00000000 | Unrecoverable error not generated                      |
| ASB_AUTORECOVER_ERR    | ON         | 0x00004000 | Auto recovery error generated                          |
|                        | OFF        | 0x00000000 | Auto recovery error not generated                      |
| ASB_RECEIPT_NEAR_END   | ON         | 0x00020000 | No paper in the roll paper near end detector           |
|                        | OFF        | 0x00000000 | Paper in the roll paper near end detector              |
| ASB_RECEIPT_END        | ON         | 0x00080000 | No paper in the roll paper end detector                |
|                        | OFF        | 0x00000000 | Paper in the roll paper end detector                   |
| ASB_SPOOLER_IS_STOPPED | ON         | 0x80000000 | Stop the spooler                                       |
|                        | OFF        | 0x00000000 | Operation the spooler                                  |

## TM-T88IV

## ASB Status

| Macro Definitions      | ON/<br>OFF | Value      | Status                                                 |
|------------------------|------------|------------|--------------------------------------------------------|
| ASB_NO_RESPONSE        | ON         | 0x00000001 | No printer response                                    |
|                        | OFF        | 0x00000000 | Printer response                                       |
| ASB_PRINT_SUCCESS      | ON         | 0x00000002 | Print complete                                         |
|                        | OFF        | 0x00000000 | -                                                      |
| ASB_DRAWER_KICK        | ON         | 0x00000004 | Status of the drawer kick number 3 connector pin = "H" |
|                        | OFF        | 0x00000000 | Status of the drawer kick number 3 connector pin = "L" |
| ASB_OFF_LINE           | ON         | 0x00000008 | Offline status                                         |
|                        | OFF        | 0x00000000 | Online status                                          |
| ASB_COVER_OPEN         | ON         | 0x00000020 | Cover is open                                          |
|                        | OFF        | 0x00000000 | Cover is closed                                        |
| ASB_PAPER_FEED         | ON         | 0x00000040 | Paper feed switch is feeding paper                     |
|                        | OFF        | 0x00000000 | Paper feed switch is not feeding paper                 |
| ASB_AUTOCUTTER_ERR     | ON         | 0x00000800 | Auto cutter error generated                            |
|                        | OFF        | 0x00000000 | Auto cutter error not generated                        |
| ASB_UNRECOVER_ERR      | ON         | 0x00002000 | Unrecoverable error generated                          |
|                        | OFF        | 0x00000000 | Unrecoverable error not generated                      |
| ASB_AUTORECOVER_ERR    | ON         | 0x00004000 | Auto recovery error generated                          |
|                        | OFF        | 0x00000000 | Auto recovery error not generated                      |
| ASB_RECEIPT_NEAR_END   | ON         | 0x00020000 | No paper in the roll paper near end detector           |
|                        | OFF        | 0x00000000 | Paper in the roll paper near end detector              |
| ASB_RECEIPT_END        | ON         | 0x00080000 | No paper in the roll paper end detector                |
|                        | OFF        | 0x00000000 | Paper in the roll paper end detector                   |
| ASB_SPOOLER_IS_STOPPED | ON         | 0x80000000 | Stop the spooler                                       |
|                        | OFF        | 0x00000000 | Operation the spooler                                  |

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## Maintenance Counter

| Counter Number<br>(readno) | Resetability | Counter<br>(readcounter)                              | Unit  |
|----------------------------|--------------|-------------------------------------------------------|-------|
| 20 (14H)                   | Resetable    | Number of line feeds (for roll paper)                 | Lines |
| 21 (15H)                   | Resetable    | Number of times head is energized<br>(for roll paper) | Times |
| 50 (32H)                   | Resetable    | Number of autocutter operations                       | Times |
| 70 (46H)                   | Resetable    | Printer operation time                                | Hours |
| 148 (94H)                  | Cumulative   | Number of line feeds (for roll paper)                 | Lines |
| 149 (95H)                  | Cumulative   | Number of times head is energized<br>(for roll paper) | Times |
| 178 (B2H)                  | Cumulative   | Number of autocutter operations                       | Times |
| 198 (C6H)                  | Cumulative   | Printer operation time                                | Hours |



## TM-T88IV ReStick

## ASB Status

| Macro Definitions      | ON/<br>OFF | Value      | Status                                                 |
|------------------------|------------|------------|--------------------------------------------------------|
| ASB_NO_RESPONSE        | ON         | 0x00000001 | No printer response                                    |
|                        | OFF        | 0x00000000 | Printer response                                       |
| ASB_PRINT_SUCCESS      | ON         | 0x00000002 | Print complete                                         |
|                        | OFF        | 0x00000000 | -                                                      |
| ASB_DRAWER_KICK        | ON         | 0x00000004 | Status of the drawer kick number 3 connector pin = "H" |
|                        | OFF        | 0x00000000 | Status of the drawer kick number 3 connector pin = "L" |
| ASB_OFF_LINE           | ON         | 0x00000008 | Offline status                                         |
|                        | OFF        | 0x00000000 | Online status                                          |
| ASB_COVER_OPEN         | ON         | 0x00000020 | Cover is open                                          |
|                        | OFF        | 0x00000000 | Cover is closed                                        |
| ASB_PAPER_FEED         | ON         | 0x00000040 | Paper feed switch is feeding paper                     |
|                        | OFF        | 0x00000000 | Paper feed switch is not feeding paper                 |
| ASB_AUTOCUTTER_ERR     | ON         | 0x00000800 | Auto cutter error generated                            |
|                        | OFF        | 0x00000000 | Auto cutter error not generated                        |
| ASB_UNRECOVER_ERR      | ON         | 0x00002000 | Unrecoverable error generated                          |
|                        | OFF        | 0x00000000 | Unrecoverable error not generated                      |
| ASB_AUTORECOVER_ERR    | ON         | 0x00004000 | Auto recovery error generated                          |
|                        | OFF        | 0x00000000 | Auto recovery error not generated                      |
| ASB_RECEIPT_NEAR_END   | ON         | 0x00020000 | No paper in the roll paper near end detector           |
|                        | OFF        | 0x00000000 | Paper in the roll paper near end detector              |
| ASB_RECEIPT_END        | ON         | 0x00080000 | No paper in the roll paper end detector                |
|                        | OFF        | 0x00000000 | Paper in the roll paper end detector                   |
| ASB_SPOOLER_IS_STOPPED | ON         | 0x80000000 | Stop the spooler                                       |
|                        | OFF        | 0x00000000 | Operation the spooler                                  |

