

EPSON Advanced Printer Driver for TM series Ver3
Status API
Reference Manual

Revision D

Seiko Epson Corporation

Notes

- (1) Reproduction of this documentation by any means in part or in whole is prohibited.
- (2) Contents of this documentation are subject to change without notice.
- (3) Epson will not be responsible for any consequences resulting from the use of any information in this documentation.
- (4) Comments and notification of any mistakes in this documentation are gratefully accepted.

Trademarks

Microsoft, Windows 95, Windows 98, Windows NT, Windows 2000, Windows XP, Visual Basic and Visual C++ are trademarks and registered trademarks of Microsoft Corporation, USA.

Epson and ESC/POS are registered trademarks of Seiko Epson Corporation.

All other company names and trademarks mentioned in this documentation are the property of their respective owners.

LEADTOOLS

Copyright (C) 1991-2001 LEAD Technologies, Inc.

Contents

1. INTRODUCTION	1
2. OPERATING ENVIRONMENT	1
2.1. Operating System	1
2.2. Computer	1
2.3. Printers	1
3. STATUS API	3
3.1. Outline	3
3.1.1. <i>Acquiring the Status Using BiGetStatus</i>	6
3.1.2. <i>Acquiring the Status Using BiSetStatusBackFunction</i>	6
3.1.3. <i>Acquiring the Status Using BiSetStatusBackWnd</i>	7
3.2. Printer Statuses that Can Be Acquired	8
3.3. Scanning Data Processing Overview	10
3.4. Scanning Data Processing	11
3.5. Scanning New Function for the TM-J9000/9100	11
3.6. BiOpenMonPrinter	13
3.7. BiGetStatus	14
3.8. BiGetRealStatus	15
3.9. BiSetStatusBackFunction	16
3.10. BiSetStatusBackFunctionEx	17
3.11. BiSetStatusBackWnd	18
3.12. BiCancelStatusBack	19
3.13. BiDirectIO	20
3.14. BiDirectIOEx	22
3.15. BiSendDataFile	24
3.16. BiDirectSendRead	26
3.17. BiResetPrinter	28
3.18. BiGetOfflineCode	29
3.19. BiGetCounter	34
3.20. BiResetCounter	36
3.21. BiCancelError	37
3.22. BiGetType	38
3.23. BiGetPrnCapability	41
3.24. BiOpenDrawer	46
3.25. BiSetMonInterval	47
3.26. BiSetMonEtherInterval	48
3.27. BiSetDefaultEchoTime	49
3.28. BiSetEtherEchoTime	50
3.29. BiGetInkStatus	51
3.30. BiSetInkStatusBackFunction	52
3.31. BiSetInkStatusBackFunctionEx	53
3.32. BiSetInkStatusBackWnd	54
3.33. BiCancelInkStatusBack	55
3.34. BiGetBatteryStatus	56
3.35. BiSetBatteryStatusBackFunctionEx	57
3.36. BiSetBatteryStatusBackWndEx	58
3.37. BiCancelBatteryStatusBack	59
3.38. BiAutoPowerOffTime	60
3.39. BiPowerOff	61
3.40. BiMICRSetReadBackFunction	62

3.41.	BiMICRSetReadBackFunctionEx	64
3.42.	BiMICRSetReadBackWnd	65
3.43.	BiMICRSelectDataHandling	66
3.44.	BiMICRReadCheck	67
3.45.	BiMICRCancelWaitCheckInsertion	68
3.46.	BiMICRCancelReadBack	69
3.47.	BiMICRRetransmissionCheckData	70
3.48.	BiMICRGetStatus	71
3.49.	BiMICREjectCheck	73
3.50.	BiMICRLoadCheck	74
3.51.	BiMICRCleaning	75
3.52.	BiSCNSelectScanUnit	76
3.53.	BiSCNSetImageQuality	77
3.54.	BiSCNSetImageFormat	79
3.55.	BiSCNSetScanArea	80
3.56.	BiSCNPreScan	82
3.57.	BiSCNGetImageQuality	83
3.58.	BiSCNGetImageFormat	84
3.59.	BiSCNGetScanArea	85
3.60.	BiSCNSetReadBackFunction	86
3.61.	BiSCNSetReadBackFunctionEx	88
3.62.	BiSCNSetReadBackWnd	90
3.63.	BiSCNCancelReadBack	91
3.64.	BiSCNReadImage	92
3.65.	BiSCNRetransmissionImage	94
3.66.	BiSCNGetClumpStatus	96
3.67.	BiSCNClumpPaper	98
3.68.	BiSCNSetCroppingArea	99
3.69.	BiSCNGetCroppingArea	101
3.70.	BiSCNDeleteCroppingArea	102
3.71.	BiSCNDeleteImage	103
3.72.	BiSCNGetImageList	104
3.73.	BiSCNGetImageRemainingCapacity	105
3.74.	BiESCNEnable	106
3.75.	BiESCNGetAutoSize	107
3.76.	BiESCNSetAutoSize	108
3.77.	BiESCNGetCutSize	109
3.78.	BiESCNSetCutSize	110
3.79.	BiESCNGetRotate	111
3.80.	BiESCNSetRotate	112
3.81.	BiESCNGetDocumentSize	113
3.82.	BiESCNSetDocumentSize	114
3.83.	BiESCNDefineCropArea	115
3.84.	BiESCNGetMaxCropArea	117
3.85.	BiESCNSStoreImage	118
3.86.	BiESCNRtrieveImage	120
3.87.	BiESCNClearImage	122
3.88.	BiESCNGetRemainingImages	124
3.89.	BiSCNMICRFunction	125
3.90.	BiSCNMICRCancelFunction	138
3.91.	BiSCNSelectScanFace	139
3.92.	BiCloseMonPrinter	140
4.	LOG COLLECTION FUNCTION	141

4.1.	Log File Outline	141
4.2.	Registry Details	142
4.3.	Log File Details	143
5.	NOTES	148
APPENDIX A. HEADER FILE		150
APPENDIX A OPERATION OF EACH FUNCTION ACCORDING TO PRINTER STATUS		1
APPENDIX B END OF PROCESSING JUDGMENT METHOD AFTER EACH FUNCTION IS EXECUTED		4

1.Introduction

Status API is a program that offers an Application Program Interface for obtaining the printer and presenter status during printing and when not printing, in conjunction with the TM printer drivers made by Epson. By using this API, printer status handling functions can be integrated more simply with applications.

This manual explains concerning the Status API. In order to utilize this API's functions fully and in order to use them correctly, please use this manual as a reference guide when developing applications.

When developing an application with StatusAPI using VC++, you need to load EpsStmApi.dll and obtain an API address. Use LoadLibrary for downloading the dll. To obtain the API address, use GetProcAddress. When completing the application, use FreeLibrary to open the dll. See the Microsoft Windows(R)SDK help or the Visual Studio help for detailed usage on LoadLibrary, GetProcAddress, and FreeLibrary. You can find the header file named as EpsStmApi.h that defines a macro to be used in the Appendix A. Header file.

2. Operating Environment

2.1. Operating System

The driver operation has been verified with the following operating systems.

- Microsoft Windows NT4.0 SP6a English
- Microsoft Windows 2000 SP4 English
- Microsoft Windows XP SP2 English
- Microsoft Windows XP Embedded

This driver is not supported by Windows 95/98.

2.2. Computer

This software supports computers, which the above operating systems run on.

- AT Compatible Computers

2.3. Printers

This software is compatible with the printer in the following table.

Please use this API with the printer drivers shown on the right side of the table.

Printer	Driver name
TM-U375	EPSON TM-U375 Receipt
	EPSON TM-U375 Slip
	EPSON TM-U375 Validation
TM-J9000/9100	EPSON TM-J9000/9100 Receipt
	EPSON TM-J9000/9100 Validation
TM-P60	EPSON TM-P60 Receipt
TM-U220A/B/D	EPSON TM-U220 Receipt
TM-H6000II	EPSON TM-H6000II Receipt
	EPSON TM-H6000II Slip
	EPSON TM-H6000II Validation
	EPSON TM-H6000II Endorse
TM-L90	EPSON TM-L90 Receipt

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 2	SHEET 1

	EPSON TM-L90Peeler Receipt
	EPSON TM-L90 Receipt Reverse
	EPSON TM-L90 Reduce35
	EPSON TM-L90 Label
	EPSON TM-L90Peeler Label
	EPSON TM-L90 Label Reverse
TM-T90	EPSON TM-T90 Receipt
	EPSON TM-T90 Reverse
	EPSON TM-T90 Reduce35
TM-T88II/T88III	EPSON TM-T88III Receipt
	EPSON TM-T88III Reduce35
	EPSON TM-T88II(R) Receipt
	EPSON TM-T88II(R) Reduce35
TM-U210A/B/D	EPSON TM-U210 Receipt
	EPSON TM-U210A(R) Receipt
TM-H5000II	EPSON TM-H5000II Receipt
	EPSON TM-H5000II Reduce35
	EPSON TM-H5000II Slip
TM-H5200	EPSON TM-H5200 Receipt
	EPSON TM-H5200 Reduce35
	EPSON TM-H5200 Slip
TM-J2000/2100	EPSON TM-J2000/2100 Receipt
	EPSON TM-J2000/2100 Reverse
	EPSON TM-J2000/2100 Reduce35
TM-J7000/7100	EPSON TM-J7000/7100 Receipt
	EPSON TM-J7000/7100 Reduce35
	EPSON TM-J7000/7100 Slip
	EPSON TM-J7000/7100 Endorse
TM-J7500/7600	EPSON TM-J7500/7600 Receipt
	EPSON TM-J7500/7600 Reduce35
	EPSON TM-J7500/7600 Slip
TM-U230	EPSON TM-U230 Receipt
TM-H3000(R)	EPSON TM-H3000(R) Receipt
	EPSON TM-H3000(R) Reduce35
	EPSON TM-H3000(R) Slip
TM-L60II	EPSON TM-L60II Receipt
	EPSON TM-L60II Label
TM-U295	EPSON TM-U295 Slip
TM-U590	EPSON TM-U590 Slip
TM-U675	EPSON TM-U675 Receipt
	EPSON TM-U675 Slip
	EPSON TM-U675 Validation
TM-U950	EPSON TM-U590 Receipt
	EPSON TM-U590 Slip

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 3	SHEET 2

3.Status API

3.1. Outline

The following functions are provided in the Status API.

- BiOpenMonPrinter ••• Open the printer which is the object of status monitoring.
- BiGetStatus ••• Acquire the status.
- BiGetRealStatus ••• Acquire the latest printer status
- BiSetStatusBackFunction ••• Register the auto status notification callback function.
- BiSetStatusBackFunctionEx ••• Sets the extended status notification call back argument
- BiSetStatusBackWnd ••• Register the auto status notification message acquisition window.
- BiCancelStatusBack ••• Cancel the auto status notification
- BiDirectIO ••• Direct input/output
- BiDirectIOEx ••• Extended Direct input/output
- BiSendDataFile ••• Macro command registry
- BiDirectSendRead ••• Executes a registered macro command
- BiResetPrinter ••• Printer reset
- BiGetOfflineCode ••• Acquire the reason for being off-line
- BiGetCounter ••• Acquire the maintenance counter
- BiResetCounter ••• Reset the maintenance counter
- BiCancelError ••• Restore recoverable printer errors
- BiGetType ••• Acquire the printer's type ID
- BiGetPrnCapability ••• Acquire the printer's information
- BiOpenDrawer ••• Operates the drawer
- BiSetMonInterval ••• Change the interval of the reading of status information.
- BiSetMonEtherInterval ••• Change the interval of the reading of status information of Ethernet connection printer.
- BiSetDefaultEchoTime ••• Sets the default value for confirming the printer's response time in a printer with an Ethernet connection.
- BiSetEtherEchoTime ••• Sets the printer's response time in a printer with an Ethernet connection.
- BiGetInkStatus ••• Acquires the ink status
- BiSetInkStatusBackFunction ••• Sets the ink status notification call back function
- BiSetInkStatusBackWnd ••• Sets the ink status notification window
- BiCancelInkStatusBack ••• Cancels the ink status notification
- BiGetBatteryStatus ••• Acquire the printer's battery status
- BiSetBatteryStatusBackFunctionEx ••• Register the printer's battery status notification callback function
- BiSetBatteryStatusBackWndEx ••• Register the printer's battery status notification message acquisition window
- BiCancelBatteryStatusBack ••• Cancel the printer's battery status notification
- BiAutoPowerOffTime ••• Set the power off time and acquire the setting value
- BiPowerOffTime ••• Execute the power off
- BiMICRSetReadBackFunction ••• Sets the check reading results notification function
- BiMICRSetReadBackWnd ••• Sets the check reading results notification window
- BiMICRSelectDataHandling ••• Selects the check reading operation
- BiMICRReadCheck ••• Reads the check
- BiMICRCancelWaitCheckInsertion ••• Cancels the check insertion wait
- BiMICRCancelReadBack ••• Cancels the check reading results notification
- BiMICRRetransmissionCheckData ••• Rsend the check reading results

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 4	SHEET 3

- BiMICRGetStatus
 - BiMICREjectCheck
 - BiMICRLoadCheck
 - BiMICRCleaning
 - BiSCNSetImageQuality
 - BiSCNSetImageFormat
 - BiSCNSetScanArea
 - BiSCNPreScan
 - BiSCNGetImageQuality
 - BiSCNGetImageFormat
 - BiSCNGetScanArea
 - BiSCNSetReadBackFunction
 - BiSCNSetReadBackWnd
 - BiSCNCancelReadBack
 - BiSCNReadImage
 - BiSCNRetransmissionImage
 - BiSCNGetClumpStatus
 - BiSCNClumpPaper
 - BiSCNSetCroppingArea
 - BiSCNGetCroppingArea
 - BiSCNDeleteCroppingArea
 - BiSCNDeleteImage
 - BiSCNGetImageList
 - BiSCNGetImageRemainingCapacity
 - BiESCNEnable()
 - BiESCNGetDocumentSize()
 - BiESCNSetDocumentSize()
 - BiESCNGetAutoSize()
 - BiESCNSetAutoSize()
 - BiESCNGetCutSize()
 - BiESCNSetCutSize()
 - BiESCNGETRotate()
 - BiESCNSetRotate()
 - BiESCNDefineCropArea()
 - BiESCNGetMaxCropAreas()
 - BiESCNSaveImage()
 - BiESCNRetrieveImage()
 - BiESCNClearImage()
 - BiESCNGetRemainingImages()
 - BiSCNMICRFunction
 - BiSCNMICRCancelFunction
 - BiSCNSelectScanFace
 - BiCloseMonPrinter
- Acquires the MICR status
 - Ejects the check
 - Loads the check to the printing position
 - Cleans the MICR mechanism
 - Sets the scanning quality for image data.
 - Sets the scanning format for image data.
 - Sets the scanning area.
 - Sets the image data density automatically.
 - Acquires the scanning quality setting value for image data.
 - Acquires the scanning format setting value for image data.
 - Acquires the scanning area setting values.
 - Sets the image scanning notification call back function.
 - Sets the image scanning notification window.
 - Cancels the image scanning notification.
 - Scans an image.
 - Retransmits the image scanning results.
 - Acquires the cut sheet paper clamping status.
 - Executes clamping of cut sheet paper.
 - Sets the cropping area.
 - Acquires the setting value for the cropping area.
 - Deletes the cropping area.
 - Deletes the reading result of a selected image
 - Acquires a list of reading result IDs of images
 - Acquires remaining NV memory capacity used for saving the result of reading images
 - Enables use of a scanner extension function.
 - Acquires the width and height of the currently selected image data.
 - Selects the width and height of image data.
 - Acquires setting information on cutting any unnecessary area that surrounds the image data.
 - Selects whether the unnecessary area that surrounds the image data is cut or not.
 - Acquires setting information on cutting the left and right sides of the image data with the selected size.
 - Selects size of cutting the left and right sides of the image data.
 - Acquires information on whether rotation processing for the image data is enabled.
 - Selects whether rotation processing for the image data is enabled or disabled.
 - Selects a cropping area for the image data.
 - Acquires a maximum number of defining cropping areas.
 - Saves cropped image data in memory or a file.
 - Retrieves the data saved in memory or a file.
 - Clears the data saved in memory or a file.
 - Acquires the amount of data that can be saved in memory or a file.
 - Scans an image and read MICR characters.
 - Cancel the scanning an image and reading MICR characters.
 - specifies the back or front for an image that is being read.
 - Close the printer that is the object of status monitoring.

In this chapter, we explain concerning methods for acquiring the printer status using BiGetStatus, BiSetStatusBackFunction, BiSetStatusBackWnd, but BiDirectIO or BiDirectIOEx is also provided as a function that enables simple input of data to the printer and output. Use this function if printer data other than the printer status are read, or in cases where you are writing to

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 5	SHEET 4

the printer, etc.

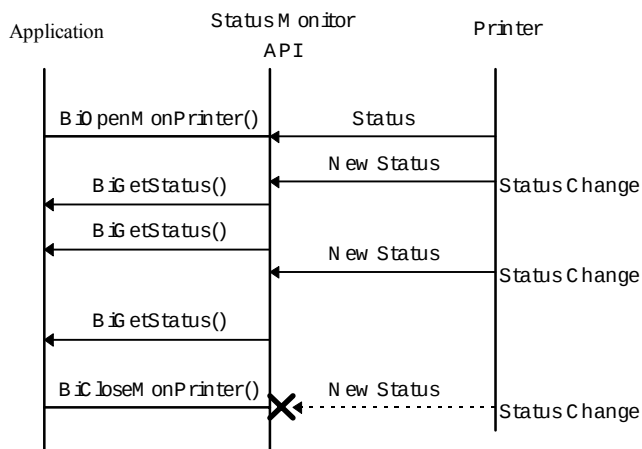
Also see Appendix A and Appendix B concerning operations of each function when the printer is online, offline and when the power is cut off, as well as for judgment methods for determining if function execution is normal or abnormal.

	TITLE EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 6	SHEET 5

3.1.1. Acquiring the Status Using BiGetStatus

Using BiGetStatus, the application can acquire the printer's status when necessary as shown in the following figure.