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## Maintenance Counter

| Counter Number<br>(readno) | Resetability | Counter<br>(readcounter)                              | Unit  |
|----------------------------|--------------|-------------------------------------------------------|-------|
| 20 (14H)                   | Resetable    | Number of line feeds (for roll paper)                 | Lines |
| 21 (15H)                   | Resetable    | Number of times head is energized<br>(for roll paper) | Times |
| 50 (32H)                   | Resetable    | Number of autocutter operations                       | Times |
| 70 (46H)                   | Resetable    | Printer operation time                                | Hours |
| 148 (94H)                  | Cumulative   | Number of line feeds (for roll paper)                 | Lines |
| 149 (95H)                  | Cumulative   | Number of times head is energized<br>(for roll paper) | Times |
| 178 (B2H)                  | Cumulative   | Number of autocutter operations                       | Times |
| 198 (C6H)                  | Cumulative   | Printer operation time                                | Hours |

## TM-T90

## ASB Status

| Macro Definitions    | ON/<br>OFF | Value      | Status                                                 |
|----------------------|------------|------------|--------------------------------------------------------|
| ASB_NO_RESPONSE      | ON         | 0x00000001 | No printer response                                    |
|                      | OFF        | 0x00000000 | Printer response                                       |
| ASB_PRINT_SUCCESS    | ON         | 0x00000002 | Print complete                                         |
|                      | OFF        | 0x00000000 | -                                                      |
| ASB_DRAWER_KICK      | ON         | 0x00000004 | Status of the drawer kick number 3 connector pin = "H" |
|                      | OFF        | 0x00000000 | Status of the drawer kick number 3 connector pin = "L" |
| ASB_OFF_LINE         | ON         | 0x00000008 | Offline status                                         |
|                      | OFF        | 0x00000000 | Online status                                          |
| ASB_COVER_OPEN       | ON         | 0x00000020 | Cover is open                                          |
|                      | OFF        | 0x00000000 | Cover is closed                                        |
| ASB_PAPER_FEED       | ON         | 0x00000040 | Paper feed switch is feeding paper                     |
|                      | OFF        | 0x00000000 | Paper feed switch is not feeding paper                 |
| ASB_WAIT_ON_LINE     | ON         | 0x00000100 | Waiting for online recovery                            |
|                      | OFF        | 0x00000000 | Not waiting for online recovery                        |
| ASB_PANEL_SWITCH     | ON         | 0x00000200 | Panel switch is ON                                     |
|                      | OFF        | 0x00000000 | Panel switch is OFF                                    |
| ASB_MECHANICAL_ERR   | ON         | 0x00000400 | Mechanical error generated                             |
|                      | OFF        | 0x00000000 | Mechanical error not generated                         |
| ASB_AUTOCUTTER_ERR   | ON         | 0x00000800 | Auto cutter error generated                            |
|                      | OFF        | 0x00000000 | Auto cutter error not generated                        |
| ASB_UNRECOVER_ERR    | ON         | 0x00002000 | Unrecoverable error generated                          |
|                      | OFF        | 0x00000000 | Unrecoverable error not generated                      |
| ASB_AUTORECOVER_ERR  | ON         | 0x00004000 | Auto recovery error generated                          |
|                      | OFF        | 0x00000000 | Auto recovery error not generated                      |
| ASB_RECEIPT_NEAR_END | ON         | 0x00020000 | No paper in the roll paper near end detector           |
|                      | OFF        | 0x00000000 | Paper in the roll paper near end detector              |

| Macro Definitions      | ON/<br>OFF | Value      | Status                                  |
|------------------------|------------|------------|-----------------------------------------|
| ASB_RECEIPT_END        | ON         | 0x00080000 | No paper in the roll paper end detector |
|                        | OFF        | 0x00000000 | Paper in the roll paper end detector    |
| ASB_SPOOLER_IS_STOPPED | ON         | 0x80000000 | Stop the spooler                        |
|                        | OFF        | 0x00000000 | Operation the spooler                   |

## Offline Cause

### First Byte

| Bit | ON/<br>OFF | Value | Status                            |
|-----|------------|-------|-----------------------------------|
| 0   | ON         | 0x01  | CPU execution error generated     |
|     | OFF        | 0x00  | CPU execution error not generated |
| 1   | ON         | 0x02  | ROM error generated               |
|     | OFF        | 0x00  | ROM error not generated           |
| 2   | ON         | 0x04  | G/A error generated               |
|     | OFF        | 0x00  | G/A error not generated           |
| 3   | -          | 0x00  | Reserved (fixed to 0)             |
| 4   | -          | 0x00  | Reserved (fixed to 0)             |
| 5   | -          | 0x00  | Reserved (fixed to 0)             |
| 6   | -          | 0x40  | Fixed (fixed to 1)                |
| 7   | -          | 0x00  | Fixed (fixed to 0)                |

### Second Byte

| Bit | ON/<br>OFF | Value | Status                           |
|-----|------------|-------|----------------------------------|
| 0   | ON         | 0x01  | High voltage error generated     |
|     | OFF        | 0x00  | High voltage error not generated |
| 1   | ON         | 0x02  | Low voltage error generated      |
|     | OFF        | 0x00  | Low voltage error not generated  |
| 2   | ON         | 0x04  | Overcurrent error generated      |
|     | OFF        | 0x00  | Overcurrent error not generated  |
| 3   | -          | 0x00  | Reserved (fixed to 0)            |
| 4   | -          | 0x00  | Reserved (fixed to 0)            |
| 5   | -          | 0x00  | Reserved (fixed to 0)            |
| 6   | -          | 0x40  | Fixed (fixed to 1)               |
| 7   | -          | 0x00  | Fixed (fixed to 0)               |

## Third Byte

| Bit | ON/<br>OFF | Value | Status                         |
|-----|------------|-------|--------------------------------|
| 0   | ON         | 0x01  | Thermistor error generated     |
|     | OFF        | 0x00  | Thermistor error not generated |
| 1   | -          | 0x00  | Reserved                       |
| 2   | -          | 0x00  | Reserved                       |
| 3   | -          | 0x00  | Reserved                       |
| 4   | -          | 0x00  | Reserved                       |
| 5   | -          | 0x00  | Reserved                       |
| 6   | -          | 0x40  | Fixed (fixed to 1)             |
| 7   | -          | 0x00  | Fixed (fixed to 0)             |

## Fourth Byte

| Bit | ON/<br>OFF | Value | Status                                                                           |
|-----|------------|-------|----------------------------------------------------------------------------------|
| 0   | ON         | 0x01  | Auto cutter error generated                                                      |
|     | OFF        | 0x00  | Auto cutter error not generated                                                  |
| 1   | ON         | 0x02  | Roll paper cover open error generated<br>(when specifying recoverable error)     |
|     | OFF        | 0x00  | Roll paper cover open error not generated<br>(when specifying recoverable error) |
| 2   | -          | 0x00  | Reserved (fixed to 0)                                                            |
| 3   | -          | 0x00  | Reserved (fixed to 0)                                                            |
| 4   | -          | 0x00  | Reserved (fixed to 0)                                                            |
| 5   | -          | 0x00  | Reserved (fixed to 0)                                                            |
| 6   | -          | 0x40  | Fixed (fixed to 1)                                                               |
| 7   | -          | 0x00  | Fixed (fixed to 0)                                                               |

## Fifth Byte

| Bit | ON/<br>OFF | Value | Status                                                                             |
|-----|------------|-------|------------------------------------------------------------------------------------|
| 0   | ON         | 0x01  | Roll paper cover open error generated<br>(when specifying auto recovery error)     |
|     | OFF        | 0x00  | Roll paper cover open error not generated<br>(when specifying auto recovery error) |
| 1   | ON         | 0x02  | High head temperature error generated                                              |
|     | OFF        | 0x00  | High head temperature error not generated                                          |
| 2   | -          | 0x00  | Reserved (fixed to 0)                                                              |
| 3   | -          | 0x00  | Reserved (fixed to 0)                                                              |
| 4   | -          | 0x00  | Reserved (fixed to 0)                                                              |
| 5   | -          | 0x00  | Reserved (fixed to 0)                                                              |
| 6   | -          | 0x40  | Fixed (fixed to 1)                                                                 |
| 7   | -          | 0x00  | Fixed (fixed to 0)                                                                 |

## Maintenance Counter

| Counter Number<br>(readno) | Resetability | Counter<br>(readcounter)                              | Unit  |
|----------------------------|--------------|-------------------------------------------------------|-------|
| 20 (14H)                   | Resetable    | Number of line feeds (for roll paper)                 | Lines |
| 21 (15H)                   | Resetable    | Number of times head is energized<br>(for roll paper) | Times |
| 50 (32H)                   | Resetable    | Number of autocutter operations                       | Times |
| 70 (46H)                   | Resetable    | Printer operation time                                | Hours |
| 148 (94H)                  | Cumulative   | Number of line feeds (for roll paper)                 | Lines |
| 149 (95H)                  | Cumulative   | Number of times head is energized<br>(for roll paper) | Times |
| 178 (B2H)                  | Cumulative   | Number of autocutter operations                       | Times |
| 198 (C6H)                  | Cumulative   | Printer operation time                                | Hours |