Flow of Status using BiGetStatus

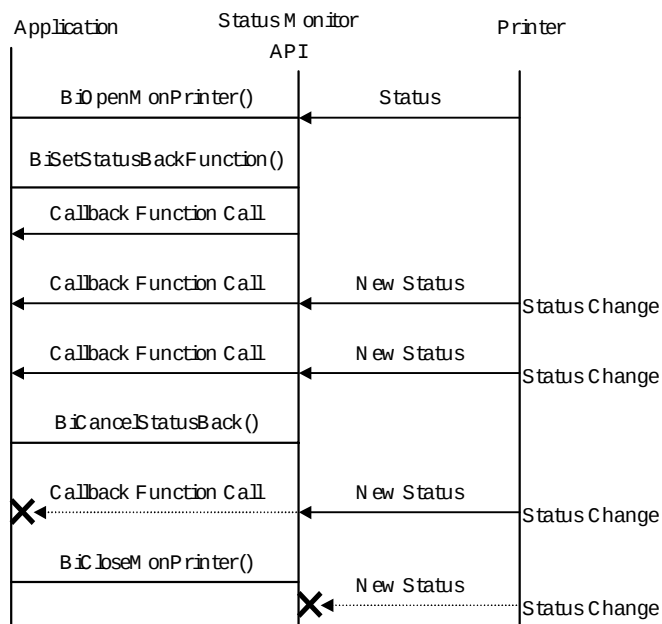


- If the monitored printer is opened by BiOpenMonPrinter(), Status API reads the printer status at that point in time. After that, the Status API reads and saves the printer status each time there is a change in status.
- If BiGetStatus() is called, The printer status which is being saved by the Status API at that point in time is returned to the application
- If BiCloseMonPrinter() is called, the Status API closes monitoring of the printer status.

3.1.2. Acquiring the Status Using BiSetStatusBackFunction

If BiSetStatusBackFunction is used and a method of acquiring auto status notifications is registered, each time the printer status changes, the new status can be acquired through calling of the callback function.

Flow of Status Using BiSetStatusBack Function

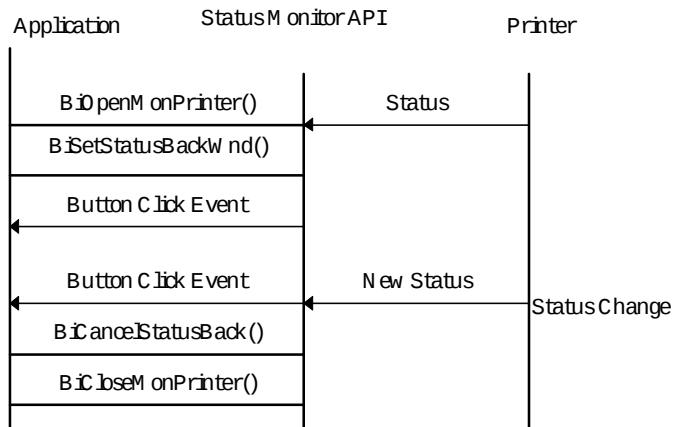


- If the monitored printer is opened by BiOpenMonPrinter(), the status API the printer status at that moment is read.
- If BiSetStatusBackFunction() is called and the callback function is registered, the Status API calls the callback function and notifies it of the printer status at that point in time. After that, each time there is a change in the printer status, the Status API calls the callback function and notifies it of the new printer status.
- If BiCancelStatusBack() is called, status notification by calling the callback function is not performed thereafter.
- If BiCloseMonPrinter() is called, the Status API closes monitoring of the printer status.

	TITLE EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No NEXT 7		SHEET 6
--	--	-------------------	---------------------	--	------------

3.1.3.Acquiring the Status Using BiSetStatusBackWnd

Flow of the Status Using BiSetStatusBackWnd



If you are acquiring auto status notification by a language which does not support callback functions like Microsoft Visual Basic 5.0 32-bit with Office Service Pack 3, use `BiSetStatusBackWnd`. If this function is used and the addresses of the memory where the printer status are stored and the window handle of the buttons on the application's screen, the Status API sets the new status in the specified addresses, and sends a click event to the registered buttons. For details of how to use this method, please refer to the Visual Basic 5.0 32-bit with Office Service Pack 3 sample program which is included in the package.

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 8	SHEET 7

3.2. Printer Statuses that Can Be Acquired

In Status API, using the Automatic Status Back command supported by TM printers, the following statuses are acquired and offered to the application. The acquired status changes into the DWORD value and notifies the application. ON/OFF of each bit with the value of DWORD corresponds to each printer status like the table below. However, depending on the model of printer used, a status may not be necessary, so please use them after you have a good understanding of the Automatic Status Back command specifications for the printer you are using.

Macro Definition	Value	OFF	ON
ASB_NO_RESPONSE	0x00000001	Printer Responds	Printer does not respond.
ASB_PRINT_SUCCESS	0x00000002	-	Printing Finished
ASB_UNRECOVER_ERR	0x00002000	No non-recoverable error.	A non-recoverable error has occurred.
ASB_AUTORECOVER_ERR	0x00004000	No auto-recoverable error.	An auto-recoverable error has occurred.
ASB_OFF_LINE	0x00000008	On-line	Off-line
ASB_PRINTER_FEED	0x00000040	Not feeding paper by the paper feed switch.	Feeding paper by the paper feed switch.
ASB_PANEL_SWITCH	0x00000200	Panel switch OFF	Panel switch ON
ASB_MECHANICAL_ERR	0x00000400	No mechanical error	A mechanical error has occurred.
ASB_AUTOCUTTER_ERR	0x00000800	No cutter error.	A cutter error has occurred.
ASB_DRAWER_KICK	0x00000004	Drawer kick-out connector pin 3 is LOW.	Drawer kick-out connector pin 3 is HIGH.
ASB_RECEIPT_END	0x00080000	Paper at the receipt end detector.	No paper at the receipt end detector.
ASB_COVER_OPEN	0x00000020	Cover is closed.	Cover is open.
ASB_RECEIPT_NEAR_END	0x00020000	Paper at the receipt near end detector.	No paper at the receipt near end detector.
ASB_SLIP_TOF	0x00200000	Paper at the Slip TOF detector.	No Paper at the Slip TOF detector.
ASB_SLIP_BOF	0x00400000	Paper at the Slip BOF detector.	No Paper at the Slip BOF detector.
ASB_SLIP_SELECTED *1	0x01000000	Slip is selected.	Slip is not selected.
ASB_PRINT_SLIP	0x02000000	Can print on slip.	Can not print on slip.
ASB_VALIDATION_SELECTED *1	0x04000000	Validation is selected.	Validation is not selected.
ASB_PRINT_VALIDATION	0x08000000	Can print on validation.	Can not print on validation.
ASB_VALIDATION_TOF	0x20000000	Paper at the validation TOF detector.	No Paper at the validation TOF detector.
ASB_VALIDATION_BOF	0x40000000	Paper at the validation BOF detector.	No Paper at the validation BOF detector.

*1 For TM-L90 with Peeler

ASB_WAIT_REMOVE_LABEL	0x01000000	Not waiting for label removal.	Waiting for label removal.
ASB_NO_LABEL	0x04000000	Label peeling sensor: paper present.	Label peeling sensor: paper not present.

[Supplement]

It prepares a macro definition file of the above status. Refer to Appendix A. Header file

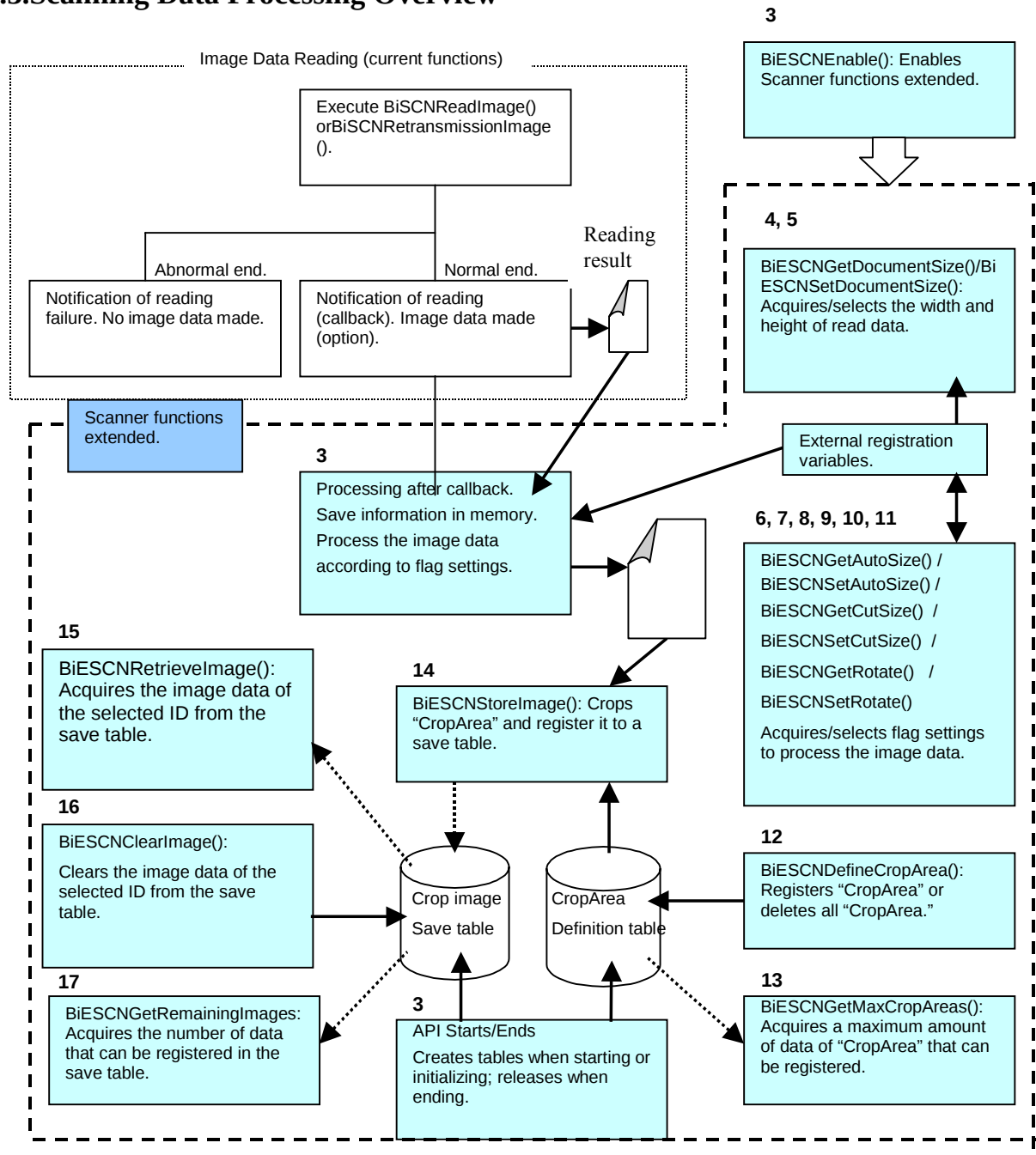
- Transition in the Close printing status (ASB_PRINT_SUCCESS) is as follows.

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 9	SHEET 8

1. It goes Off when printing starts, and goes On when printing is finished.
2. According to BiGetStatus(), or BiSetStatusBackFunction() or BiSetStatusBackWnd(), after status back notifies of ON once, it goes OFF.

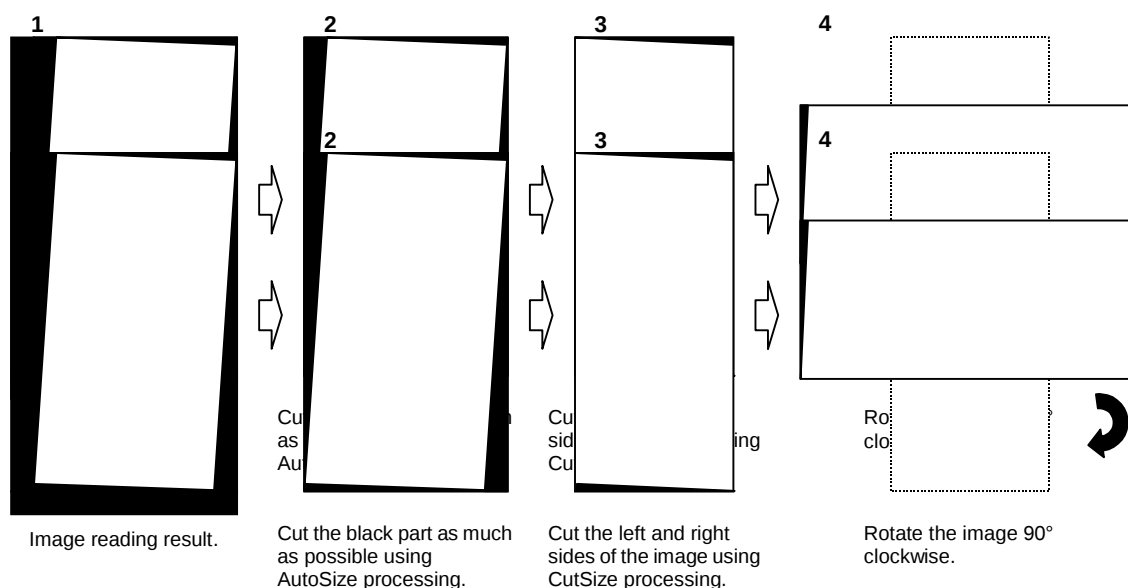
	TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision	No	
				NEXT 10	SHEET 9

3.3.Scanning Data Processing Overview



TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 11	SHEET 10

3.4.Scanning Data Processing



3.5.Scanning New Function for the TM-J9000/9100

SCAN / MICR / TRANSACTION PRINTING

BiSCNMICRFunction and BiSCNMICRCancelFunction were added to allow Scan / MICR / transaction printing in a single pass. In addition, three paper discharge methods were made possible for cases where there is normal completion, detection of multiple sheets being sent and errors other than detection of multiple sheets being sent. (Discharge, release, and stopping at that point) These can be set independently for each phase (initialization, scanning, MICR, and printing). By this means, it is possible to control the process such that with normal completion the paper is discharged to the pocket; when multiple sheets are detected it stops at that point and the user gives confirmation for continuing, and when there are other errors the paper is released, etc.

SCAN

Slip / Photo-ID reading is possible. It is possible to read both the front and back of a slip. Scanning APIs (BiSCNxxxx / BiESCNxxxx) other than reading and some exceptions were made so they can be used as they have been up to this point. Both the front and back faces can be read, and variables and tables are prepared separately for the back and front faces. Settings, acquisition and other operations related to these variables and tables are executed to the face specified by BiSCNSelectFace().

MICR

MIC OCR functions, parsing processes and a reliability notification function have been executed.

TRANSACTION PRINTING

Check sheet endorsement and an electronic endorsement function have been made possible. Print color, bold printing, underlining, font, font size and printing direction can be designated as print attributes.

When printing goes out of the print area, the printer gives notification with a clear response. StatusAPI notifies the application using a return code when a clear response is received. In this case, there is no notification of ASB_PRINT_SUCCESS in 3.2, **Printer Statuses that Can Be Acquired**. StatusAPI operates in the following steps:

- Print attributes and print data are sent
- A command for ASB_PRINT_SUCCESS is sent
- A response of ASB_PRINT_SUCCESS is received
- Clear response is checked
- Paper is discharged

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 12	SHEET 11

- Printing completed in ASB or error notification

DETECTION OF MULTIPLE SHEETS

It is possible to set multiple sheet detection in units of 0.01 mm during Scan / MICR reading. When the setting is 0, it indicates 0.18 mm, which is the initial setting. In addition, there is no multiple sheet detection when -1 is the setting. When there is detection of multiple sheets being sent, the paper is released or discharged according to what is indicated in the application, and a message is sent to the application. When there is detection of multiple sheets being sent in models equipped with automatic sheet feeders (ASF), it is possible to make a buzzer sound. Regardless of whether an ASF is attached or not, multiple sheet detection settings are carried out with BiSCNMICRFunction.

PUMP UNIT LIFE NOTIFICATION

When BiOpenMonPrinter runs, the pump unit life is checked when NoResponse is returned, and if the life is up, there is an error.

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 13	SHEET 12

3.6.BiOpenMonPrinter

[Function]

This opens the printer for which the status is being monitored.

[Format]

int BiOpenMonPrinter (int nType, LPSTR pName):

[Argument]

int nType

This specifies the type of name specified in pName. One of the following two types is specified.

TYPE_PORT The port name is specified in pName.

TYPE_PRINTER The printer name is specified in pName.

LPSTR pName

This specifies the printer that is opened. The specification is as follows, depending on the nType value.

If the nType is TYPE_PORT, it specifies the port name to which the printer is connected.

(Example: "COM1", "COM2", "LPT1", ...)

If the nType is TYPE_PRINTER, the printer name is specified.

(Example: "EPSON TM-H6000II Receipt," ...)

[Return Value]

If opening of the specified printer was successful, the handle value (greater than zero) by which that printer is identified is returned. If there is an error, the following error codes (less than zero) are returned.

ERR_TYPE(-10)	nType parameter error
ERR_OPENED(-20)	The specified printer has already been opened.
ERR_NO_PRINTER(-30)	The specified printer driver does not exist.
ERR_NO_TARGET(-40)	An unsupported printer was specified. (The printer's power is not On or the cable connections are faulty, etc.)
ERR_NO_MEMORY(-50)	Memory is insufficient.
ERR_PARAM(-80)	Parameter error.
ERR_SS_NOT_EXIST (-340)	The status service has not been started up.
ERR_SPL_NOT_EXIST (-350)	The spooler service has not been started up.
ERR_SPL_PAUSED (-370)	The OS does not open the port and the spooler is in a temporary stop status.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Explanation]

Before using an API function other than this function, it is necessary that this function be executed first.

The number of the printer that is able to open at a time is to 32 units.

Use of this function when the printer is in the Offline state, and the functions that can be used up to the time when the Online state is restored are limited.

[Note]

The handle value obtained is valid only in the same thread.

[Supported printer]

TM-T88II(R), TM-T88III, TM-T90, TM-L90, TM-H5000II, TM-H5200, TM-U590, TM-U675, TM-U375, TM-H6000, TM-H6000II, TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, M-H3000(R), TM-U230, TM-U220, TM-U210, TM-U950, TM-U295, TM-L60II, TM-P60, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 14	SHEET 13

3.7.BiGetStatus

[Function]

Acquires the current printer status.

[Format]

```
int BiGetStatus (int nHandle, LPDWORD lpStatus);
```

[Argument]

int nHandle

Specify the handle value of the printer you are acquiring the status of. For the handle value, use the value returned by BiOpenMonPrinter().

LPDWORD lpStatus

The current status of the printer is set.

[Return Value]

If acquisition of the printer's status was successful, a 0 is returned. In the case of an error, the following error code (less than zero) is returned.

ERR_HANDLE (-60) The handle value that specifies the printer is incorrect.

ERR_PARAM (-90) Parameter error

ERR_EXEC_FUNCTION(-310) Cannot be used because the other API is being executed.

ERR_NOT_ALLOW_IN_CB(-410) Cannot be called for from the current callback routine.