## TM-U120

## ASB Status

| Macro Definitions    | ON/<br>OFF | Value      | Status                                                 |
|----------------------|------------|------------|--------------------------------------------------------|
| ASB_NO_RESPONSE      | ON         | 0x00000001 | No printer response                                    |
|                      | OFF        | 0x00000000 | Printer response                                       |
| ASB_PRINT_SUCCESS    | ON         | 0x00000002 | Print complete                                         |
|                      | OFF        | 0x00000000 | -                                                      |
| ASB_DRAWER_KICK      | ON         | 0x00000004 | Status of the drawer kick number 3 connector pin = "H" |
|                      | OFF        | 0x00000000 | Status of the drawer kick number 3 connector pin = "L" |
| ASB_OFF_LINE         | ON         | 0x00000008 | Offline status                                         |
|                      | OFF        | 0x00000000 | Online status                                          |
| ASB_COVER_OPEN       | ON         | 0x00000020 | Cover is open                                          |
|                      | OFF        | 0x00000000 | Cover is closed                                        |
| ASB_PAPER_FEED       | ON         | 0x00000040 | Paper feed switch is feeding paper                     |
|                      | OFF        | 0x00000000 | Paper feed switch is not feeding paper                 |
| ASB_WAIT_ON_LINE     | ON         | 0x00000100 | Waiting for online recovery                            |
|                      | OFF        | 0x00000000 | Not waiting for online recovery                        |
| ASB_PANEL_SWITCH     | ON         | 0x00000200 | Panel switch is ON                                     |
|                      | OFF        | 0x00000000 | Panel switch is OFF                                    |
| ASB_RECOVER_ERR      | ON         | 0x00000400 | Recoverable error has occurred                         |
|                      | OFF        | 0x00000000 | Recoverable error has not occurred                     |
| ASB_AUTOCUTTER_ERR   | ON         | 0x00000800 | Auto cutter error generated                            |
|                      | OFF        | 0x00000000 | Auto cutter error not generated                        |
| ASB_UNRECOVER_ERR    | ON         | 0x00002000 | Unrecoverable error generated                          |
|                      | OFF        | 0x00000000 | Unrecoverable error not generated                      |
| ASB_AUTORECOVER_ERR  | ON         | 0x00004000 | Auto recovery error generated                          |
|                      | OFF        | 0x00000000 | Auto recovery error not generated                      |
| ASB_RECEIPT_NEAR_END | ON         | 0x00020000 | No paper in the roll paper near end detector           |
|                      | OFF        | 0x00000000 | Paper in the roll paper near end detector              |

| Macro Definitions      | ON/<br>OFF | Value      | Status                                  |
|------------------------|------------|------------|-----------------------------------------|
| ASB_RECEIPT_END        | ON         | 0x00080000 | No paper in the roll paper end detector |
|                        | OFF        | 0x00000000 | Paper in the roll paper end detector    |
| ASB_SPOOLER_IS_STOPPED | ON         | 0x80000000 | Stop the spooler                        |
|                        | OFF        | 0x00000000 | Operation the spooler                   |



## TM-U120II

## ASB Status

| Macro Definitions    | ON/<br>OFF | Value      | Status                                                 |
|----------------------|------------|------------|--------------------------------------------------------|
| ASB_NO_RESPONSE      | ON         | 0x00000001 | No printer response                                    |
|                      | OFF        | 0x00000000 | Printer response                                       |
| ASB_PRINT_SUCCESS    | ON         | 0x00000002 | Print complete                                         |
|                      | OFF        | 0x00000000 | -                                                      |
| ASB_DRAWER_KICK      | ON         | 0x00000004 | Status of the drawer kick number 3 connector pin = "H" |
|                      | OFF        | 0x00000000 | Status of the drawer kick number 3 connector pin = "L" |
| ASB_OFF_LINE         | ON         | 0x00000008 | Offline status                                         |
|                      | OFF        | 0x00000000 | Online status                                          |
| ASB_COVER_OPEN       | ON         | 0x00000020 | Cover is open                                          |
|                      | OFF        | 0x00000000 | Cover is closed                                        |
| ASB_PAPER_FEED       | ON         | 0x00000040 | Paper feed switch is feeding paper                     |
|                      | OFF        | 0x00000000 | Paper feed switch is not feeding paper                 |
| ASB_WAIT_ON_LINE     | ON         | 0x00000100 | Waiting for online recovery                            |
|                      | OFF        | 0x00000000 | Not waiting for online recovery                        |
| ASB_PANEL_SWITCH     | ON         | 0x00000200 | Panel switch is ON                                     |
|                      | OFF        | 0x00000000 | Panel switch is OFF                                    |
| ASB_RECOVER_ERR      | ON         | 0x00000400 | Recoverable error has occurred                         |
|                      | OFF        | 0x00000000 | Recoverable error has not occurred                     |
| ASB_AUTOCUTTER_ERR   | ON         | 0x00000800 | Auto cutter error generated                            |
|                      | OFF        | 0x00000000 | Auto cutter error not generated                        |
| ASB_UNRECOVER_ERR    | ON         | 0x00002000 | Unrecoverable error generated                          |
|                      | OFF        | 0x00000000 | Unrecoverable error not generated                      |
| ASB_AUTORECOVER_ERR  | ON         | 0x00004000 | Auto recovery error generated                          |
|                      | OFF        | 0x00000000 | Auto recovery error not generated                      |
| ASB_RECEIPT_NEAR_END | ON         | 0x00020000 | No paper in the roll paper near end detector           |
|                      | OFF        | 0x00000000 | Paper in the roll paper near end detector              |

| Macro Definitions      | ON/<br>OFF | Value      | Status                                  |
|------------------------|------------|------------|-----------------------------------------|
| ASB_RECEIPT_END        | ON         | 0x00080000 | No paper in the roll paper end detector |
|                        | OFF        | 0x00000000 | Paper in the roll paper end detector    |
| ASB_SPOOLER_IS_STOPPED | ON         | 0x80000000 | Stop the spooler                        |
|                        | OFF        | 0x00000000 | Operation the spooler                   |