[Explanation]

Refer to **3.2, Printer Statuses that Can Be Acquired**, for the printer statuses that you can acquire. However, some statuses may be invalid depending on the model of printer used.

[Supported printer]

TM-T88II(R), TM-T88III, TM-T90, TM-L90, TM-H5000II, TM-H5200, TM-U590, TM-U675, TM-U375, TM-H6000, TM-H6000II, TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, TM-H3000(R), TM-U230, TM-U220, TM-U210, TM-U950, TM-U295, TM-L60II, TM-P60, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 15	SHEET 14

3.8.BiGetRealStatus

[Function]

Acquire the latest printer status

[Format]

int BiGetRealStatus (int nHandle, LPDWORD lpStatus)

[Argument]

int nHandle

Specify the handle value of the printer you are acquiring the status of. For the handle value, use the value returned by BiOpenMonPrinter().

LPDWORD lpStatus

The current status of the printer is set.

[Return Value]

If acquisition of the printer's status was successful, a 0 is returned. In the case of an error, the following error code (less than zero) is returned.

ERR_HANDLE (-60)	The handle value that specifies the printer is incorrect.
ERR_TIMEOUT (-70)	A time out error occurred.
ERR_ACCESS (-80)	Reading/writing with the printer is not possible (printing in progress).
ERR_NOT_SUPPORT (-100)	Not supported (Including when a serial connection is used.)
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is recovered.
ERR_NOT_EPSON (-120)	Cannot be used (printer not EPSON)
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_EXEC_MICR (-320)	Cannot be used because MICR reading is being executed.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.
ERR_RESET (-400)	Cannot be used because the printer is being reset.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Explanation]

Refer to **3.2, Printer Statuses that Can Be Acquired**, for the printer statuses that you can acquire. However, some statuses may be invalid depending on the model of printer used.

The difference between this argument and BiGetStatus is that status acquisition command is actually transmitted to the printer after the argument is called for and then the printer replies. Therefore, when printing is completed, the bit of ASB_PRINTSUCCESS will not be ON. When the power is off, ERR_ACCESS is returned and the bit of ASB_NO_RESPONSE will not be ON.

[Note]

Note that when an error has occurred, if this argument is used frequently, the printer buffer becomes full and ERR_ACCESS will occur.

[Supported printer]

TM-T88II(R), TM-T88III, TM-T90, TM-L90, TM-H5000II, TM-H5200, TM-U590, TM-U675, TM-U375, TM-H6000, TM-H6000II, TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, TM-H3000(R), TM-U230, TM-U220, TM-U210, TM-U950, TM-U295, TM-L60II, TM-P60, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 16	SHEET 15

3.9. BiSetStatusBackFunction

[Function]

This registers the called callback function on the occasion of Automatic Status Back.

[Format]

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

[Argument]

int nHandle

This specifies the handle value of the printer for which the status is monitored. The BiOpenMonPrinter() return value is used as the handle value.

int (CALLBACK EXPORT *pStatusCB) (DWORD dwStatus)

Sets the callback function's address.

[Return Value]

If registration of the callback function is successful, a 0 is returned. If there is an error, the following error code (less than zero) is returned.

ERR_HANDLE (-60)	The handle value that specifies the printer is incorrect.
ERR_PARAM (-90)	Parameter error
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Explanation]

If there is a BiSetStatusBackFunction() call, first, the printer status at that point in time is set in dwStatus and the callback function is called. After that, each time the printer's status changes, the new status is set in dwStatus and the callback function is called. Cancellation of Automatic Status Back is accomplished by executing BiCancelStatusBack().

For the value that is set in the callback function's argument dwStatus, see the table in **3.2 Printer Statuses that Can Be Acquired**.

[Note]

Within registered callback function, it is a separate thread. Therefore, StatusAPI cannot be used from the callback function.

[Supported printer]

TM-T88II(R), TM-T88III, TM-T90, TM-L90, TM-H5000II, TM-H5200, TM-U590, TM-U675, TM-U375, TM-H6000, TM-H6000II, TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, TM-H3000(R), TM-U230, TM-U220, TM-U210, TM-U950, TM-U295, TM-L60II, TM-P60, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 17	SHEET 16

3.10.BiSetStatusBackFunctionEx

[Function]

This registers the called callback function on the occasion of Automatic Status Back.

[Format]

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

[Argument]

int nHandle

This specifies the handle value of the printer for which the status is monitored. The BiOpenMonPrinter() return value is used as the handle value.

int (CALLBACK EXPORT *pStatusCB) (DWORD dwStatus, LPSTR lpcPortName)

Sets the callback function's address. The port name is set to lpcPortName.

[Return Value]

If registration of the callback function is successful, a 0 is returned. If there is an error, the following error code (less than zero) is returned.

ERR_HANDLE (-60)	The handle value that specifies the printer is incorrect.
ERR_PARAM (-90)	Parameter error
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Explanation]

If there is a BiSetStatusBackFunctionEx() call, first, the printer status at that point in time is set in dwStatus and the callback function is called. After that, each time the printer's status changes, the new status is set in dwStatus and the callback function is called. Cancellation of Automatic Status Back is accomplished by executing BiCancelStatusBack().

For the value that is set in the callback function's argument dwStatus, see the table in **3.2 Printer Statuses that Can Be Acquired**.

[Note]

Within registered callback function, it is a separate thread. Therefore, StatusAPI cannot be used from the callback function. The difference between this argument and BiSetStatusBackFunctionEx is that the port from which the callback is sent can be recognized.

[Supported printer]

TM-T88II(R), TM-T88III, TM-T90, TM-L90, TM-H5000II, TM-H5200, TM-U590, TM-U675, TM-U375, TM-H6000, TM-H6000II, TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, TM-H3000(R), TM-U230, TM-U220, TM-U210, TM-U950, TM-U295, TM-L60II, TM-P60, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 18	SHEET 17

3.11. BiSetStatusBackWnd

[Function]

This registers a Windows handle for a button which sends a click even when there is an Automatic Status Back, and registers an address in memory where the status information is set.

[Format]

```
int BiSetStatusBackWnd (int nHandle, long hWnd, LPDWORD lpdwStatus);
```

[Argument]

int nHandle

This specifies the handle value of the printer for which the status is to be acquired. The value returned from BiOpenMonPrinter() is used as the handle value.

Long hWnd

Specifies the Windows handle of the button which sends a click event during Automatic Status Back.

LPDWORD lpdwStatus

Specifies the address in memory where the printer status is set.

[Return Value]

If registration of the button's windows handle and the address where the status information is saved was successful, 0 is returned. If there is an error, the following error code (less than zero) is returned.

ERR_HANDLE (-60) The handle value that specifies the printer is incorrect.

ERR_PARAM (-90) Parameter error

ERR_EXEC_FUNCTION (-310) Cannot be used because the other API is being executed.

ERR_NOT_ALLOW_IN_CB(-410) Cannot be called for from the current callback routine.

[Explanation]

If there is a BiSetStatusBackWind() call, first, the printer status at that point is set in lpdwStatus and a click event is sent to the button window specified by hWnd. After that, each time there is a change in the printer status, the new status is set in lpdwStatus and a click event is set to the specified button window. Automatic Status Back is canceled by executing BiCancelStatusBack().

For the value set in the memory address specified by lpdwStatus, see the table in **3.2 Printer Statuses that Can Be Acquired**.

[Supported printer]

TM-T88II(R), TM-T88III, TM-T90, TM-L90, TM-H5000II, TM-H5200, TM-U590, TM-U675, TM-U375, TM-H6000, TM-H6000II, TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, TM-H3000(R), TM-U230, TM-U220, TM-U210, TM-U950, TM-U295, TM-L60II, TM-P60, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 19	SHEET 18

3.12. BiCancelStatusBack

[Function]

This cancels Automatic Status Back registered by BiSetStatusBackFunction() or BiSetStatusBackWnd().

[Format]

```
int BiCancelStatusBack (int nHandle);
```

[Argument]

int nHandle

Specifies the handle value for the printer for which Automatic Status Back is being canceled. The value returned from BiOpenMonPrinter() is used as the handle value.

[Return Value]

If cancellation of Automatic Status Back was successful, a 0 is returned. If there is an error, the following error code (less than zero) is returned.

ERR_HANDLE (-60)	The handle value that specifies the printer is incorrect.
ERR_PARAM (-90)	Parameter error
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_NOT_ALLOW_IN_CB(-410)	Cannot be called for from the current callback routine.

[Explanation]

The cancel request is ignored and SUCCESS return if a status notification request has not been registered.

[Supported printer]

TM-T88II(R), TM-T88III, TM-T90, TM-L90, TM-H5000II, TM-H5200, TM-U590, TM-U675, TM-U375, TM-H6000, TM-H6000II, TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, TM-H3000(R), TM-U230, TM-U220, TM-U210, TM-U950, TM-U295, TM-L60II, TM-P60, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 20	SHEET 19

3.13. BiDirectIO

[Function]

This carries out reading and writing of data with the specified printer.

[Format]

```
int BiDirectIO (int nHandle, BYTE writeLen, LPBYTE writeCmd, LPBYTE readLen, LPBYTE readBuff, DWORD
timeout, BOOL nullTerminate);
```

[Argument]

int nHandle

Specifies the handle value of the printer being accessed. The value returned from BiOpenMonPrinter() is used as the handle value.

BYTE writeLen

This specifies the length of data (length of the command) written to the printer. If this value is zero, writing is not performed, but only reading is done.

LPBYTE writeCmd

This specifies the data (command) to be written to the printer.

LPBYTE readLen

This specifies the length of the data to be read from the printer. If the value is zero, reading is not performed after writing. After return from this function, the number of bytes actually read is saved.

LPBYTE readBuff

This specifies the buffer where data read from the printer are stored.

DWORD timeout

This specifies the data writing and data reading time out time in msec units.

BOOL nullTerminate

If TRUE, reading is finished at the point when a NULL is received from the printer. At this time, the size of the readBuff prepared by the user program in readLen must be specified.

If FALSE, reading of data from the printer is performed until a timeout occurs or the specified length of "readLen" is read.

[Return Value]

If reading/writing was successful, a 0 is returned. If there is an error, the following error codes (less than zero) are returned.

ERR_HANDLE (-60)	The handle value that specifies the printer is incorrect.
ERR_TIMEOUT (-70)	A time out error occurred.
ERR_ACCESS (-80)	Reading/writing with the printer is not possible (printing in progress).
ERR_PARAM (-90)	Parameter error
ERR_NOT_SUPPORT (-100)	Not supported (Including when a serial connection is used.)
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is recovered.
ERR_NOT_EPSON (-120)	Cannot be used (printer not EPSON)
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Explanation]

For the readBuff size, memory with a length which is the same as, or greater than the length specified by readLen should be secured.

The following points are also different from BiDirectIOEx. Use BiDirectIOEx as needed.

- A command disabling ASB his added as a prefix to BiDirectIO data. If problems occur when other commands are inserted while writing continuous data with BiDirectIO, use BiDirectIOEx.
- The maximum data length that can be read/write processed by BiDirectIO is 255 bytes. For longer data, use BiDirectIOEx.
- Process
 - (1) Read all received data and check the status.
 - (2) Transmit the disabled command of status transmission.

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 21	SHEET 20

- (3) If a value other than 0 is specified to writeLen, data with the length specified will be transmitted.
- (4) If a value other than 0 is specified to readLen, data with the length specified will be received. However, if the nullTerminate is TRUE, NULL data is checked with a range of the length previously specified to readLen and data up to NULL data is recognized as received data and it is notified.
- (5) Transmit an enabled command of the status transmission.

[Supported printer]

TM-T88II(R), TM-T88III, TM-T90, TM-L90, TM-H5000II, TM-H5200, TM-U590, TM-U675, TM-U375, TM-H6000, TM-H6000II, TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, TM-H3000(R), TM-U230, TM-U220, TM-U210, TM-U950, TM-U295, TM-L60II, TM-P60, TM-J9000/9100

	TITLE EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 22	SHEET 21

3.14. BiDirectIOEx

[Function]

This carries out reading and writing of data with the specified printer. No ASB disable command is added.

[Format]

```
int BiDirectIOEx( int nHandle, DWORD writeLen, LPBYTE writeCmd, LPDWORD readLen, LPBYTE readBuff,  
                 DWORD timeout, BOOL nullTerminate, BYTE option) ;
```

[Argument]

int nHandle

Specifies the handle value of the printer being accessed. The value returned from BiOpenMonPrinter() is used as the handle value.

DWORD writeLen

This specifies the length of data (length of the command) written to the printer. If this value is zero, writing is not performed, but only reading is done.

LPBYTE writeCmd

This specifies the data (command) to be written to the printer.

LPWORD readLen

This specifies the length of the data to be read from the printer. If the value is zero, reading is not performed after writing. After return from this function, the number of bytes actually read is saved.

LPBYTE readBuff

This specifies the buffer where data read from the printer are stored.

DWORD timeout

This specifies the data writing and data reading time out time in msec units.

BOOL nullTerminate

If TRUE, reading is finished at the point when a NULL is received from the printer. At this time, the size of the readBuff prepared by the user program in readLen must be specified.

If FALSE, reading of data from the printer is performed until a timeout occurs or the specified length of "readLen" is read..

BYTE option

0: ASB disable command (GS a) is sent before data write, and ASB enabled after data write complete.

1: ASB disable and enable commands are not sent.

[Return Value]

If reading/writing was successful, a 0 is returned. If there is an error, the following error codes (less than zero) are returned.

ERR_HANDLE (-60)	The handle value that specifies the printer is incorrect.
ERR_TIMEOUT (-70)	A time out error occurred.
ERR_ACCESS (-80)	Reading/writing with the printer is not possible (printing in progress).
ERR_PARAM (-90)	Parameter error
ERR_NOT_SUPPORT (-100)	Not supported (Including when a serial connection is used.)
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is recovered.
ERR_NOT_EPSON (-120)	Cannot be used (printer not EPSON)
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Explanation]

For the readBuff size, memory with a length which is the same as, or greater than the length specified by readLen should be secured. This is functionally the same as BiDirectIO, but there are specification differences. See Section 5.8 BiDirectIO.

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 23	SHEET 22

[Caution]

- Up to 2 Gbytes of data can be specified for read/write processing, but under Windows NT 4.0 the specified memory region is reserved, so please specify the minimum data length.
- While monitoring printer status, do not use this function to send the ASB status transmit disable command (GS a), or it will make it impossible to acquire status.
- The BiDirectIOEx ASB (Auto Status Back) suppress specification is specified so that a response other than the expected response (such as Status) will not be received if a command is sent for which a response is expected from the printer. If ASB is not suppressed, it is necessary during programming to give consideration to the reception of data other than the expected data.
- Specifying the receiving buffer or not specifying it is equivalent to specifying processing of data received from the printer by BiDirectIOEx or specifying processing by the monitoring thread (notification by callback or BiGetStatus).

Command sent by BiDirectIOEx	Receiving Buffer Specified or Not	BiDirectIOEx Receiving Buffer	Monitoring Thread Operation
Get Status Command	Specified	Status is input to the receiving buffer.	Callback does not occur. Status is not updated.
	Not Specified	–	Callback occurs. Status is updated.
Other commands with a response from the printer	Specified	The printer response is input to the receiving buffer.	No effect on the monitoring thread.
	Not Specified	–	An abnormal callback may occur.
Command without a response from the printer	Specified	A Time Out error occurred.	No effect on the monitoring thread.
	Not Specified	–	No effect on the monitoring thread.

- Process

(1) Read all received data and check the status.

(2) When “0” is specified to the option, transmit a disabled command of the status transmission. When “1” is specified to the option, nothing is executed.

(3) If a value other than 0 is specified to writeLen, data with the length specified will be transmitted.

(4) If a value other than 0 is specified to readLen, data with the length specified will be received. However, if the nullTerminate is TRUE, NULL data is checked with a range of the length previously specified to readLen and data up to NULL data is recognized as received data and it is notified.

(5) When “0” is specified to the option, transmit an enabled command of the status transmission. When “1” is specified to the option, nothing is executed.

[Supported printer]

TM-T88II(R), TM-T88III, TM-T90, TM-L90, TM-H5000II, TM-H5200, TM-U590, TM-U675, TM-U375, TM-H6000, TM-H6000II, TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, TM-H3000(R), TM-U230, TM-U220, TM-U210, TM-U950, TM-U295, TM-L60II, TM-P60, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 24	SHEET 23

3.15. BiSendDataFile

[Function]

Specifies a macro command definition file and registers the macro command.

[Format]

int BiSendDataFile(int iHandle, LPCSTR lpcFileName)

[Argument]

int nHandle

Specifies the handle value of the printer being accessed. The value returned from BiOpenMonPrinter() is used as the handle value.

LPCSTR lpcFileName

Specifies the macro command definition in a full pass.

[Return Value]

If reading/writing was successful, a 0 is returned. If there is an error, the following error codes (less than zero) are returned.

ERR_HANDLE (-60)	The handle value that specifies the printer is incorrect.
ERR_NO_MEMORY (-50)	Memory is insufficient.
ERR_PARAM (-90)	Parameter error
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Explanation]

A macro definition file is made as a text file.

A sample of command definition file

```
#Cut Paper
CutPaper=0a 1d 56 42 00 #Cut paper command
#Test String
TestString="This is a test message." 0a 0a

#Eject the Check
EjectCheck=1c 61 32
```

A character string after '#' (including '#') is treated as a comment.

A character string described to the left of '=' is treated as "Macro name" of the data written into the printer.

When defining a character string, enclose it with the symbol of "".

Binary data should be written in hexadecimal numbers in 2 columns.

A maximum of the macro name is 33 bytes.

Maximum transmitted data is 10240 bytes.

If the same macro name has already been registered, the command register processing is stopped and an error is returned.

Number of the macro that can be registered is restricted only by the memory of the system that can be used.

Command data previously registered is discarded when BiCloseMonPrinter is executed.

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 25	SHEET 24

[Supported printer]

TM-T88II(R), TM-T88III, TM-T90, TM-L90, TM-H5000II, TM-H5200, TM-U590, TM-U675, TM-U375, TM-H6000, TM-H6000II, TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, TM-H3000(R), TM-U230, TM-U220, TM-U210, TM-U950, TM-U295, TM-L60II, TM-P60, TM-J9000/9100

	TITLE EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 26	SHEET 25

3.16. BiDirectSendRead

[Function]

Transmits command data that is previously registered by using the macro command definition file and reads data of the received data type specified.

[Format]

```
int BiDirectSendRead(int iHandle, LPCSTR lpcCmdName, LPCSTR lpcReadName,  
LPDWORD lpdwLength, LPBYTE lpbReadBuf, DWORD dwTimeout,  
BOOL bNullTerminate)
```

[Argument]

int nHandle

Specifies the handle value of the printer being accessed. The value returned from BiOpenMonPrinter() is used as the handle value.

LPCSTR lpcCmdName

Specifies "Macro name" registered by using BiSendDataFile that is sent to the printer.

LPCSTR lpcReadName

Specifies "Received data type name" received from the printer. Refer to the table of "Received data type name that can be specified" below.

LPDWORD lpdwLength

Specifies the length of data read from the printer.

LPBYTE lpbReadBuf

Specifies the buffer in which read data from the printer is stored.

DWORD dwTimeout

Specifies time-out time of data writing and data reading in msec units.

BOOL bNullTerminate

If TRUE, reading is finished in the point NULL is received from the printer. At this point, a size of lpbReadBuf that has been provided by the user program needs to be specified to lpdwLength.

If FALSE, the specified length of "lpdwLength" is read or reading data from the printer is performed until a timeout occurs.

[Return Value]

If reading/writing was successful, a 0 is returned. If there is an error, the following error codes (less than zero) are returned.

ERR_HANDLE (-60)	The handle value that specifies the printer is incorrect.
ERR_NO_MEMORY (-50)	Memory is insufficient.
ERR_TIMEOUT (-70)	A time out error occurred.
ERR_ACCESS (-80)	Reading/writing with the printer is not possible (printing in progress).
ERR_PARAM (-90)	Parameter error
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Explanation]

Received data type names that can be specified are below:

Data type	Description
ASB	Enable/ disable Automatic Status Back (ASB)
ASB Extended	Enable/ disable Automatic Status Back for optional functions (extended status)
Ptr Info Byte	Transmit printer ID
Ptr Info String	Printer information B
Power OFF	Notification of power-off

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 27	SHEET 26

Power ON	Notification of power-on
Realtime	Transmit real-time status
Buffer Clear	Clear buffer(s)
Slip Remaining	Transmit number of dots in the remaining printing area for a slip
MICR Read	Read check paper
Scan Density	Transmit a setting value for basic operations for the image scanner
Scan Area	Transmit a setting value for a range of reading
Scan Compress	Transmit a setting value for a method of compression for image data
Scan Transmit	Transmit a setting value for a form of transmission for image data
Scan Read Hex	Transmit a reading result of image data (in hexadecimal character strings)
Scan CropArea	Transmit a setting value for a cropping area
Scan Read Bin	Transmit a reading result of image data (in binary)
Scan ClumpPaper	Transmit status for a slip
Scan RemainCapa	Transmit remaining amount of NV memory in which reading results of images are stored
NVM Image Size	Transmit total memory of NV graphics area
NVM Image Free	Transmit remaining amount of NV graphics area
NVM Image Keys	Transmit a key code list of NV graphics defined
NVM Image List	Transmit a data ID list of reading results of images stored in the NV memory
NVM User Used	Transmit used memory (number of bytes of used area)
NVM User Free	Transmit remaining memory (number of bytes of unused area)
NVM User Get	Transmit stored data of specified records
NVM User Keys	Transmit a key code list of stored records
NVM Set Mode	Transmit a notification of switching to a user setting mode
NVM Get Mswitch	Transmit a memory switch value
NVM Set Size	Transmit a customized value
ASB Ink	Enable/disable Automatic Status Back (ASB) for ink
Ptr Info Type A	Printer information A
Test Print	Execute test print
RAM Image Free	Transmit remaining amount of downloaded graphic area
RAM Image Keys	Transmit a key code list of downloaded graphics defined
Offline Code Bit	Transmit offline response (bits)
Offline Code Data	Transmit offline response (data)
Presenter Event	Transmit a result of presenter execution
Other	Data other than described above

Note that there are data types that are not supported depending on printer models.

[Supported printer]

TM-T88II(R), TM-T88III, TM-T90, TM-L90, TM-H5000II, TM-H5200, TM-U590, TM-U675, TM-U375, TM-H6000, TM-H6000II, TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, TM-H3000(R), TM-U230, TM-U220, TM-U210, TM-U950, TM-U295, TM-L60II, TM-P60, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 28	SHEET 27

3.17. BiResetPrinter

[Function]

Resets the status monitor printer.

[Format]

```
int BiResetPrinter (int nHandle);
```

[Argument]

int nHandle

Specifies the handle value of the printer to be reset. The BiOpenMonPrinter() return value is used in the handle value.

[Return value]

0 is returned when printer reset is successful. The following error codes (less than zero) are returned when an error is triggered.

ERR_HANDLE (-60)	The handle value specified for the printer is incorrect.
ERR_NOT_SUPPORT (-100)	Not supported (Including when a serial connection is used.)
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_EXEC_MICR (-320)	Cannot be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being performed.
ERR_SS_NOT_EXIST (-340)	Status service is not started up.
ERR_RESET (-400)	Cannot be used because the ptiner is being reset.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Explanation]

Judges the printer's interface automatically and executes parallel connection printer reset processing. Also, if printer reset is executed during printing, the printing job is canceled and printer reset is executed.

[Caution]

- Do not execute this argument while the TM-H6000II is scanning.

[Supported printer]

TM-T88II(R), TM-T88III, TM-T90, TM-L90, TM-H5000II, TM-H5200, TM-U590, TM-U675, TM-U375, TM-H6000, TM-H6000II, TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, TM-H3000(R), TM-U230, TM-U220, TM-U210, TM-U950, TM-U295, TM-L60II, TM-P60, TM-J9000/9100 (In each case, it is possible to use a connection other than a serial connection.

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 29	SHEET 28

3.18.BiGetOfflineCode

[Function]

Acquires the bit that indicates the reason for being off-line.

[Format]

int BiGetOfflineCode(int nHandle, LPBYTE offlinecode);

[Argument]

int nHandle

Specifies the handle value of the printer being accessed. The BiOpenMonPrinter() return value is used in the handle value.

LPBYTE offlinecode

Sets the bit that indicates the reason for being off-line.

[Return value]

0 is returned when printer reset is successful. The following error codes (less than zero) are returned when an error is triggered.

ERR_HANDLE	The handle value specified for the printer is incorrect.
ERR_NOT_SUPPORT	Not supported
ERR_TIMEOUT	A time out error occurred.
ERR_ACCESS	Reading/writing with the printer is not possible (printing in progress).
ERR_OFFLINE	It was opened in the offline state, so it cannot be used until the online state i
ERR_NOT_EPSON	Cannot be used (printer not EPSON)
ERR_PARAM	Parameter error

[Explanation]

The following off-line causes are assigned:

For TM-J2000/2100, TM-J7000/7100, TM-J7500/7600

Byte 1

Bit	Function	Value	
		0	1
0	CPU execution error	Not occurred	Occurred
1	R/W error in memory	Not occurred	Occurred
2	R/W error in gate array	Not occurred	Occurred
3	Not defined	Fixed to 0	
4	Not defined	Fixed to 0	
5	Not defined	Fixed to 0	
6	Fixed	Fixed to 1	
7	Fixed	Fixed to 0	

Byte 2

Bit	Function	Value	
		0	1
0	High voltage error	Not occurred	Occurred
1	Low voltage error	Not occurred	Occurred
2	Overcurrent error	Not occurred	Occurred
3	Not defined	Fixed to 0	
4	Not defined	Fixed to 0	

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 30	SHEET 29

5	Not defined	Fixed to 0
6	Fixed	Fixed to 1
7	Fixed	Fixed to 0

Byte 3

Bit	Function	Value	
		0	1
0	Thermistor error	Not occurred	Occurred
1	Print head high voltage error	Not occurred	Occurred
2	Print head low voltage error	Not occurred	Occurred
3	RTC error	Not occurred	Occurred
4	Number of carriage operations error	Not occurred	Occurred
5	Number of pump operations error	Not occurred	Occurred
6	Fixed	Fixed to 1	
7	Fixed	Fixed to 0	

Byte 4

Bit	Function	Value	
		0	1
0	Auto cutter error	Not occurred	Occurred
1	Paper roll cover open error (recover automatically)	Not occurred	Occurred
2	Not defined	Fixed to 0	
3	Not defined	Fixed to 0	
4	Home position detection error	Not occurred	Occurred
5	Carriage detection error	Not occurred	Occurred
6	Fixed	Fixed to 1	
7	Fixed	Fixed to 0	

Byte 5

Bit	Function	Value	
		0	1
0	Paper roll cover open error (recover by the command)	Not occurred	Occurred
1	Print head high temperature error	Not occurred	Occurred
2	Print head low temperature error	Not occurred	Occurred
3	Not defined	Fixed to 0	
4	Not defined	Fixed to 0	
5	Not defined	Fixed to 0	
6	Fixed	Fixed to 1	
7	Fixed	Fixed to 0	

For TM-T90, TM-L90

Byte 1

Bit	Function	Value	
		0	1
0	CPU execution error	Not occurred	Occurred
1	R/W error in memory	Not occurred	Occurred
2	R/W error in gate array	Not occurred	Occurred
3	Not defined	Fixed to 0	
4	Not defined	Fixed to 0	

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 31	SHEET 30

5	Not defined	Fixed to 0
6	Fixed	Fixed to 1
7	Fixed	Fixed to 0

Byte 2

Bit	Function	Value	
		0	1
0	High voltage error	Not occurred	Occurred
1	Low voltage error	Not occurred	Occurred
2	Overcurrent error	Not occurred	Occurred
3	Not defined	Fixed to 0	
4	Not defined	Fixed to 0	
5	Not defined	Fixed to 0	
6	Fixed	Fixed to 1	
7	Fixed	Fixed to 0	

Byte 3

Bit	Function	Value	
		0	1
0	Thermistor error	Not occurred	Occurred
1	Not defined	Fixed to 0	
2	Not defined	Fixed to 0	
3	Not defined	Fixed to 0	
4	Not defined	Fixed to 0	
5	Not defined	Fixed to 0	
6	Fixed	Fixed to 1	
7	Fixed	Fixed to 0	
7	Fixed	Fixed to 0	

Byte 4

Bit	Function	Value	
		0	1
0	Auto cutter error	Not occurred	Occurred
1	Paper roll cover open error (recover automatically)	Not occurred	Occurred
2	Paper layout error (TM-L90 only)	Not occurred	Occurred
3	Label paper jam error. (TM-L90 with Peeler only)	Not occurred	Occurred
4	Not defined	Fixed to 0	
5	Not defined	Fixed to 0	
6	Fixed	Fixed to 1	
7	Fixed	Fixed to 0	

Byte 5

Bit	Function	Value	
		0	1
0	Paper roll cover open error (recover by the command)	Not occurred	Occurred
1	Print head high temperature error	Not occurred	Occurred
2	Not defined	Fixed to 0	
3	Not defined	Fixed to 0	
4	Not defined	Fixed to 0	
5	Not defined	Fixed to 0	

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 32	SHEET 31

6	Fixed	Fixed to 1
7	Fixed	Fixed to 0

For TM-J9000/9100

Byte 1

Bit	Function	Value	
		0	1
0	CPU execution error	Not occurred	Occurred
1	R/W error in memory	Not occurred	Occurred
2	R/W error in gate array		
3	CPU execution error. (sub circuit board)	Not occurred	Occurred
4	read/write error in memory. (sub circuitboard)	Not occurred	Occurred
5	Not defined	Fixed to 0	
6	Fixed	Fixed to 1	
7	Fixed	Fixed to 0	

Byte 2

Bit	Function	Value	
		0	1
0	High voltage error	Not occurred	Occurred
1	Low voltage error	Not occurred	Occurred
2	Not defined	Fixed to 0	
3	Not defined	Fixed to 0	
4	Not defined	Fixed to 0	
5	Not defined	Fixed to 0	
6	Fixed	Fixed to 1	
7	Fixed	Fixed to 0	

Byte 3

Bit	Function	Value	
		0	1
0	Thermistor error	Not occurred	Occurred
1	Not defined	Fixed to 0	
2	Print head low voltage error	Not occurred	Occurred
3	Not defined	Fixed to 0	
4	Internal circuit connection error (CIS)	Not occurred	Occurred
5	Number of pump operations error	Not occurred	Occurred
6	Fixed	Fixed to 1	
7	Fixed	Fixed to 0	

Byte 4

Bit	Function	Value	
		0	1
0	Not defined	Fixed to 0	
1	Paper roll cover open error (recover automatically)	Not occurred	Occurred
2	Cut sheet ejection error	Not occurred	Occurred
3	Not defined	Fixed to 0	
4	Carriage home position detection error	Not occurred	Occurred

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 33	SHEET 32

5	Carriage out of phase detection error	Not occurred	Occurred
6	Fixed	Fixed to 1	
7	Fixed	Fixed to 0	

Byte 5

Bit	Function	Value	
		0	1
0	Paper roll cover open error (recover by the command)	Not occurred	Occurred
1	Print head high temperature error	Not occurred	Occurred
2	Print head low temperature error	Not occurred	Occurred
3	Carriage cover is open.	Not occurred	Occurred
4	Scanner cover is open.	Not occurred	Occurred
5	Roll paper cover is open.	Not occurred	Occurred
6	Fixed	Fixed to 1	
7	Fixed	Fixed to 0	

[Supported printer]

TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, TM-T90, TM-L90, TM-J9000/9100 (In all cases, they are enabled when there is not a Ethernet connection.)

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 34	SHEET 33

3.19. BiGetCounter

[Function]

Acquires the maintenance counter.

[Format]

```
int BiGetCounter(int nHandle, BYTE readno, LPDWORD readcounter);
```

[Argument]

int nHandle

Specifies the handle value of the printer being accessed. The BiOpenMonPrinter() return value is used in the handle value.

BYTE readno

Specifies the number of the maintenance counter.

LPWORD readcounter

Sets the maintenance counter value.

[Return value]

0 is returned when printer reset is successful. The following error codes (less than zero) are returned when an error is triggered.

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 (printing in progress).
ERR_PARAM (-90)	Parameter error (specified counter number outside of permissible range)
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state i
ERR_NOT_EPSON (-120)	Cannot be used (printer not EPSON)
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_EXEC_MICR (-320)	Cannot be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.

[Explanation]

In the TM-H5000II, a maintenance counter is assigned as shown below. Depending on the model, there are counter values which cannot be acquired, but please read the product specifications for each model.

Counter No.		Counter	Counter Model
Hexadecimal	Decimal		
0A	10	Number of paper feed lines (slip)	Can be reset
0B	11	Number of printed characters (slip)	Can be reset
14	20	Number of paper feed lines (roll paper)	Can be reset
15	21	Number of times the head is charged (roll paper)	Can be reset
32	50	Number of times the auto cutter is operated	Can be reset
3C	60	Number of times the check is read	Can be reset
46	70	Product operation time	Can be reset
8A	138	Number of paper feed lines (slip)	Cumulative
8B	139	Number of printed characters (slip)	Cumulative

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 35	SHEET 34

94	148	Number of paper feed lines (roll paper)	Cumulative
95	149	Number of times the head is charged (roll paper)	Cumulative
B2	178	Number of times the auto cutter is operated.	Cumulative
BC	188	Number of times the check is read	Cumulative
C6	198	Product operation time	Cumulative

If this function is executed in a model in which a maintenance counter is not installed, it results in a time out error.

[Supported printer]

TM-T90, TM-L90, TM-H5000II, TM-H5200, TM-U675, TM-H6000, TM-H6000II, TM-J8000, TM-J2000/2100,
TM-J7000/7100, TM-J7500/7600, TM-H3000(R), TM-P60, TM-J9000/9100

	TITLE EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 36	SHEET 35

3.20. BiResetCounter

[Function]

Resets the maintenance counter.

[Format]

int BiResetCounter(int nHandle, BYTE writeno)

[Argument]

int nHandle

Specifies the handle value of the printer being accessed. The BiOpenMonPrinter() return value is used in the handle value.

BYTE writeno

Specifies the number of the maintenance counter.

[Return value]

0 is returned when printer reset is successful. The following error codes (less than zero) are returned when an error is triggered.

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 (printing in progress).
ERR_PARAM (-90)	Parameter error (specified counter number outside of permissible range)
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state i
ERR_NOT_EPSON (-120)	Cannot be used (printer not EPSON)
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_EXEC_MICR (-320)	Cannot be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.

[Explanation]

Refer to **BiGetCounter** assigned with TM printer. Only valid for counters that can be reset.

Certain printers are not equipped with maintenance counters. A timeout error will be triggered for this function in this event.

[Supported printer]

TM-T90, TM-L90, TM-H5000II, TM-H5200, TM-U675, TM-H6000, TM-H6000II, TM-J8000, TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, TM-H3000(R), TM-P60, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 37	SHEET 36

3.21. BiCancelError

[Function]

Restores recoverable printer errors.

[Format]

int BiCancelError(int nHandle)

[Argument]

int nHandle

Specifies the handle value of the printer being accessed. The BiOpenMonPrinter() return value is used in the handle value.

[Return value]

0 is returned when printer reset is successful. The following error codes (less than zero) are returned when an error is triggered.

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 (printing in progress).
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 be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being performed.
ERR_SS_NOT_EXIST (-340)	Status service is not started up.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Explanation]

The recoverable errors with the TM printer are shown below

The contents of these allocations may differ depending on the model.

- Cover open error: Close the cover opened during printing and then call this API.
- Auto-cutter error: An error occurred with the cutter. Remove the paper from around the cutter, close the platen and then call this API.

[Caution]

- If a recoverable error occurs during print data transmission, the error might not be recovered by BiCanceleror. In this case, recover from the error status by using BiResetPrinter.

[Supported printer]

TM-T88II(R), TM-T88III, TM-T90, TM-L90, TM-H5000II, TM-H5200, TM-U590, TM-U675, TM-U375, TM-H6000, TM-H6000II, TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, M-H3000(R), TM-U230, TM-U220, TM-U210, TM-U950, TM-U295, TM-L60II, TM-P60, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 38	SHEET 37

3.22. BiGetType

[Function]

Acquires the printer's type ID.

[Format]

```
int BiGetType(int nHandle, LPBYTE typeid, LPBYTE font,
              LPBYTE exrom, LPBYTE euspecial);
```

[Argument]

int nHandle

Specifies the handle value of the printer being accessed. The BiOpenMonPrinter() return value is used in the handle value.

LPBYTE typeid

Sets the printer's type ID (refer to the list of type IDs.)

LPBYTE font

Sets the font mounted on the printer (refer to the list of installed fonts.)

LPBYTE exrom

Sets the capacity of the printer's expanded flash ROM (Not supported.)

LPBYTE euspecial

Sets the printer's type ID(B) (TM-J2000/2100, TM-J7000/7100, TM-J7500/7600 and TM-H6000II with scanner.)