## TM-U220

## ASB Status

| Macro Definitions      | ON/<br>OFF | Value      | Status                                                 |
|------------------------|------------|------------|--------------------------------------------------------|
| ASB_NO_RESPONSE        | ON         | 0x00000001 | No printer response                                    |
|                        | OFF        | 0x00000000 | Printer response                                       |
| ASB_PRINT_SUCCESS      | ON         | 0x00000002 | Print complete                                         |
|                        | OFF        | 0x00000000 | -                                                      |
| ASB_DRAWER_KICK        | ON         | 0x00000004 | Status of the drawer kick number 3 connector pin = "H" |
|                        | OFF        | 0x00000000 | Status of the drawer kick number 3 connector pin = "L" |
| ASB_OFF_LINE           | ON         | 0x00000008 | Offline status                                         |
|                        | OFF        | 0x00000000 | Online status                                          |
| ASB_COVER_OPEN         | ON         | 0x00000020 | Cover is open                                          |
|                        | OFF        | 0x00000000 | Cover is closed                                        |
| ASB_PAPER_FEED         | ON         | 0x00000040 | Paper feed switch is feeding paper                     |
|                        | OFF        | 0x00000000 | Paper feed switch is not feeding paper                 |
| ASB_MECHANICAL_ERR     | ON         | 0x00000400 | Mechanical error generated                             |
|                        | OFF        | 0x00000000 | Mechanical error not generated                         |
| ASB_AUTOCUTTER_ERR     | ON         | 0x00000800 | Auto cutter error generated                            |
|                        | OFF        | 0x00000000 | Auto cutter error not generated                        |
| ASB_UNRECOVER_ERR      | ON         | 0x00002000 | Unrecoverable error generated                          |
|                        | OFF        | 0x00000000 | Unrecoverable error not generated                      |
| ASB_AUTORECOVER_ERR    | ON         | 0x00004000 | Auto recovery error generated                          |
|                        | OFF        | 0x00000000 | Auto recovery error not generated                      |
| ASB_RECEIPT_NEAR_END   | ON         | 0x00020000 | No paper in the roll paper near end detector           |
|                        | OFF        | 0x00000000 | Paper in the roll paper near end detector              |
| ASB_RECEIPT_END        | ON         | 0x00080000 | No paper in the roll paper end detector                |
|                        | OFF        | 0x00000000 | Paper in the roll paper end detector                   |
| ASB_SPOOLER_IS_STOPPED | ON         | 0x80000000 | Stop the spooler                                       |
|                        | OFF        | 0x00000000 | Operation the spooler                                  |

## ASB Status

| Macro Definitions      | ON/<br>OFF | Value      | Status                                                 |
|------------------------|------------|------------|--------------------------------------------------------|
| ASB_NO_RESPONSE        | ON         | 0x00000001 | No printer response                                    |
|                        | OFF        | 0x00000000 | Printer response                                       |
| ASB_PRINT_SUCCESS      | ON         | 0x00000002 | Print complete                                         |
|                        | OFF        | 0x00000000 | -                                                      |
| ASB_DRAWER_KICK        | ON         | 0x00000004 | Status of the drawer kick number 3 connector pin = "H" |
|                        | OFF        | 0x00000000 | Status of the drawer kick number 3 connector pin = "L" |
| ASB_OFF_LINE           | ON         | 0x00000008 | Offline status                                         |
|                        | OFF        | 0x00000000 | Online status                                          |
| ASB_COVER_OPEN         | ON         | 0x00000020 | Cover is open                                          |
|                        | OFF        | 0x00000000 | Cover is closed                                        |
| ASB_PAPER_FEED         | ON         | 0x00000040 | Paper feed switch is feeding paper                     |
|                        | OFF        | 0x00000000 | Paper feed switch is not feeding paper                 |
| ASB_WAIT_ON_LINE       | ON         | 0x00000100 | Waiting for online recovery                            |
|                        | OFF        | 0x00000000 | Not waiting for online recovery                        |
| ASB_MECHANICAL_ERR     | ON         | 0x00000400 | Mechanical error generated                             |
|                        | OFF        | 0x00000000 | Mechanical error not generated                         |
| ASB_AUTOCUTTER_ERR     | ON         | 0x00000800 | Auto cutter error generated                            |
|                        | OFF        | 0x00000000 | Auto cutter error not generated                        |
| ASB_UNRECOVER_ERR      | ON         | 0x00002000 | Unrecoverable error generated                          |
|                        | OFF        | 0x00000000 | Unrecoverable error not generated                      |
| ASB_AUTORECOVER_ERR    | ON         | 0x00004000 | Auto recovery error generated                          |
|                        | OFF        | 0x00000000 | Auto recovery error not generated                      |
| ASB_RECEIPT_NEAR_END   | ON         | 0x00020000 | No paper in the roll paper near end detector           |
|                        | OFF        | 0x00000000 | Paper in the roll paper near end detector              |
| ASB_RECEIPT_END        | ON         | 0x00080000 | No paper in the roll paper end detector                |
|                        | OFF        | 0x00000000 | Paper in the roll paper end detector                   |
| ASB_SPOOLER_IS_STOPPED | ON         | 0x80000000 | Stop the spooler                                       |
|                        | OFF        | 0x00000000 | Operation the spooler                                  |