[Return value]

0 is returned when printer reset is successful. The following error codes (less than zero) are returned when an error is triggered.

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 (printing in progress).
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state i
ERR_NOT_EPSON (-120)	Cannot be used (printer not EPSON)
ERR_PARAM (-90)	Parameter error
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_EXEC_MICR (-320)	Cannot be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.

[Explanation]

The values are listed below.

Type ID

For the TM-T88II(R), TM-T88III, TM-T90, TM-L90, TM-H5000II, TM-U590, TM-U675, TM-H6000, TM-H6000II, TM-J8000, TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, TM-H3000(R), TM-U230, TM-U220, TM-U210, TM-U325, TM-U950, TM-U295, TM-L60II

Bit	Function	Value	
		0	1
0	2-byte code	Not supported	Supported
1	A/C	Without	With
	Not defined *5	-	
2	Customer display direct connection	Without	With
	Label*1	receipt	label
	Not defined*2	-	
3	MICR*3	Without	With

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 39	SHEET 38

	Not defined	-	
4	Not used	Fixed to 0	
5	Not defined	-	
6	Equipped with endorse printer*4	Without	With
	Not defined	-	
7	Not used	Fixed to 0	

*1 TM-L60II only

*2 TM-U230, TM-U220, TM-U210, TM-T90, TM-L90, TM-U295

*3 TM-H5000II, TM-U590, TM-U675, TM-H6000, TM-H6000II, TM-J7000/7100, TM-J7500/7600, TM-U325, TM-U950

*4 TM-H6000, TM-H6000II

*5 TM-L90 with Peeler only

Type ID (TM-P60)

Bit	Function	Value	
		0	1
0	2-byte code	Fixed to 0	
1	A/C	Fixed to 1	
2	Customer display direct connection	Fixed to 0	
3	Not defined	-	
4	Not defined	-	
5	Not defined	-	
6	Not used	Fixed to 1	
7	Not used	Fixed to 0	

For the TM-J9000/9100

Bit	Function	Value	
		0	1
0	Not defined	-	
1	Not defined	-	
2	Not defined	-	
3	Equipped with MICR	Without	With
4	Not used	Fixed to 1	
5	Not defined	-	
6	Not defined	-	
7	Not used	Fixed to 0	

Type ID(B)

For the TM-J2000/2100

Bit	Function	Value	
		0	1
0	Color	Monochrome (TM-J2000)	Two-color (TM-J2100)
1,2,3,4,5	Not defined	-	
6	Not used	Fixed to 1	
7	Not used	Fixed to 0	

For the TM-J7000/7100

Bit	Function	Value	
		0	1
0	Color	Monochrome (TM-J7000)	Two-color (TM-J7100)

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 40	SHEET 39

1	Equipped with endorse printer	Without	With
2,3,4,5	Not defined	-	
6	Not used	Fixed to 1	
7	Not used	Fixed to 0	

For the TM-J7500/7600

Bit	Function	Value	
		0	1
0	Color	Monochrome (TM-J7500)	Two-color (TM-J7600)
1	Equipped with endorse printer	Without	With
2	Not defined	-	
3	Equipped with OCR	Without	With
4,5	Not defined	-	
6	Not used	Fixed to 1	
7	Not used	Fixed to 0	

For the TM-H6000II with Scanner

Bit	Function	Value	
		0	1
0	2-byte code	Not supported	Supported
1	A/C	Without	With
2	DM-D connection	OFF	ON
3	Equipped with MICR	Without	With
4	Equipped with Scanner	Without	With
5	Equipped with endorse printer	Without	With
6	Not used	Fixed to 1	
7	Not used	Fixed to 0	

For the TM-J9000/9100

Bit	Function	Value	
		0	1
0	Color	Monochrome (TM-J9000)	Two-color (TM-J9100)
1,2,3,4,5	Not defined	-	
6	Not used	Fixed to 1	
7	Not used	Fixed to 0	

Installed Fonts

For the TM-H5000II, TM-H6000, TM-H6000II, TM-T88II, TM-T88III, TM-T90, TM-T90

Value	Installed Font
00h	Not clear
01h	ANK only
02h	Japanese Kanji (JIS)
03h	Chinese Kanji (Simplified Chinese GB 2312)
04h	Taiwan Kanji (Traditional Chinese BIG-5)
05h	Thai Characters (3-pass)

Depending on the model, no installed fonts are provided. In the case of models with no installation font, nothing is set in the Installed Fonts even if the BiGetType function is called.

[Supported printer]

TM-T88II(R), TM-T88III, TM-T90, TM-L90, TM-H5000II, TM-H5200, TM-U590, TM-U675, TM-H6000, TM-H6000II, TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, M-H3000(R), TM-U230, TM-U220, TM-U210, TM-U950, TM-U295, TM-L60II, TM-P60, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 41	SHEET 40

3.23.BiGetPrnCapability

[Function]

Acquires printer information specified by printer ID.

[Format]

int BiGetPrnCapability(int nHandle, BYTE prnID, LPBYTE pBuffSize, LPBYTE pBuff)

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

BYTE PrnID

Specifies a printer ID to acquire information. See the following tables.

LPBYTE pBuffSize

Specifies the memory size to set the printer information. A value can be set in the range of 1 - 80.

After executing this function, the size of the actually read data is set. If the buffer capacity is not enough, the required number of bytes is set and in case of errors other than this, nothing is set.

LPBYTE pBuff

Specifies a memory address to set printer information.

[Return Values]

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

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 (printing in progress).
ERR_PARAM (-90)	Parameter error
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is recovered.
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_EXEC_MICR (-320)	Cannot be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.

[Explanation]

Printer ID List

Printer ID Value set to prnID	Type of Printer ID	Acquired Data
1	Printer ID	1-byte data. Acquired data differs depending on models.
2	Type ID	1-byte data. See (A) for details.
3	Firmware version ID	1-byte data. Acquired data differs depending on firmware versions.
33	Type Information	2-byte data. See (B) for details.
66	Manufacturer	Character string data, "EPSON."
67	Printer Name	Character string data. Acquired data differs depending on models. Example "TM-T90."
68	Serial Number	Character string data. Acquired data differs depending on models. Example "DEKK000015"

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 42	SHEET 41

69	Character type	Character string data. Acquired data differs depending on equipped fonts. ANK :None Kanji: “KANJI JAPANESE ” Simplified Chinese: “CHINA GB2312 ” Traditional Chinese: “TAIWAN BIG-5 ” Thai: “THAI 3 PASS ” Korean: “KOREA C-5601C ”
112	Settings relating to models · DIP switches · Type ID (B)	Acquired data differs depending on models. →2 or 4-byte data. See (C) for details. →1-byte data. See (D) for details.
114	Settings depending on models · Extended ROM capacity	Acquired data differs depending on models. →1-byte data. See (E) for details.
115	Settings depending on models · EU Special Type ID	Acquired data differs depending on models. →1-byte data. See (F) for details.

(A) Type ID (Printer ID=2)

Bit	Function	Value	
		0	1
0	2-byte code	Not supported	Supported
1	A/C	Without	With
2	Customer display direct connection	Without	With
3	MICR	Without	With
4	Not used	Fixed to 0	
5	Not defined	-	
6	Equipped with endorse printer	Without	With
7	Not used	Fixed to 0	

(B) Type Information (Printer ID=33)

The first byte

Bit	Function	Value	
		0	1
0	2-byte code	Not supported	Supported
1	Autocutter	Not equipped	Equipped
2	DM-D connection	Not connected	Connected
3	MICR reader	Not equipped	Equipped
4	Image scanner	Not equipped	Equipped
5	E/P	Not equipped	Equipped
6	Fixed	--	Fixed to 1
7	Fixed	Fixed to 0	--

The second byte

Bit	Function	Value	
		0	1
0	NV memory for saving the reading result of images	Not present	Present
1	Gray scale reading	Not capable	Capable
2 - 5	(Reserved)	(Fixed to 0)	--
6	Fixed	--	Fixed to 1

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 43	SHEET 42

7	Fixed	Fixed to 0	--
---	-------	------------	----

(C) DIP switch status (Printer ID=112)

The first byte

Bit	Function	Value	
		0	1
0	DIP switch [SW1-1]	OFF	ON
1	DIP switch [SW1-2]	OFF	ON
2	DIP switch [SW1-3]	OFF	ON
3	DIP switch [SW1-4]	OFF	ON
4,5	(Reserved)	(Fixed to 0)	--
6	Fixed	--	(Fixed to 1)
7	Fixed	(Fixed to 0)	--

The second byte

Bit	Function	Value	
		0	1
0	DIP switch [SW1-5]	OFF	ON
1	DIP switch [SW1-6]	OFF	ON
2	DIP switch [SW1-7]	OFF	ON
3	DIP switch [SW1-8]	OFF	ON
4,5	(Reserved)	(Fixed to 0)	--
6	Fixed	--	Fixed to 1
7	Fixed	Fixed to 0	--

The third byte

Bit	Function	Value	
		0	1
0	DIP switch [SW2-1]	OFF	ON
1	DIP switch [SW2-2]	OFF	ON
2	DIP switch [SW2-3]	OFF	ON
3	DIP switch [SW2-4]	OFF	ON
4,5	(Reserved)	(Fixed to 0)	--
6	Fixed	--	Fixed to 1
7	Fixed	Fixed to 0	--

The fourth byte

Bit	Function	Value	
		0	1
0	DIP switch [SW2-5]	OFF	ON
1 - 5	(Reserved)	(Fixed to 0)	--
6	Fixed	--	Fixed to 1
7	Fixed	Fixed to 0	--

For TM-J9000/9100

The first byte

Bit	Function	Value	
		0	1
0	MICR reader	Not equipped	Equipped
1	Image scanner	Not equipped	Equipped

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 44	SHEET 43

2	DM-D connection	Not connected	Connected
3	MICR reader	Not equipped	Equipped
4	Image scanner	Not equipped	Equipped
5	(Reserved)	-	
6	Fixed	--	Fixed to 1
7	Fixed	Fixed to 0	--

The second byte

Bit	Function	Value	
		0	1
0	(Reserved)	-	
1	Gray scale reading	--	Fixed to 1
2	Image scanner installed.	--	Fixed to 1
3	Automatic sheet feeder installed.	Not equipped	Equipped
4-5	(Reserved)	-	
6	Fixed	--	Fixed to 1
7	Fixed	Fixed to 0	--

(C) DIP switch status (Printer ID=96)

Bit	Function	Value	
		0	1
0	(Reserved)	(Fixed to 0)	--
1	DIP switch [SW1-2]	OFF	ON
2	(Reserved)	(Fixed to 0)	--
3	DIP switch [SW1-4]	OFF	ON
4,5	(Reserved)	(Fixed to 0)	--
6	Fixed	--	(Fixed to 1)
7	Fixed	(Fixed to 0)	--

(B) DIP switch status (Printer ID=112)

The first byte

Bit	Function	Value	
		0	1
0	DIP switch [SW1-1]	OFF	ON
1	DIP switch [SW1-2]	OFF	ON
2	DIP switch [SW1-3]	OFF	ON
3	DIP switch [SW1-4]	OFF	ON
4,5	(Reserved)	(Fixed to 0)	--
6	Fixed	--	(Fixed to 1)
7	Fixed	(Fixed to 0)	--

The second byte

Bit	Function	Value	
		0	1
0	DIP switch [SW1-5]	OFF	ON
1	DIP switch [SW1-6]	OFF	ON
2	DIP switch [SW1-7]	OFF	ON
3	DIP switch [SW1-8]	OFF	ON
4,5	(Reserved)	(Fixed to 0)	--
6	Fixed	--	(Fixed to 1)
7	Fixed	(Fixed to 0)	--

The third byte

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 45	SHEET 44

Bit	Function	Value	
		0	1
0	DIP switch [SW2-1]	OFF	ON
1	DIP switch [SW2-2]	OFF	ON
2	DIP switch [SW2-3]	OFF	ON
3	DIP switch [SW2-4]	OFF	ON
4,5	(Reserved)	(Fixed to 0)	--
6	Fixed	--	(Fixed to 1)
7	Fixed	(Fixed to 0)	--

The fourth byte

Bit	Function	Value	
		0	1
0	DIP switch [SW2-5]	OFF	ON
1,2,3,4,5	(Reserved)	(Fixed to 0)	--
6	Fixed	--	(Fixed to 1)
7	Fixed	(Fixed to 0)	--

(C) Type ID(B) (Printer ID=112)

Bit	Function	Value	
		0	1
0	Two-color model	Single-color	Two-color
1,2,3,4,5	(Reserved)	-	
6	Fixed	--	Fixed to 1
7	Fixed	Fixed to 0	--

[Caution]

- There are non-supported printer IDs depending on models. If a non-supported printer ID is specified, the error ERR_TIMEOUT will be returned.

[Supported printer]

TM-T88II(R), TM-T88III, TM-T90, TM-L90, TM-H5000II, TM-H5200, TM-U590, TM-U675, TM-H6000, TM-H6000II, TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, M-H3000(R), TM-U230, TM-U220, TM-U210, TM-U950, TM-U295, TM-L60II, TM-P60, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 46	SHEET 45

3.24. BiOpenDrawer

[Function]

Executes drawer operation.

[Format]

int BiOpenDrawer(int nHandle, BYTE drawer, BYTE pulse)

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

BYTE drawer

Specifies the drawer to be opened.

EPS_BI_DRAWER_1: Operates Drawer 1

EPS_BI_DRAWER_2: Operates Drawer 2

BYTE pulse

Specifies the interval until drawer operation.

EPS_BI_PULSE_100: Operates the drawer after 100 msec.

EPS_BI_PULSE_200: Operates the drawer after 200 msec.

EPS_BI_PULSE_300: Operates the drawer after 300 msec.

EPS_BI_PULSE_400: Operates the drawer after 400 msec.

EPS_BI_PULSE_500: Operates the drawer after 500 msec.

EPS_BI_PULSE_600: Operates the drawer after 600 msec.

EPS_BI_PULSE_700: Operates the drawer after 700 msec.

EPS_BI_PULSE_800: Operates the drawer after 800 msec.

[Return Values]

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

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 be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.

[Explanation]

The drawers operate even when the printer is off-line.

[Supported printer]

TM-T88II(R), TM-T88III, TM-T90, TM-L90, TM-H5000II, TM-H5200, TM-U675, TM-H6000, TM-H6000II, TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, M-H3000(R)

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 47	SHEET 46

3.25.BiSetMonInterval

[Function]

A status API that specifies the interval of the status information from the printer which is expressed in milliseconds.

[Format]

```
int BiSetMonInterval (int nHandle, WORD wNoPrnInterval, WORD wPrnInterval);
```

[Argument]

int nHandle

Specifies the handle value of the printer to change the interval. The BiOpenMonPrinter() return value is used in the handle value.

WORD wNoPrnInterval

Specifies the interval to get information from the printer expressed in milliseconds during non-printing.

WORD wPrnInterval

Specified the interval to get information from the printer expressed in milliseconds during printing.

[Return value]

0 is returned when changing the interval to get information from the printer is successful. The following error codes (less than zero) are returned when an error is triggered.

ERR_HANDLE(-60)	The handle value specified for the printer is incorrect.
ERR_PARAM(-90)	Specified interval in milliseconds is less than or equal to zero.
ERR_EXEC_FUNCTION(-310)	Cannot be used because the other API is being executed.

[Supported printer]

TM-T88II(R), TM-T88III, TM-T90, TM-L90, TM-H5000II, TM-H5200, TM-U590, TM-U675, TM-U375, TM-H6000, TM-H6000II, TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, M-H3000(R), TM-U230, TM-U220, TM-U210, TM-U950, TM-U295, TM-L60II, TM-P60, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 48	SHEET 47

3.26. BiSetMonEtherInterval

[Function]

A status API that specifies the interval of the status information from the Ethernet connection printer which is expressed in seconds.

[Format]

```
int BiSetMonEtherInterval (int nHandle, WORD wEtherInterval);
```

[Argument]

int nHandle

Specifies the handle value of the printer to change the interval. The BiOpenMonPrinter() return value is used in the handle value.

WORD wEtherInterval

Specifies the interval to get information from the Ethernet connection printer expressed in seconds.

[Return value]

0 is returned when changing the interval to get information from the printer is successful. The following error codes (less than zero) are returned when an error is triggered.

ERR_HANDLE (-60)	The handle value specified for the printer is incorrect.
ERR_PARAM (-90)	Parameter error
ERR_NOT_SUPPORT (-100)	Not supported

[Explanation]

If this function is not called, a default value exists. It is 2 seconds.

[Caution]

When using this function and the interval mode is very long, the serial reception buffer overflows and the right status notice become unreliable.

[Supported printer]

TM-T88II, TM-T88III, TM-T90, TM-L90, TM-H5000II, TM-H5200, TM-U590, TM-U675, TM-H6000, TM-H6000II, TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, TM-U230, TM-U220, TM-U210, TM-U295, TM-P60, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 49	SHEET 48

3.27.BiSetDefaultEchoTime

[Function]

Sets the number of response confirmations and the length of 1 time out.

[Format]

int BiSetDefaultEchoTime(BYTE Count, WORD Timeout)

[Argument]

BYTE Count

Specifies the number of response confirmations. ($0 < \text{Count} \leq 255$)

WORD Timeout

Specifies the length of 1 time out (Millisecond units ($0 < \text{Timeout} \leq 65535$))

[Return value]

0 is returned when changing the interval to get information from the printer is successful. The following error codes (less than zero) are returned when an error is triggered.

ERR_HANDLE (-60) The handle value specified for 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_SS_NOT_EXIST (-340) The status service has not been started up.

[Explanation]

Immediately after StatusAPI is installed, the number of times is 1 time and the timer out duration is 1 second. The value set by this function is enabled when BiOpenMonPrinter () is called the next time. Also, this function is enabled only when connected through Ethernet.

[Supported printer]

TM-T88II, TM-T88III, TM-T90, TM-L90, TM-H5000II, TM-H5200, TM-U590, TM-U675, TM-H6000, TM-H6000II, TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, TM-U230, TM-U220, TM-U210, TM-U295, TM-P60, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 50	SHEET 49

3.28.BiSetEtherEchoTime

[Function]

Sets the number of network printer response confirmations and the length of 1 time out after opening the StatusAPI.

[Format]

int BiSetEtherEchoTime(int nHandle, BYTE Count, WORD Timeout)

[Argument]

int nHandle

Specifies the handle value of the printer to change the interval. The BiOpenMonPrinter() return value is used in the handle value.

BYTE Count

Specifies the number of response confirmations. (0 < Count ≤ 255)

WORD Timeout

Specifies the length of 1 time out (Millisecond units (0 < Timeout ≤ 65535))

[Return value]

0 is returned when changing the interval to get information from the printer is successful. The following error codes (less than zero) are returned when an error is triggered.