## TM-U295

## ASB Status

| Macro Definitions      | ON/<br>OFF | Value      | Status                                                 |
|------------------------|------------|------------|--------------------------------------------------------|
| ASB_NO_RESPONSE        | ON         | 0x00000001 | No printer response                                    |
|                        | OFF        | 0x00000000 | Printer response                                       |
| ASB_PRINT_SUCCESS      | ON         | 0x00000002 | Print complete                                         |
|                        | OFF        | 0x00000000 | -                                                      |
| ASB_DRAWER_KICK        | ON         | 0x00000004 | Status of the drawer kick number 3 connector pin = "H" |
|                        | OFF        | 0x00000000 | Status of the drawer kick number 3 connector pin = "L" |
| ASB_OFF_LINE           | ON         | 0x00000008 | Offline status                                         |
|                        | OFF        | 0x00000000 | Online status                                          |
| ASB_PAPER_FEED         | ON         | 0x00000040 | Paper feed switch is feeding paper                     |
|                        | OFF        | 0x00000000 | Paper feed switch is not feeding paper                 |
| ASB_UNRECOVER_ERR      | ON         | 0x00002000 | Unrecoverable error generated                          |
|                        | OFF        | 0x00000000 | Unrecoverable error not generated                      |
| ASB_SLIP_BOF_2         | ON         | 0x00200000 | No paper in BOF detector                               |
|                        | OFF        | 0x00000000 | Paper in BOF detector                                  |
| ASB_SLIP_TOF_2         | ON         | 0x00400000 | No paper in TOF detector                               |
|                        | OFF        | 0x00000000 | Paper in TOF detector                                  |
| ASB_SLIP_SELECTED      | ON         | 0x01000000 | Slip unselected                                        |
|                        | OFF        | 0x00000000 | Slip selected: (active sheet = slip)                   |
| ASB_PRINT_SLIP         | ON         | 0x02000000 | Slip printing is impossible                            |
|                        | OFF        | 0x00000000 | Slip printing is possible                              |
| ASB_SPOOLER_IS_STOPPED | ON         | 0x80000000 | Stop the spooler                                       |
|                        | OFF        | 0x00000000 | Operation the spooler                                  |

## ASB Status

| Macro Definitions        | ON/<br>OFF | Value      | Status                                                 |
|--------------------------|------------|------------|--------------------------------------------------------|
| ASB_NO_RESPONSE          | ON         | 0x00000001 | No printer response                                    |
|                          | OFF        | 0x00000000 | Printer response                                       |
| ASB_PRINT_SUCCESS        | ON         | 0x00000002 | Print complete                                         |
|                          | OFF        | 0x00000000 | -                                                      |
| ASB_DRAWER_KICK          | ON         | 0x00000004 | Status of the drawer kick number 3 connector pin = "H" |
|                          | OFF        | 0x00000000 | Status of the drawer kick number 3 connector pin = "L" |
| ASB_OFF_LINE             | ON         | 0x00000008 | Offline status                                         |
|                          | OFF        | 0x00000000 | Online status                                          |
| ASB_COVER_OPEN           | ON         | 0x00000020 | Cover is open                                          |
|                          | OFF        | 0x00000000 | Cover is closed                                        |
| ASB_PAPER_FEED           | ON         | 0x00000040 | Paper feed switch is feeding paper                     |
|                          | OFF        | 0x00000000 | Paper feed switch is not feeding paper                 |
| ASB_MECHANICAL_ERR       | ON         | 0x00000400 | Mechanical error generated                             |
|                          | OFF        | 0x00000000 | Mechanical error not generated                         |
| ASB_UNRECOVER_ERR        | ON         | 0x00002000 | Unrecoverable error generated                          |
|                          | OFF        | 0x00000000 | Unrecoverable error not generated                      |
| ASB_HEAD_TEMPERATURE_ERR | ON         | 0x00004000 | High head temperature error has occurred               |
|                          | OFF        | 0x00000000 | High head temperature error has not occurred           |
| ASB_RECEIPT_NEAR_END     | ON         | 0x00020000 | No paper in the roll paper near end detector           |
|                          | OFF        | 0x00000000 | Paper in the roll paper near end detector              |
| ASB_SLIP_BOF             | ON         | 0x00400000 | No paper in BOF detector                               |
|                          | OFF        | 0x00000000 | Paper in BOF detector                                  |
| ASB_SLIP_SELECTED        | ON         | 0x01000000 | Slip unselected                                        |
|                          | OFF        | 0x00000000 | Slip selected: (active sheet = slip)                   |
| ASB_PRINT_SLIP           | ON         | 0x02000000 | Slip printing is impossible                            |
|                          | OFF        | 0x00000000 | Slip printing is possible                              |
| ASB_VALIDATION_SELECTED  | ON         | 0x04000000 | Validation not selected as the active sheet            |
|                          | OFF        | 0x00000000 | Validation selected as the active sheet                |

| Macro Definitions      | ON/<br>OFF | Value      | Status                            |
|------------------------|------------|------------|-----------------------------------|
| ASB_PRINT_VALIDATION   | ON         | 0x08000000 | Validation printing is impossible |
|                        | OFF        | 0x00000000 | Validation printing is possible   |
| ASB_VALIDATION_BOF     | ON         | 0x40000000 | No paper in the validationBOF     |
|                        | OFF        | 0x00000000 | Paper in the validation BOF       |
| ASB_SPOOLER_IS_STOPPED | ON         | 0x80000000 | Stop the spooler                  |
|                        | OFF        | 0x00000000 | Operation the spooler             |

## ASB Status

| Macro Definitions      | ON/<br>OFF | Value      | Status                                                 |
|------------------------|------------|------------|--------------------------------------------------------|
| ASB_NO_RESPONSE        | ON         | 0x00000001 | No printer response                                    |
|                        | OFF        | 0x00000000 | Printer response                                       |
| ASB_PRINT_SUCCESS      | ON         | 0x00000002 | Print complete                                         |
|                        | OFF        | 0x00000000 | -                                                      |
| ASB_DRAWER_KICK        | ON         | 0x00000004 | Status of the drawer kick number 3 connector pin = "H" |
|                        | OFF        | 0x00000000 | Status of the drawer kick number 3 connector pin = "L" |
| ASB_OFF_LINE           | ON         | 0x00000008 | Offline status                                         |
|                        | OFF        | 0x00000000 | Online status                                          |
| ASB_COVER_OPEN         | ON         | 0x00000020 | Cover is open                                          |
|                        | OFF        | 0x00000000 | Cover is closed                                        |
| ASB_PAPER_FEED         | ON         | 0x00000040 | Paper feed switch is feeding paper                     |
|                        | OFF        | 0x00000000 | Paper feed switch is not feeding paper                 |
| ASB_MECHANICAL_ERR     | ON         | 0x00000400 | Mechanical error generated                             |
|                        | OFF        | 0x00000000 | Mechanical error not generated                         |
| ASB_UNRECOVER_ERR      | ON         | 0x00002000 | Unrecoverable error generated                          |
|                        | OFF        | 0x00000000 | Unrecoverable error not generated                      |
| ASB_SLIP_TOF           | ON         | 0x00200000 | No paper in TOF detector                               |
|                        | OFF        | 0x00000000 | Paper in TOF detector                                  |
| ASB_SLIP_BOF           | ON         | 0x00400000 | No paper in BOF detector                               |
|                        | OFF        | 0x00000000 | Paper in BOF detector                                  |
| ASB_SLIP_SELECTED      | ON         | 0x01000000 | Slip unselected                                        |
|                        | OFF        | 0x00000000 | Slip selected: (active sheet = slip)                   |
| ASB_PRINT_SLIP         | ON         | 0x02000000 | Slip printing is impossible                            |
|                        | OFF        | 0x00000000 | Slip printing is possible                              |
| ASB_SPOOLER_IS_STOPPED | ON         | 0x80000000 | Stop the spooler                                       |
|                        | OFF        | 0x00000000 | Operation the spooler                                  |



## TM-U675

## ASB Status

| Macro Definitions    | ON/<br>OFF | Value      | Status                                                 |
|----------------------|------------|------------|--------------------------------------------------------|
| ASB_NO_RESPONSE      | ON         | 0x00000001 | No printer response                                    |
|                      | OFF        | 0x00000000 | Printer response                                       |
| ASB_PRINT_SUCCESS    | ON         | 0x00000002 | Print complete                                         |
|                      | OFF        | 0x00000000 | -                                                      |
| ASB_DRAWER_KICK      | ON         | 0x00000004 | Status of the drawer kick number 3 connector pin = "H" |
|                      | OFF        | 0x00000000 | Status of the drawer kick number 3 connector pin = "L" |
| ASB_OFF_LINE         | ON         | 0x00000008 | Offline status                                         |
|                      | OFF        | 0x00000000 | Online status                                          |
| ASB_COVER_OPEN       | ON         | 0x00000020 | Cover is open                                          |
|                      | OFF        | 0x00000000 | Cover is closed                                        |
| ASB_PAPER_FEED       | ON         | 0x00000040 | Paper feed switch is feeding paper                     |
|                      | OFF        | 0x00000000 | Paper feed switch is not feeding paper                 |
| ASB_WAIT_ON_LINE     | ON         | 0x00000100 | Waiting for online recovery                            |
|                      | OFF        | 0x00000000 | Not waiting for online recovery                        |
| ASB_PANEL_SWITCH     | ON         | 0x00000200 | Panel switch is ON                                     |
|                      | OFF        | 0x00000000 | Panel switch is OFF                                    |
| ASB_MECHANICAL_ERR   | ON         | 0x00000400 | Mechanical error generated                             |
|                      | OFF        | 0x00000000 | Mechanical error not generated                         |
| ASB_AUTOCUTTER_ERR   | ON         | 0x00000800 | Auto cutter error generated                            |
|                      | OFF        | 0x00000000 | Auto cutter error not generated                        |
| ASB_UNRECOVER_ERR    | ON         | 0x00002000 | Unrecoverable error generated                          |
|                      | OFF        | 0x00000000 | Unrecoverable error not generated                      |
| ASB_AUTORECOVER_ERR  | ON         | 0x00004000 | Auto recovery error generated                          |
|                      | OFF        | 0x00000000 | Auto recovery error not generated                      |
| ASB_RECEIPT_NEAR_END | ON         | 0x00020000 | No paper in the roll paper near end detector           |
|                      | OFF        | 0x00000000 | Paper in the roll paper near end detector              |
| ASB_RECEIPT_END      | ON         | 0x00080000 | No paper in the roll paper end detector                |
|                      | OFF        | 0x00000000 | Paper in the roll paper end detector                   |