ERR_HANDLE (-60) The handle value specified for 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_SS_NOT_EXIST (-340) The status service has not been started up.

[Explanation]

If a value is not specified by this function, the value set by BiSetDefaultEchoTime () becomes the effective value. If it has not been set by BiSetDefaultEchoTime (), the number of times is set at 1 and the time out duration becomes 1 second. This function is enabled only when connected through Ethernet.

[Supported printer]

TM-T88II, TM-T88III, TM-T90, TM-L90, TM-H5000II, TM-H5200, TM-U590, TM-U675, TM-H6000, TM-H6000II, TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, TM-U230, TM-U220, TM-U210, TM-U295, TM-P60, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 51	SHEET 50

3.29.BiGetInkStatus

[Function]

Acquires the current ink status.

[Format]

int BiGetInkStatus(int nHandle, LPDWORD Status) ;

[Argument]

int nHandle

Specifies the handle value for the printer whose status is being acquired. The return value of BiOpenMonPrinter() is specified in the handle value.

LPDWORD Status

The current ink status is set.

[Return Value]

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

ERR_HANDLE The handle value that specifies the printer is incorrect.

ERR_NOT_SUPPORT Not supported by this printer.

ERR_PARAM Parameter error

[Explanation]

The types of the printer's status that can be acquired are as followed.

Macro definition	Value	Status
INK_ASB_NEAR_END	0x0001	INK near end
INK_ASB_END	0x0002	INK end
INK_ASB_NO_CARTRIDGE	0x0004	INK cartridge installed/not installed
INK_ASB_NO_CARTRIDGE2	0x0008	INK cartridge (Color 2) installed/not installed
INK_ASB_CLEANING	0x0020	Cleaning
INK_ASB_NEAR_END2	0x0100	INK near end (Color2)
INK_ASB_END2	0x0200	INK end (Color2)

About the Color 2 ink status

The status should always be “ink present”, “ink adequate”, and “cartridge present”.

[Supported Printer]

TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 52	SHEET 51

3.30. BiSetInkStatusBackFunction

[Function]

Registers a callback function output when calling for ink status notification.

[Format]

```
int      BiSetInkStatusBackFunction( int nHandle,  
                                     int (CALLBACK EXPORT *pStatusCB)(DWORD dwStatus)) ;
```

[Argument]

int nHandle

Specifies the handle value for the printer whose status is being acquired. The return value of BiOpenMonPrinter() is specified in the handle value.

int (CALLBACK EXPORT *pStatusCB)(DWORD dwStatus)

Sets the address of the callback function.

[Return Value]

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

ERR_HANDLE	The handle value that specifies the printer is incorrect.
ERR_NOT_SUPPORT	Not supported by this printer.
ERR_PARAM	Parameter error

[Explanation]

If BiSetInkStatusBackFunction() is called, first, the ink status at that point is set in dwStatus and the callback function is called. After that, each time the printer's status undergoes a change, the new status is set in dwStatus and the callback function is called. To cancel the automatic status notification, BiCancelInkStatusBack() is executed.

For the value set in the callback function argument dwStatus, see the table in **3.28, BiGetInkStatus**.

[Supported Printer]

TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 53	SHEET 52

3.31.BiSetInkStatusBackFunctionEx

[Function]

Registers a callback function output when calling for ink status notification.

[Format]

```
int      BiSetInkStatusBackFunctionEx( int nHandle,
                                       int (CALLBACK EXPORT *pStatusCB)(DWORD dwStatus, LPSTR lpcPortName)) ;
```

[Argument]

int nHandle

Specifies the handle value for the printer whose status is being acquired. The return value of BiOpenMonPrinter() is specified in the handle value.

int (CALLBACK EXPORT *pStatusCB)(DWORD dwStatus, LPSTR lpcPortName)

Sets the callback function's address. The port name is set to lpcPortName.

[Return Value]

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

ERR_HANDLE	The handle value that specifies the printer is incorrect.
ERR_NOT_SUPPORT	Not supported by this printer.
ERR_PARAM	Parameter error

[Explanation]

If BiSetInkStatusBackFunctionEx() is called, first, the ink status at that point is set in dwStatus and the callback function is called. After that, each time the printer's status undergoes a change, the new status is set in dwStatus and the callback function is called. To cancel the automatic status notification, BiCancelInkStatusBack() is executed.

For the value set in the callback function argument dwStatus, see the table in **3.28, BiGetInkStatus**.

[Note]

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

[Supported Printer]

TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 54	SHEET 53

3.32. BiSetInkStatusBackWnd

[Function]

Registers a memory address which sets the window handle of the button which sends click events and sets status information when there is an ink status notification.

[Format]

```
int    BiSetInkStatusBackWnd( int nHandle, long hWnd, LPDWORD lpdwStatus) ;
```

[Argument]

int nHandle

Specifies the handle for the printer whose ink status is being acquired. The return value of BiOpenMonPrinter() is specified in the handle value.

long hWnd

Specifies the window handle of the button that sends the click event when there is an ink status notification.

LPDWORD lpdwStatus

Specifies the memory address that sets the ink status.

[Return Value]

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

ERR_HANDLE	The handle value that specifies the printer is incorrect.
ERR_NOT_SUPPORT	Not supported by this printer.
ERR_PARAM	Parameter error

[Explanation]

If BiSetInkStatusBackWnd() is called, first, the ink status at that point is set in lpdwStatus and the click event is sent to the button window specified in hWnd. After that, each time the printer's status undergoes a change, the new status is set in lpdwStatus and the click event is sent to the specified button window. To cancel the automatic status notification, BiCancelInkStatusBack() is executed.

For the value set in the callback function argument lpdwStatus, see the table in 3.24, BiGetInkStatus.

[Supported Printer]

TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 55	SHEET 54

3.33. BiCancelInkStatusBack

[Function]

Cancels the ink status notification registered in BiSetInkStatusBackFunction() or BiSetInkStatusBackWnd().

[Format]

```
int    BiCancelInkStatusBack( int nHandle );
```

[Argument]

int nHandle

Specifies the handle value for the printer whose ink status notification is being canceled. The return value in BiOpenMonPrinter() is specified in the handle value.

[Return Value]

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

ERR_HANDLE The handle value that specifies the printer is incorrect.

ERR_NOT_SUPPORT Not supported by this printer.

[Explanation]

If registration of the ink status notification request has not been performed, the cancel request is disregarded and 0 is returned.

[Supported Printer]

TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 56	SHEET 55

3.34.BiGetBatteryStatus

[Function]

Acquires the printer's current battery status. 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.

[Format]

int BiGetBatteryStatus (int nHandle, LPBYTE lpbPowerStatus, LPBYTE lpbBatteryStatus)

[Argument]

```
int      nHandle
```

Specifies the return value of the monitor initializing function.

LPBYTE lpbPowerStatus

Specifies the memory address where the power status is set.

LPBYTE lpbBatteryStatus

Specifies the memory address where the remaining amount of the battery is set.

[Return value]

0 is returned when changing the interval to get information from the printer is successful. The following error codes (less than zero) are returned when an error is triggered.

SUCCESS•0• Success

ERR_HANDLE (-60)	The handle value is incorrect.
------------------	--------------------------------

ERR_PARAM (-90)	Parameter error
-----------------	-----------------

ERR_NOT_SUPPORT (-100)	Not supported.
------------------------	----------------

ERR_OFFLINE • -110 • Cannot be used due to offline recovery waiting.

ERR_EXEC_FUNCTION (-310)	Cannot be used because another API is being executed.
--------------------------	---

[Explanation]

Power status

Value	Information
30h	Power supply: AC adapter
31h	Power supply: Battery

Battery status

Value	Information
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)

[Supported Printer]

TM-P60

TITLE	Revision	No	
		NEXT 57	SHEET 56
EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	D		

3.35.BiSetBatteryStatusBackFunctionEx

[Function]

Registers the callback function called at the battery status notification. Power status is stored in bPowerStatus and battery status value is stored in bBatteryStatus. Returns the pointer to the port name to recognize from which port the callback is.

For the power status and the battery status value, refer to **Power status** and **Battery status** in 73.3.BiGetBatteryStatus

[Format]

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

[Argument]

int nHandle

Specifies the return value of the monitor initializing function.

```
int (CALLBACK EXPORT *pBatteryCB) (BYTE bPowerStatus, BYTE bBatteryStatus, LPSTR lpcPortName)
```

Sets the printer status for bPowerStatus, the battery status for bBatteryStatus, and the port name for lpcPortName, and calls the callback function.

[Return value]

0 is returned when changing the interval to get information from the printer is successful. The following error codes (less than zero) are returned when an error is triggered.

SUCCESS • 0 •	Success
ERR_HANDLE (-60)	The handle value is incorrect.
ERR_PARAM (-90)	Parameter error
ERR_NOT_SUPPORT (-100)	Not supported.
ERR_OFFLINE • -110 •	Cannot be used due to offline recovery waiting.
ERR_EXEC_FUNCTION (-310)	Cannot be used because another API is being executed.

[Caution]

Refer to **Caution** in 3.33.BiGetBatteryStatus.

[Supported Printer]

TM-P60

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 58	SHEET 57

3.36.BiSetBatteryStatusBackWndEx

[Function]

Registers the handle of the button to send a click event at the battery status notification and the memory address to set the power status, battery status, and the pointer to the port name. Power status is stored in lpbPowerStatus and battery status value is stored in lpbBatteryStatus. And copies the port name in lpcPortName to recognize from which port the callback is. For the power status and the battery status value, refer to **Power status** and **Battery status** in 3.33.BiGetBatteryStatus

[Format]

int BiSetBatteryStatusBackWndEx (int nHandle, long hWnd, LPBYTE lpbPowerStatus, LPBYTE lpbBatteryStatus, LPSTR lpcPortName)

[Argument]

int nHandle

Specifies the return value of the monitor initializing function.

Long hWnd

Specifies the handle of the button. Sends a click event to this button.

LPBYTE lpbPowerStatus

Sets the value of the power status for lpbPowerStatus, and then sends the event.

LPBYTE lpbBatteryStatus

Sets the battery status value for lpbBatteryStatus, and then sends the event.

LPSTR 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.

[Return value]

0 is returned when changing the interval to get information from the printer is successful. The following error codes (less than zero) are returned when an error is triggered.

SUCCESS • 0 • Success

ERR_HANDLE (-60) The handle value is incorrect.

ERR_PARAM (-90) Parameter error

ERR_NOT_SUPPORT (-100) Not supported.

ERR_OFFLINE • -110 • Cannot be used due to offline recovery waiting.

ERR_EXEC_FUNCTION (-310) Cannot be used because another API is being executed.

[Caution]

Refer to **Caution** in 3.33.BiGetBatteryStatus.

[Supported Printer]

TM-P60

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 59	SHEET 58

3.37.BiCancelBatteryStatusBack

[Function]

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

[Format]

int BiCancelBatteryStatusBack(int nHandle)

[Argument]

int nHandle

Specifies the return value of the monitor initializing function.

[Return value]

0 is returned when changing the interval to get information from the printer is successful. The following error codes (less than zero) are returned when an error is triggered.

- SUCCESS•0• Sucess
- ERR_HANDLE (-60) The handle value is incorrect.
- ERR_NOT_SUPPORT (-100) Not supported.
- ERR_OFFLINE •-110• Cannot be used due to offline recovery waiting.
- ERR_EXEC_FUNCTION (-310) Cannot be used because another API is being executed.
- *Ignores the cancel request and returns SUCCESS when the battery status notification request is not registered.

[Supported Printer]

TM-P60

3.38. BiAutoPowerOffTime

[Function]

Acquires or sets the auto power off time. For the setting range of the auto power off time, refer to **auto power off time** below.

[Format]

int BiAutoPowerOffTime (int nHandle, BYTE bMode, lpbTime)

[Argument]

int nHandle

Specifies the return value of the monitor initializing function.

BYTE bMode

Specifies the process mode.

EPS_BI_GET (0): Acquires the auto power off time.

EPS_BI_SET (1): Sets the auto power off time.

LPBYTE lpbTime

Specifies the memory address to set the auto power off time.

When EPS_BI_GET is specified for the process mode:

Auto power off time is stored in lpbTime.

When EPS_BI_SET is specified for the process mode:

Specifies the auto power off time to set in the printer in lpbTime.

[Return value]

0 is returned when changing the interval to get information from the printer is successful. The following error codes (less than zero) are returned when an error is triggered.

SUCCESS•0• Success

ERR_NO_MEMORY (-50) Memory is insufficient.

ERR_HANDLE (-60) The handle value is incorrect.

ERR_TIMEOUT (-70) A time out error occurred.

ERR_ACCESS•-80• Cannot R/W in the printer.

(while accessing or printing)

ERR_NOT_SUPPORT (-100) Not supported.

ERR_OFFLINE (-110) Cannot be used due to offline recovery waiting.

ERR_EXEC_FUNCTION (-310) Cannot be used because another API is being executed.

[Explanation]

Auto power off time

Value	Auto power off time
0	Auto power off: disabled
1 to 60	1 to 60 minutes

[Supported Printer]

TM-P60

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 61	SHEET 60

3.39.BiPowerOff

[Function]

Executes power off process.

[Format]

int BiPowerOff(int nHandle)

[Argument]

int nHandle

Specifies the return value of the monitor initializing function.

[Return value]

0 is returned when changing the interval to get information from the printer is successful. The following error codes (less than zero) are returned when an error is triggered.

SUCCESS•0• Success

ERR_NO_MEMORY (-50) Memory is insufficient.

ERR_HANDLE (-60) The handle value is incorrect.

ERR_TIMEOUT (-70) A time out error occurred

ERR_ACCESS•-80• Cannot R/W in the printer.

(while accessing or printing)

ERR_NOT_SUPPORT (-100) Not supported.

ERR_OFFLINE (-110) Cannot be used due to offline recovery waiting.

ERR_EXEC_FUNCTION (-310) Cannot be used because another API is being executed

[Explanation]

Auto power off time

Value	Auto power off time
0	Auto power off: disabled
1 to 60	1 to 60 minutes

[Caution]

This function cannot be used during offline recovery waiting.

When the printer goes to offline while executing this function, power is not turned off.

[Supported Printer]

TM-P60

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 62	SHEET 61

3.40.BiMICRSetReadBackFunction

[Function]

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.

[Format]

```
int BiMICRSetReadBackFunction( int nHandle,  
int (CALLBACK EXPORT *pMicrCB)(void),LPBYTE pReadBuffSize,  
LPBYTE readCharBuff, LPBYTE pStatus, LPBYTE pDetail)
```

[Argument]

int nHandle

Specifies the handle value of the executing printer. The return value specified in BiOPENMonPrinter() is specified as the handle value.

int (CALLBACK EXPORT * pMicrCB)(void)

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

LPBYTE 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.

LPBYTE readCharBuff

Specifies the memory address where the check reading data are set.

LPBYTE pStatus

Specifies a 1-byte memory address where the reading status is stored. See MICR reading status below concerning the status that is returned.

LPBYTE 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.

[Return Values]

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

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 (printing in progress).
ERR_PARAM (-90)	Parameter error
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state i
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Explanation]

The following MICR reading states can be acquired.

Bit	Function	Value	
		0	1
0	Reading font	E13B	CMC7
1	Reserved	Fixed to 0	
2	Reserved	Fixed to 0	
3	Detailed information	Not added	Added
4	Reread	Enabled	Disabled

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 63	SHEET 62

5	Reading results	Normal end	Abnormal end
6	Reading data overflow	No	Yes
7	Fixed	Fixed to 0	

MICR Detailed Information

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.

[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).

[Supported Printers]

TM-H6000, TM-H6000II, TM-U675, TM-H5000II, TM-J7000/7100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 64	SHEET 63

3.41. BiMICRSetReadBackFunctionEx

[Function]

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.

[Format]

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

[Argument]

int nHandle

Specifies the handle value of the executing printer. The return value specified in BiOPENMonPrinter() is specified as the handle value.

int (CALLBACK EXPORT * pMicrCB)(void)

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

LPSTR 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.

LPBYTE 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.

LPBYTE readCharBuff

Specifies the memory address where the check reading data are set.

LPBYTE pStatus

Specifies a 1-byte memory address where the reading status is stored. See MICR reading status below concerning the status that is returned.

LPBYTE 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.

[Return Values]

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

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 (printing in progress).
ERR_PARAM (-90)	Parameter error
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state i
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Explanation]

The following MICR reading states can be acquired. Refer to [Explanation] and [Caution] in 3.39.

BiMICRSetReadBackFunction.

[Caution]

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

[Supported Printers]

TM-H6000, TM-H6000II, TM-U675, TM-H5000II, TM-J7000/7100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 65	SHEET 64

3.42.BiMICRSetReadBackWnd

[Function]

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.

[Format]

```
int    BiMICRSetReadBackWnd( int nHandle, long hWnd, LPBYTE pReadBuffSize,
                             LPBYTE readCharBuff, LPBYTE pStatus, LPBYTE pDetail)
```

[Argument]

int nHandle

Specifies the handle value of the printer executing the operation. The return value in BiOpenMonPrinter() is specified.

Long hWnd

Specifies the button handle. Sends the click even to this button.

LPBYTE 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.

LPBYTE readCharBuff

Specifies the memory addresses where the reading data are set.

LPBYTE pStatus

Specifies a 1-byte memory address where the reading status is set. See the MICR reading status in 5.19, "BiMICRSetReadBackFunction" concerning the status that is returned.

LPBYTE 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. See 5.19 "BiMICRSetReadBackFunction" concerning the MICR 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.

ERR_HANDLE (-60)	The handle value specified for the printer is incorrect.
ERR_PARAM (-90)	Parameter error
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state i
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[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).

[Supported Printers]

TM-H6000, TM-H6000II, TM-U675, TM-H5000II, TM-J7000/7100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 66	SHEET 65

3.43. BiMICRSelectDataHandling

[Function]

Selects the check reading operation.

[Format]

```
int BiMICRSelectDataHandling( int nHandle, BYTE charSelect,
                             BYTE detailSelect, BYTE errorSelect)
```

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

BYTE charSelect

Specifies handling of characters that cannot be analyzed.

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.

BYTE detailSelect

Specifies whether or not to add detailed information after a reading error.

0: Detailed information is not added.

1: Detailed information is added.

BYTE 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.

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.

- A check with a non-standard length is inserted.
- The magnetic waveform cannot be detected.
- Characters which cannot be analyzed are detected in analysis processing.
- Errors were detected in the noise measurements.

[Return Values]

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

ERR_HANDLE (-60)	The handle value specified for the printer is incorrect.
ERR_PARAM (-90)	Parameter error
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is reached.
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_EXEC_MICR (-320)	Cannot be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Supported Printers]

TM-H6000, TM-H6000II, TM-U675, TM-H5000II, TM-J7000/7100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 67	SHEET 66

3.44. BiMICRReadCheck

[Function]

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.

[Format]

int BiMICRReadCheck(int nHandle, BYTE readFont, BYTE waitInsertionTime)

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

BYTE readFont

Specifies the reading font.

0:E13B

1:CMC 7

BYTE waitInsertionTime

Specifies the check insertion wait time.

0 ~ 15 (x 60 sec.) (The printer's default is 0)

[Return Values]

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

ERR_HANDLE (-60)	The handle value specified for the printer is incorrect.
ERR_ACCESS (-80)	Reading/writing with the printer is not possible (printing in progress).
ERR_PARAM (-90)	Parameter error
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is reached.
ERR_WITHOUT_CB (-130)	Cannot be called for from the current callback routine (BiMICRSetReadBackFunction or BiMICRSetReadBackWnd).
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_EXEC_MICR (-320)	Cannot be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Caution]

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

[Supported Printers]

TM-H6000, TM-H6000II, TM-U675, TM-H5000II, TM-J7000/7100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 68	SHEET 67

3.45. BiMICRCancelWaitCheckInsertion

[Function]

Cancels check insertion wait.

[Format]

int BiMICRCancelWaitCheckInsertion(int nHandle)

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

[Return Values]

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

ERR_HANDLE (-60)	The handle value specified for the printer is incorrect.
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is recovered.
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Caution]

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

[Supported Printers]

TM-H6000, TM-H6000II, TM-U675, TM-H5000II, TM-J7000/7100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 69	SHEET 68

3.46. BiMICRCancelReadBack

[Function]

Cancels a reading information notification request registered using BiMICRSetReadBackFunction() or BiMICRSetReadBackWnd().

[Format]

int BiMICRCancelReadBack(int nHandle)

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

[Return Values]

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

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 (printing in progress).
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is recovered.
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_EXEC_MICR (-320)	Cannot be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Supported Printers]

TM-H6000, TM-H6000II, TM-U675, TM-H5000II, TM-J7000/7100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 70	SHEET 69

3.47. BiMICRRetransmissionCheckData

[Function]

Resends the check reading results.

[Format]

int BiMICRRetransmissionCheckData(int nHandle, LPBYTE pReadBuffSize,
LPBYTE readCharBuff, LPBYTE pStatus, LPBYTE pDetail, DWORD timeout)

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

LPBYTE 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.

LPBYTE readCharBuff

Specifies the memory addresses where the reading data are set.

LPBYTE pStatus

Specifies a 1-byte memory address where the reading status is set. See the MICR reading status in 5.19, "BiMICRSetReadBackFunction" concerning the status that is returned.

LPBYTE 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. See 5.19 "BiMICRSetReadBackFunction" concerning the MICR detailed information that is returned.

DWORD timeout

Specifies the time-out time for data reading in msec units.

[Return Values]

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

ERR_HANDLE (-60)	The handle value specified for the printer is incorrect.
ERR_TIMEOUT (-70)	A time out error occurred.
ERR_PARAM (-90)	Parameter error
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is recovered.
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_EXEC_MICR (-320)	Cannot be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[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).

[Supported Printers]

TM-H6000, TM-H6000II, TM-U675, TM-H5000II, TM-J7000/7100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 71	SHEET 70

3.48. BiMICRGetStatus

[Function]

Acquires the MICR status.

[Format]

int BiMICRGetStatus(int nHandle, LPBYTE pStatus)

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

LPBYTE 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.

[Return Values]

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

ERR_HANDLE (-60)	The handle value specified for the printer is incorrect.
ERR_TIMEOUT (-70)	A time out error occurred.
ERR_PARAM (-90)	Parameter error
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is recovered.
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_EXEC_MICR (-320)	Cannot be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Explanation]

The types of MICR status that can be acquired are as followed.

Bit	Function	Value	
		0	1
0	Fixed	Fixed to 0	
1	Fixed	Fixed to 1	
2	Selects the MICR Function	Selected	Not selected
3	Waits for insertion of a check/cleaning sheet.	Do not wait for insertion	Wait for insertion
4	Fixed	Fixed to 1	
5	TOF Detector	With form	Without form
6	BOF Detector	With form	Without form
7	Fixed	Fixed to 0	

For J9000/9100

Bit	Function	Value	
		0	1
0	Fixed	Fixed to 0	
1	Fixed	Fixed to 1	
2	Selects the MICR Function	Selected	Not selected
3	Waits for insertion of a check/cleaning sheet.	Do not wait for insertion	Wait for insertion
4	Fixed	Fixed to 1	
5	TOF Detector	With form	Without form

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 72	SHEET 71

6	ASF Detector	With form	Without form
7	Fixed	Fixed to 0	

[Supported Printers]

TM-H6000, TM-H6000II, TM-U675, TM-H5000II, TM-J7000/7100, TM-J9000/9100

	TITLE EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 73	SHEET 72

3.49. BiMICREjectCheck

[Function]

Ejects the check when the MICR function is selected.

[Format]

int BiMICREjectCheck(int nHandle)

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

[Return Values]

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

ERR_HANDLE (-60)	The handle value specified for the printer is incorrect.
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is recovered.
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_EXEC_MICR (-320)	Cannot be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Supported Printers]

TM-H6000, TM-H6000II, TM-U675, TM-H5000II, TM-J7000/7100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 74	SHEET 73

3.50. BiMICRLoadCheck

[Function]

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

[Format]

int BiMICRLoadCheck(int nHandle)

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

[Return Values]

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

ERR_HANDLE (-60)	The handle value specified for the printer is incorrect.
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is recovered.
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_EXEC_MICR (-320)	Cannot be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Supported Printers]

TM-H6000, TM-H6000II, TM-U675, TM-H5000II, TM-J7000/7100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 75	SHEET 74

3.51. BiMICRCleaning

[Function]

Cleans the MICR mechanism.

[Format]

int BiMICRCleaning(int nHandle)

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

[Return Values]

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

ERR_HANDLE (-60)	The handle value specified for the printer is incorrect.
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is recovered.
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_EXEC_MICR (-320)	Cannot be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[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.

[Supported Printers]

TM-H6000, TM-H6000II, TM-U675, TM-H5000II, TM-J7000/7100, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 76	SHEET 75

3.52.BiSCNSelectScanUnit

[Function]

Sets a unit that executes image scanning.

[Format]

int BiSCNSelectScanUnit (int nHandle, BYTE bSelectUnit)

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

BYTE bSelectUnit

Specifies a unit to be used for scanning. Values that can be specified are as below:

- | | |
|--------------------------------|--------------------------|
| EPS_BI_SCN_UNIT_CHECKPAPER(48) | • Unit for check reading |
| EPS_BI_SCN_UNIT_CARD(49) | • Unit for card scanning |

[Return Values]

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

- | | |
|----------------------------|---|
| ERR_HANDLE(-60) | The handle value specified for the printer is incorrect. |
| ERR_ACCESS (-80) | Reading/writing with the printer is not possible (printing in progress). |
| ERR_PARAM (-90) | Parameter error |
| ERR_NOT_SUPPORT (-100) | Not supported |
| ERR_OFFLINE (-110) | It was opened in the offline state, so it cannot be used until the online state is recovered. |
| ERR_NOT_EPSON (-120) | The printer is not an EPSON printer, so it cannot be used. |
| ERR_EXEC_FUNCTION (-310) | Cannot be used because the other API is being executed. |
| ERR_EXEC_MICR (-320) | Cannot be used because MICR is being read. |
| ERR_EXEC_SCAN (-330) | Cannot be used because scanning is being executed. |
| ERR_NOT_ALLOW_IN_CB (-410) | Cannot be called for from the current callback routine. |

[Caution]

If this function is executed for a TM-H6000II 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. The default when any unit is not specified with this argument is “Unit for check reading.” EPS_BI_SCN_UNIT_CHECKPAPER •

The following arguments are valid for the units currently selected.

- BiSCNSetImageQuality • •
- BiSCNSetScanArea • •
- BiSCNSetImageFormat • •
- BiSCNDeleteImage • •
- BiSCNSetCroppingArea • •
- BiSCNGetImageQuality • •
- BiSCNGetScanArea • •
- BiSCNGetCroppingArea • •

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 77	SHEET 76

3.53.BiSCNSetImageQuality

[Function]

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.

[Format]

int BiSCNSetImageQuality(int nHandle, BYTE bColorDepth, char bThreshold, BYTE bColor, BYTE bExOption)

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

BYTE 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.

EPS_BI_SCN_1BIT(1): 1bit

EPS_BI_SCN_8BIT(8): 8bit

char 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.

BYTE bColor

Specifies the color. Valid specification values are as shown below.

EPS_BI_SCN_MONOCHROME (48) : Black and White

EPS_BI_SCN_COLOR (49) : Color

However, in the current version, this value is fixed at EPS_BI_SCN_MONOCHROME, and any other value that is specified is regarded as invalid.

BYTE bExOption

Specifies density adjustment types. Values that can be specified are as below.

EPS_BI_SCN_MANUAL (49) •Density is adjusted manually.

EPS_BI_SCN_SHARP (50) Sharpening

[Return Values]

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

ERR_HANDLE(-60) The handle value specified for the printer is incorrect.

ERR_ACCESS (-80) Reading/writing with the printer is not possible (printing in progress).

ERR_PARAM (-90) Parameter error

ERR_NOT_SUPPORT (-100) Not supported

ERR_OFFLINE (-110) It was opened in the offline state, so it cannot be used until the online state is recovered.

ERR_EXEC_FUNCTION (-310) Cannot be used because the other API is being executed.

ERR_EXEC_MICR (-320) Cannot be used because MICR is being read.

ERR_EXEC_SCAN (-330) Cannot be used because scanning is being executed.

ERR_NOT_ALLOW_IN_CB (-410) Cannot be called for from the current callback routine.

[Caution]

If this function is executed for a TM-H6000II 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.

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 78	SHEET 77

- When check paper is selected with the TM-J9000/J9100, this function is available for the face specified by BiSCNSelectScanFace.
- 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.)
-

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

	TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision	No	
				NEXT	SHEET
			D	79	78

3.54.BiSCNSetImageFormat

[Function]

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.

[Format]

int BiSCNSetImageFormat(int nHandle, BYTE bFormat)

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

BYTE bFormat

Specifies the format of image data notified. The valid specification values are as shown below.

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

The default value is EPS_BI_SCN_TIFF(1) after the printer's power is turned on, or after it is reset.

[Return Values]

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

ERR_HANDLE(-60) The handle value specified for the printer is incorrect.
ERR_ACCESS (-80) Reading/writing with the printer is not possible (printing in progress).
ERR_PARAM (-90) Parameter error
ERR_NOT_SUPPORT (-100) Not supported
ERR_OFFLINE (-110) It was opened in the offline state, so it cannot be used until the online state is recovered.
ERR_EXEC_FUNCTION (-310) Cannot be used because the other API is being executed.
ERR_EXEC_MICR (-320) Cannot be used because MICR is being read.
ERR_EXEC_SCAN (-330) Cannot be used because scanning is being executed.
ERR_NOT_ALLOW_IN_CB (-410) Cannot be called for from the current callback routine.

[Caution]

If this function is executed for the TM-H6000II, 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.

- When check paper is selected with the TM-J9000/J9100, this function is available for the face specified by BiSCNSelectScanFace.
- 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.)

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 80	SHEET 79

3.55.BiSCNSetScanArea

[Function]

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.

[Format]

int BiSCNSetScanArea(int nHandle, BYTE bStartX, BYTE bStartY, BYTE bEndX, BYTE bEndY)

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

BYTE 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-H6000II is 0~99. The valid specification range in the TM-J9000/9100 is 0~228.)

The default value after the printer's power is turned off or after printer reset is 0.

BYTE 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.

BYTE 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-H6000II is 0~100. The valid specification range in the TM-J9000/9100 is 0~230.)

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.

BYTE 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.

[Return Values]

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

ERR_HANDLE(-60)	The handle value specified for the printer is incorrect.
ERR_ACCESS (-80)	Reading/writing with the printer is not possible (printing in progress).
ERR_PARAM (-90)	Parameter error
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is recovered.
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_EXEC_MICR (-320)	Cannot be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Caution]

- If this function is executed for the TM-H6000II, 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 >= bEndX, or bStartY >= 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 StatusAPI, 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 H6000II, (The original valid

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 81	SHEET 80

specification range is 0 ~ 100.)

- 1) The API transmits 101 as the scanning area's end X 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.
 - When check paper is selected with the TM-J9000/J9100, this function is available for the face specified by BiSCNSelectScanFace.
 - 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).

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 82	SHEET 81

3.56.BiSCNPreScan

[Function]

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).)

[Format]

int BiSCNPreScan(int nHandle, LPBYTE pResultStatus, char *pThreshold)

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

LPBYTE pResultStatus

Specifies the memory address where the prescan results status is set. The set value is as shown below.

Bit	Function	Value	
		0	1
0,1,2,3,4	Reserved	Fixed to 0	
5	Execution Results	Ends normally.	Ends with an error.
6	Fixed	—	Fixed to 1.
7	Fixed	Fixed to 0	—

Char 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.

[Return Values]

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

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 (printing in progress).
ERR_PARAM (-90)	Parameter error
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is recovered.
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_EXEC_MICR (-320)	Cannot be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Caution]

If this function is executed for the TM-H6000II, which is not equipped with a scanner, it ends with an ERR_TIMEOUT.

[Supported Printers]

TM-H6000II with scanner

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 83	SHEET 82

3.57.BiSCNGetImageQuality

[Function]

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

[Format]

```
int BiSCNGetImageQuality( int nHandle, LPBYTE pColorDepth, char *pThreshold,
                          LPBYTE pColor, LPBYTE pExOption)
```

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

LPBYTE pColorDepth

Specifies the memory address where the tonal gradation is set.

EPS_BI_SCN_1BIT(1): 1bit

EPS_BI_SCN_8BIT(8): 8bit

char *pThreshold

Specifies the memory address where the density threshold value is set.

LPBYTE pColor

Specifies the memory address where color is set. The set value is as shown below.

EPS_BI_SCN_MONOCHROME (48) : Black and White

EPS_BI_SCN_COLOR (49) : Color

LPBYTE pExOption

Specifies a memory address to which a density adjustment type is set. Set values are as below.

EPS_BI_SCN_MANUAL•49• •Density is adjusted manually.

EPS_BI_SCN_SHARP•50• •Sharpening

[Return Values]

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

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 (printing in progress).
ERR_PARAM (-90)	Parameter error
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is recovered.
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_EXEC_MICR (-320)	Cannot be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Caution]

If this function is executed for a TM-H6000II that is not equipped with a scanner, it ends with an ERR_TIMEOUT.

This function is valid for the scanner unit currently selected.

When check paper is selected with the TM-J9000/J9100, this function is available for the face specified by BiSCNSelectScanFace.

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 84	SHEET 83

3.58.BiSCNGetImageFormat

[Function]

Acquires the format of the image set in the printer.

[Format]

int BiSCNGetImageFormat(int nHandle, LPBYTE pFormat)

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

LPBYTE pFormat

Specifies the memory address where the format of the notified image data is set. The set value is as shown below.

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 Values]

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

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 (printing in progress).
ERR_PARAM (-90) Parameter error
ERR_NOT_SUPPORT (-100) Not supported
ERR_OFFLINE (-110) It was opened in the offline state, so it cannot be used until the online state is recovered.
ERR_EXEC_FUNCTION (-310) Cannot be used because the other API is being executed.
ERR_EXEC_MICR (-320) Cannot be used because MICR is being read.
ERR_EXEC_SCAN (-330) Cannot be used because scanning is being executed.
ERR_NOT_ALLOW_IN_CB (-410) Cannot be called for from the current callback routine.

[Caution]

If this function is executed for the TM-H6000II, which is not equipped with a scanner, it ends with an ERR_TIMEOUT.

This function is valid for the scanner unit currently selected.

When check paper is selected with the TM-J9000/J9100, this function is available for the face specified by BiSCNSelectScanFace.

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 85	SHEET 84

3.59.BiSCNGetScanArea

[Function]

Acquires the image scanning area specified in the printer.

[Format]

int BiSCNGetScanArea(int nHandle, LPBYTE pStartX, LPBYTE pStartY, LPBYTE pEndX, LPBYTE pEndY)

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

LPBYTE pStartX

Specifies the memory address where the starting X coordinate of the scanning area is set.

LPBYTE pStartY

Specifies the memory address where the starting Y coordinate of the scanning area is set.

LPBYTE pEndX

Specifies the memory address where the ending X coordinate of the scanning area is set.

LPBYTE bEndY

Specifies the memory address where the ending Y coordinate of the scanning area is set.

[Return Values]

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

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 (printing in progress).
ERR_PARAM (-90)	Parameter error
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is recovered.
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_EXEC_MICR (-320)	Cannot be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Caution]

If this function is executed for the TM-H6000II, which is not equipped with a scanner, it ends with an ERR_TIMEOUT.

This function is valid only for scanning check paper.

When check paper is selected with the TM-J9000/J9100, this function is available for the face specified by BiSCNSelectScanFace.

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 86	SHEET 85

3.60.BiSCNSetReadBackFunction

[Function]

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.

[Format]

```
int BiSCNSetReadBackFunction( int nHandle, int (CALLBACK EXPORT *pScnCB)(void),
                             LPDWORD pBuffSize, LPBYTE pBuff, LPBYTE pImageXsize,
                             LPBYTE pStatus, LPBYTE pDetail)
```

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

int (CALLBACK EXPORT * pScnCB)(void)

Specifies the callback function address for sending notification of the results of image scanning.

LPDWORD 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.

LPBYTE pBuff

Specifies the memory address where image data are set.

LPBYTE pImageXsize

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: $(198-128)*8 = 560$).

LPBYTE pStatus

Specifies the memory address where the read status is stored. Concerning the returned status, refer to the image scanning status items below.

LPBYTE 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.

[Return Values]

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

ERR_HANDLE (-60) The handle value specified for the printer is incorrect.

ERR_PARAM (-90) Parameter error

ERR_NOT_SUPPORT (-100) Not supported

ERR_OFFLINE (-110) It was opened in the offline state, so it cannot be used until the online state is recovered.

ERR_EXEC_FUNCTION (-310) Cannot be used because the other API is being executed.

ERR_NOT_ALLOW_IN_CB (-410) Cannot be called for from the current callback routine.