| Macro Definitions       | ON/<br>OFF | Value      | Status                                      |
|-------------------------|------------|------------|---------------------------------------------|
| ASB_SLIP_TOF            | ON         | 0x00200000 | No paper in TOF detector                    |
|                         | OFF        | 0x00000000 | Paper in TOF detector                       |
| ASB_SLIP_BOF            | ON         | 0x00400000 | No paper in BOF detector                    |
|                         | OFF        | 0x00000000 | Paper in BOF detector                       |
| ASB_SLIP_SELECTED       | ON         | 0x01000000 | Slip unselected                             |
|                         | OFF        | 0x00000000 | Slip selected: (active sheet = slip)        |
| ASB_PRINT_SLIP          | ON         | 0x02000000 | Slip printing is impossible                 |
|                         | OFF        | 0x00000000 | Slip printing is possible                   |
| ASB_VALIDATION_SELECTED | ON         | 0x04000000 | Validation not selected as the active sheet |
|                         | OFF        | 0x00000000 | Validation selected as the active sheet     |
| ASB_PRINT_VALIDATION    | ON         | 0x08000000 | Validation printing is impossible           |
|                         | OFF        | 0x00000000 | Validation printing is possible             |
| ASB_VALIDATION_TOF      | ON         | 0x20000000 | No paper in the validation TOF              |
|                         | OFF        | 0x00000000 | Paper in the validation TOF                 |
| ASB_VALIDATION_BOF      | ON         | 0x40000000 | No paper in the validation BOF              |
|                         | OFF        | 0x00000000 | Paper in the validation BOF                 |
| ASB_SPOOLER_IS_STOPPED  | ON         | 0x80000000 | Stop the spooler                            |
|                         | OFF        | 0x00000000 | Operation the spooler                       |

## Maintenance Counter

| Counter Number<br>(readno) | Resetability | Counter<br>(readcounter)                                 | Unit       |
|----------------------------|--------------|----------------------------------------------------------|------------|
| 10 (0AH)                   | Resetable    | Number of line feeds (for slip paper)                    | Lines      |
| 11 (0BH)                   | Resetable    | Number of printed characters<br>(for the face of a slip) | Characters |
| 50 (32H)                   | Resetable    | Number of autocutter operations                          | Times      |
| 60 (3CH)                   | Resetable    | Number of MICR reads                                     | Times      |
| 70 (46H)                   | Resetable    | Printer operation time                                   | Hours      |
| 138 (8AH)                  | Cumulative   | Number of line feeds (for slip paper)                    | Lines      |
| 139 (8BH)                  | Cumulative   | Number of printed characters<br>(for the face of a slip) | Characters |
| 178 (B2H)                  | Cumulative   | Number of autocutter operations                          | Times      |
| 188 (BCH)                  | Cumulative   | Number of MICR reads                                     | Times      |
| 198 (C6H)                  | Cumulative   | Printer operation time                                   | Hours      |

## TM-U950

## ASB Status

| Macro Definitions        | ON/<br>OFF | Value      | Status                                                 |
|--------------------------|------------|------------|--------------------------------------------------------|
| ASB_NO_RESPONSE          | ON         | 0x00000001 | No printer response                                    |
|                          | OFF        | 0x00000000 | Printer response                                       |
| ASB_PRINT_SUCCESS        | ON         | 0x00000002 | Print complete                                         |
|                          | OFF        | 0x00000000 | -                                                      |
| ASB_DRAWER_KICK          | ON         | 0x00000004 | Status of the drawer kick number 3 connector pin = "H" |
|                          | OFF        | 0x00000000 | Status of the drawer kick number 3 connector pin = "L" |
| ASB_OFF_LINE             | ON         | 0x00000008 | Offline status                                         |
|                          | OFF        | 0x00000000 | Online status                                          |
| ASB_COVER_OPEN           | ON         | 0x00000020 | Cover is open                                          |
|                          | OFF        | 0x00000000 | Cover is closed                                        |
| ASB_PAPER_FEED           | ON         | 0x00000040 | Paper feed switch is feeding paper                     |
|                          | OFF        | 0x00000000 | Paper feed switch is not feeding paper                 |
| ASB_MECHANICAL_ERR       | ON         | 0x00000400 | Mechanical error generated                             |
|                          | OFF        | 0x00000000 | Mechanical error not generated                         |
| ASB_AUTOCUTTER_ERR       | ON         | 0x00000800 | Auto cutter error generated                            |
|                          | OFF        | 0x00000000 | Auto cutter error not generated                        |
| ASB_UNRECOVER_ERR        | ON         | 0x00002000 | Unrecoverable error generated                          |
|                          | OFF        | 0x00000000 | Unrecoverable error not generated                      |
| ASB_HEAD_TEMPERATURE_ERR | ON         | 0x00004000 | High head temperature error has occurred               |
|                          | OFF        | 0x00000000 | High head temperature error has not occurred           |
| ASB_RECEIPT_NEAR_END     | ON         | 0x00020000 | No paper in the roll paper near end detector           |
|                          | OFF        | 0x00000000 | Paper in the roll paper near end detector              |
| ASB_RECEIPT_END          | ON         | 0x00080000 | No paper in the roll paper end detector                |
|                          | OFF        | 0x00000000 | Paper in the roll paper end detector                   |
| ASB_SLIP_TOF             | ON         | 0x00200000 | No paper in TOF detector                               |
|                          | OFF        | 0x00000000 | Paper in TOF detector                                  |
| ASB_SLIP_BOF             | ON         | 0x00400000 | No paper in BOF detector                               |
|                          | OFF        | 0x00000000 | Paper in BOF detector                                  |

| Macro Definitions      | ON/<br>OFF | Value      | Status                               |
|------------------------|------------|------------|--------------------------------------|
| ASB_SLIP_SELECTED      | ON         | 0x01000000 | Slip unselected                      |
|                        | OFF        | 0x00000000 | Slip selected: (active sheet = slip) |
| ASB_PRINT_SLIP         | ON         | 0x02000000 | Slip printing is impossible          |
|                        | OFF        | 0x00000000 | Slip printing is possible            |
| ASB_SPOOLER_IS_STOPPED | ON         | 0x80000000 | Stop the spooler                     |
|                        | OFF        | 0x00000000 | Operation the spooler                |