[Explanation]

Image Read Status For the TM-H6000II

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 87	SHEET 86

Bit	Function	Value	
		0	1
0	Reserved	Fixed to 0.	
1	Reserved	Fixed to 0.	
2	Reserved	Fixed to 0.	
3	Reserved	Fixed to 0.	
4	Rescanned	Possible	Not (Fixed)
5	Scanning results	Ends normally.	Ends with an error.
6	Scanning data overflow	No overflow	Overflow
7	Scanning data translation error	No error	Error

Bit 7 is ON when status API fail to receive the scanning data from the printer. In this case, the contents of pBuff is not correct.

Detailed Image Information

For the TM-H6000II

Value	Information
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

[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.

[Supported Printers]

TM-H6000II with scanner

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 88	SHEET 87

3.61.BiSCNSetReadBackFunctionEx

[Function]

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.

[Format]

```
int BiSCNSetReadBackFunctionEx( int nHandle, int (CALLBACK EXPORT *pScnCB)(LPSTR lpcPortName),
                                LPDWORD pBuffSize, LPBYTE pBuff, LPBYTE pImageXsize,
                                LPBYTE pStatus, LPBYTE pDetail)
```

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

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.

LPDWORD 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.

LPBYTE pBuff

Specifies the memory address where image data are set.

LPBYTE pImageXsize

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: $(198-128)*8 = 560$.)

LPBYTE pStatus

Specifies the memory address where the read status is stored. Concerning the returned status, refer to the image scanning status items below.

LPBYTE 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.

[Return Values]

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

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_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is recovered.
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[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.

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 89	SHEET 88

[Supported Printers]
TM-H6000II with scanner

	TITLE EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 90	SHEET 89

3.62.BiSCNSetReadBackWnd

[Function]

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.

[Format]

```
int BiSCNSetReadBackWnd( int nHandle, long hWnd, LPDWORD pBuffSize,
                        LPBYTE pBuff, LPBYTE pImageXsize,
                        LPBYTE pStatus, LPBYTE pDetail)
```

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

Long hWnd

The button handle. Click events are sent to this button.

LPDWORD pBuffSize

Specifies the size of memory where image data are sent. The actual scanning data size is set after this function is executed.

LPBYTE pBuff

Specifies the memory address where image data are set.

LPBYTE pImageXsize

Specifies the memory address where the number of data (bytes) in the X direction of the image data is set.

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: $(198-128)*8 = 560$).

LPBYTE pStatus

Specifies the memory address where the scanning status is stored. See the BiSCNSetReadBackFunction image scanning status concerning the returned status.

LPBYTE pDetail

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.

[Return Values]

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

ERR_HANDLE (-60)	The handle value specified for the printer is incorrect.
ERR_PARAM (-90)	Parameter error
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is recovered.
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[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.

[Supported Printers]

TM-H6000II with scanner

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 91	SHEET 90

3.63.BiSCNCancelReadBack

[Function]

Cancels the scanning information notice request registered using BiSCNSetReadBackFunction () or BiSCNSetReadBackWnd ().

[Format]

int BiSCNCancelReadBack(int nHandle)

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

[Return Values]

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

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 (printing in progress).
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is recovered.
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Supported Printers]

TM-H6000II with scanner

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 92	SHEET 91

3.64.BiSCNReadImage

[Function]

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

[Format]

```
int BiSCNReadImage( int nHandle, WORD wId, BYTE bSelectSheet,  
                   BYTE bWaitInsertionTime, BYTE bAddInforDataSize,  
                   LPBYTE pAddInforData, BYTE bMemory)
```

[Argument]

int nHandle
 Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

WORD wId
 Specifies the data identifier related to the scanned image. Data identifier can be specified in the range of 1- 65535.

BYTE bSelectSheet
 Specifies the paper which is the scanning object. The types that can be specified are as shown below.

EPS_BI_SCN_JOURNAL(1)	: Journal
EPS_BI_SCN_RECEIPT(2)	: Receipt
EPS_BI_SCN_CARD(16)	: Receipt
EPS_BI_SCN_CHECKPAPER(32)	: Check paper

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.

BYTE bWaitInsertionTime
 Specifies the paper insertion wait time.
 0 ~ 15 [x 60 sec.] (The default is 0.)

BYTE bAddInforDataSize
 Specifies the memory address where the size of character data is set if character information is added to an image.

LPBYTE pAddInforData
 Specifies the memory address where character data are set if character information is added to an image.

BYTE bMemory
 Specifies whether to save or not save the result of reading images in the NV memory.

EPS_BI_SCN_NVMEMORY_NOTSAVE(48)	not saved (reading result is saved in the work area)
EPS_BI_SCN_NVMEMORY_SAVE(49)	saved

[Return Values]

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

ERR_HANDLE (-60)	The handle value specified for the printer is incorrect.
ERR_ACCESS (-80)	Reading/writing with the printer is not possible (printing in progress).
ERR_PARAM (-90)	Parameter error
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is recovered.
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 be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Caution]

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 93	SHEET 92

- If this function is executed for the TM-H6000II, 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
When a selected unit is a unit for check reading•

EPS_BI_SCN_JOURNAL(1)	Journal
EPS_BI_SCN_RECEIPT(2)	Receipt
EPS_BI_SCN_CHECKPAPER(32)	Check paper

When a selected unit is a unit for card scanning•

EPS_BI_SCN_CARD (16)	Card
----------------------	------

[Supported Printers]

TM-H6000II with scanner

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 94	SHEET 93

3.65.BiSCNRetransmissionImage

[Function]

Retransmits the image scanning results.

[Format]

```
int BiSCNRetransmissionImage( int nHandle, WORD wId, LPDWORD pBuffSize,
                              LPBYTE pBuff, LPWORD pImageXsize,
                              LPBYTE pStatus, LPBYTE pDetail, DWORD dwTimeout)
```

[Argument]

int nHandle
Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

WORD wId
Specifies the data identifier related to the scanned image. Data identifier can be specified in the range of 1- 65535.

LPDWORD pBuffSize
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.

LPBYTE pBuff
Specifies the memory address where the image data are set.

LPWORD pImageXsize
Specifies the memory address where the number of image data (bytes) in the X direction is set.
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: $(198-128)*8 = 560$.)

LPBYTE pStatus
Specifies the memory address where the read status is stored. Concerning the status that is returned, see the BiSCNSetReadBackFunction image scanning status.

LPBYTE pDetail
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.

DWORD dwTimeout
Specifies the data reading time out time in msec 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.

[Return Values]

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

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 (printing in progress).
ERR_PARAM (-90)	Parameter error
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is recovered.
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_EXEC_MICR (-320)	Cannot be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Caution]

- If this function is executed for the TM-H6000II, 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).

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 95	SHEET 94

- 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.

[Supported Printers]

TM-H6000II with scanner

	TITLE EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 96	SHEET 95

3.66.BiSCNGetClumpStatus

[Function]

Acquires the clamp status of cut sheets.

[Format]

int BiSCNGetClumpStatus(int nHandle, LPBYTE pStatus)

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

LPBYTE pStatus

Specifies the memory address where the cut sheet clamp status is to be stored. See the cut sheet clamp status items shown below concerning the returned status.

[Return Values]

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

ERR_HANDLE (-60)	The handle value specified for the printer is incorrect.
ERR_ACCESS (-80)	Reading/writing with the printer is not possible (printing in progress).
ERR_PARAM (-90)	Parameter error
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is recovered.
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 be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.

[Explanation]

Cut Sheet Clamp Status for the TM-H6000II

Bit	Function	Value	
		0	1
0	Top of sheet slip processing	Possible	Not possible
1	Check paper's MICR operation status	Possible	Not possible
2	Check paper image processing status	Possible	Not possible
3	Reserved	Fixed to 0	
4	Reserved	Fixed to 0	
5	Reserved	Fixed to 0	
6	Fixed	–	Fixed to 1
7	Fixed	Fixed to 0	–

For the TM-J9000/9100

Bit	Function	Value	
		0	1
0	Reserved	–	
1	Check paper's MICR operation status	Possible	Not possible
2,3,4,5	Reserved	–	
6	Fixed	–	Fixed to 1
7	Fixed	Fixed to 0	–

When “Possible” is specified for “Top of sheet slip processing,” “Check paper's MICR operation status” and “Check

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 97	SHEET 96

paper image processing status,” it shows that each operation can be executed without the currently clamped paper being ejected.

Not possible indicates it must be executed after the cut sheet paper is inserted.

[Caution]

- If this function is executed for the TM-H6000II, which is not equipped with a scanner, it ends with an ERR_TIMEOUT.

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 98	SHEET 97

3.67.BiSCNClumpPaper

[Function]

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

[Format]

int BiSCNClumpPaper(int nHandle)

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

[Return Values]

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

ERR_HANDLE (-60)	The handle value specified for the printer is incorrect.
ERR_ACCESS (-80)	Reading/writing with the printer is not possible (printing in progress).
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is recovered.
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_EXEC_MICR (-320)	Cannot be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.

[Caution]

- If this function is executed for the TM-H6000II, which is not equipped with a scanner, it ends normally, but the paper is not clamped.
- This function is valid for the scanner unit currently selected.

[Supported Printers]

TM-H6000II with scanner

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 99	SHEET 98

3.68.BiSCNSetCroppingArea

[Function]

Specifies the cropping area.

[Format]

int BiSCNSetCroppingArea(int nHandle, BYTE bAreaNo, BYTE bStartX, BYTE bStartY, BYTE bEndX, BYTE bEndY)

[Argument]

int	nHandle	Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.
BYTE	bAreaNo	Specifies the cropping area number. The valid setting range is 1~255.
BYTE	bStartX	Specifies the starting X coordinate of the cropping area. The valid setting range is 0 ~ 254 in mm units.
BYTE	bStartY	Specifies the starting Y coordinate of the cropping area. The valid setting range is 0 ~ 254 in mm units.
BYTE	bEndX	Specifies the ending X coordinate of the cropping area. The valid setting range is 1 ~ 255 in mm units.
BYTE	bEndY	Specifies the ending Y coordinate of the cropping area. The valid setting range is 1 ~ 255 in mm units.

[Return Values]

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

ERR_HANDLE (-60)	The handle value specified for the printer is incorrect.
ERR_ACCESS (-80)	Reading/writing with the printer is not possible (printing in progress).
ERR_PARAM (-90)	Parameter error
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is recovered.
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_EXEC_MICR (-320)	Cannot be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.
ERR_NOT_ALLOW_IN_CB(-410)	Cannot be called for from the current callback routine.

[Caution]

- For the TM-H6000II, 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 <= bAreaNo <= 10, 0 <= bStartX <= 98, 0 <= bStartY <= 228, 2 <= bEndX <= 255, 2 <= bEndY <= 255
For TM-J9000/9100
1 <= bAreaNo <= 255, 0 <= bStartX <= 98, 0 <= bStartY <= 228, 2 <= bEndX <= 100, 2 <= bEndY <= 230
- 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.
- When check paper is selected with the TM-J9000/J9100, this function is available for the face specified by

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 100	SHEET 99

BiSCNSelectScanFace.

- 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)

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

	TITLE EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 101	SHEET 100

3.69.BiSCNGetCroppingArea

[Function]

Acquires the cropping area set in the printer.

[Format]

int BiSCNGetCroppingArea(int nHandle, LPWORD pBuffSize, LPBYTE pBuff)

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

LPWORD pBuffSize

Specifies the size of memory where the cropping area information is set. The actual size of the scanned data is set.

LPBYTE pBuff

Specifies the memory address where the cropping area information is set. The information is set in the following format.

Cropping area No. (1 byte)

Cropping area starting X coordinate (1 byte)

Cropping area starting Y coordinate (1 byte)

Cropping area ending X coordinate (1 byte)

Cropping area ending Y coordinate (1 byte)

:

[Return Values]

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

ERR_PAPERINSERT_TIMEOUT • □300 • Paper insertion waiting time has passed.

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 (printing in progress).

ERR_PARAM (-90) Parameter error

ERR_NOT_SUPPORT (-100) Not supported

ERR_OFFLINE (-110) It was opened in the offline state, so it cannot be used until the online state is recovered.

ERR_WITHOUT_CB (-130) Cannot execute because either BiSCNSetReadBackFunction or BiSCNSetReadBackWnd has not been called.

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 be used because MICR is being read.

ERR_EXEC_SCAN (-330) Cannot be used because scanning is being executed.

ERR_NOT_ALLOW_IN_CB (-410) Cannot be called for from the current callback routine.

[Caution]

- If this function is executed for the TM-H6000II, 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.
- When check paper is selected with the TM-J9000/J9100, this function is available for the face specified by BiSCNSelectScanFace.

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 102	SHEET 101

3.70.BiSCNDeleteCroppingArea

[Function]

Deletes the cropping area set in the printer.

[Format]

int BiSCNDeleteCroppingArea(int nHandle, BYTE AreaNo)

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

BYTE 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.

[Return Values]

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

ERR_HANDLE (-60)	The handle value specified for the printer is incorrect.
ERR_ACCESS (-80)	Reading/writing with the printer is not possible (printing in progress).
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is recovered.
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 be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Caution]

- If this function is executed for the TM-H6000II, 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.
- When check paper is selected with the TM-J9000/J9100, this function is available for the face specified by BiSCNSelectScanFace.

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 103	SHEET 102

3.71. BiSCNDeleteImage

[Function]

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.

[Format]

int BiSCNDeleteImage(int nHandle, WORD wID)

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

WORD 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.

[Return Values]

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

ERR_HANDLE (-60)	The handle value specified for the printer is incorrect.
ERR_ACCESS (-80)	Reading/writing with the printer is not possible (printing in progress).
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is recovered.
ERR_EXEC_FUNCTION (-310)	Cannot be used because the other API is being executed.
ERR_EXEC_MICR (-320)	Cannot be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Caution]

- If this function is executed for the TM-H6000II, 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.
- When check paper is selected with the TM-J9000/J9100, this function is available for the face specified by BiSCNSelectScanFace.

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 104	SHEET 103

3.72. BiSCNGetImageList

[Function]

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.

[Format]

int BiSCNGetImageList(int nHandle, LPWORD pListNum, LPWORD pIDList)

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

LPWORD 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.

pIDList

Specifies the memory address for setting the data ID list. Information should be set with the format below.

DataID1 (1-65535) , ..., DataIDk

[Return Values]

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

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 (printing in progress).
ERR_PARAM (-90)	Parameter error
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	It was opened in the offline state, so it cannot be used until the online state is recovered.
ERR_BUFFER_OVER_FLOW (-140)	Lack of buffer capacity.
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 be used because MICR is being read.
ERR_EXEC_SCAN (-330)	Cannot be used because scanning is being executed.
ERR_NOT_ALLOW_IN_CB (-410)	Cannot be called for from the current callback routine.

[Caution]

- If this function is executed for the TM-H6000II, which is not equipped with a scanner, it ends with an ERR_TIMEOUT.
- Data ID saved in the work area cannot be acquired.
- When check paper is selected with the TM-J9000/J9100, this function is available for the face specified by BiSCNSelectScanFace.

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 105	SHEET 104

3.73. BiSCNGetImageRemainingCapacity

[Function]

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

[Format]

int BiSCNGetImageRemainingCapacity(int nHandle, LPDWORD pSize)

[Argument]

int nHandle

Specifies the handle value of the printer executing the function. The return value in BiOpenMonPrinter() is specified.

LPDWORD pSize

Specifies the memory address for setting the remaining capacity of the NV memory for saving the reading result of images.

[Return Values]

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

ERR_PAPERINSERT_TIMEOUT • □300 • Paper insertion waiting time has passed.

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 (printing in progress).

ERR_PARAM (-90) Parameter error

ERR_NOT_SUPPORT (-100) Not supported

ERR_OFFLINE (-110) It was opened in the offline state, so it cannot be used until the online state is recovered.

ERR_EXEC_FUNCTION (-310) Cannot be used because the other API is being executed.

ERR_EXEC_MICR (-320) Cannot be used because MICR is being read.

ERR_EXEC_SCAN (-330) Cannot be used because scanning is being executed.

ERR_NOT_ALLOW_IN_CB (-410) Cannot be called for from the current callback routine.

[Caution]

- If this function is executed for the TM-H6000II, 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.

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 106	SHEET 105

3.74.BiESCNEEnable

[Function]

Set so that scanner extended functions can be used.

[Format]

int BiESCNEEnable(BYTE bStoreType);

[Argument]

BYTE bStoreType

Select a storing method for a cropped image stored using BiESCNSStoreImage().

CROP_STORE_MEMORY(0): Save in memory.

CROP_STORE_FILE(1): Save in a file.

[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:

ERR_PARAM (-90) Parameter error

ERR_ENABLE(-160) Cannot be used because BiOpenMonPrinter() is called.

[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.

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 107	SHEET 106

3.75.BiESCNGetAutoSize

[Function]

Acquire the value of capAutoSize.

[Format]

int BiESCNGetAutoSize(int nHandle, LPBYTE pCapAutoSize);

[Argument]

int nHandle

Select a printer handle value. Specify a return value of BiOpenMonPrinter() to the handle value.

LPBYTE pCapAutoSize

Select a memory address to set a capAutoSize value.

[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:

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.

[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.

[Caution]

- When check paper is selected with the TM-J9000/J9100, this function is available for the face specified by BiSCNSelectScanFace.

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 108	SHEET 107

3.76.BiESCNSetAutoSize

[Function]

Select the value of capAutoSize.

[Format]

```
int    BiESCNSetAutoSize(int nHandle, BYTE bCapAutoSize);
```

[Argument]

int nHandle

Select a printer handle value. Specify a return value of BiOpenMonPrinter() to the handle value.

BYTE bCapAutoSize

Select a value for a capAutoSize.

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:

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.

[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.)

[Caution]

- When check paper is selected with the TM-J9000/J9100, this function is available for the face specified by BiSCNSelectScanFace.

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 109	SHEET 108

3.77.BiESCNGetCutSize

[Function]

Acquire the value of cutSize.

[Format]

```
int    BiESCNGetCutSize(int nHandle, LPWORD pCutSize);
```

[Argument]

int nHandle

Select a printer handle value. Specify a return value of BiOpenMonPrinter() to the handle value.

LPWORD pCutSize

Select a memory address to set a cutSize value.

[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:

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.

[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.

[Caution]

- When check paper is selected with the TM-J9000/J9100, this function is available for the face specified by BiSCNSelectScanFace.

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 110	SHEET 109

3.78.BiESCNSetCutSize

[Function]

Select a value of cutSize.

[Format]

```
int    BiESCNSetCutSize(int nHandle, WORD wCutSize);
```

[Argument]

int nHandle

Select a printer handle value. Specify a return value of BiOpenMonPrinter() to the handle value.

WORD 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.

[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:

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.

[Explanation]

Set the value selected by wCutSize to cutSize.

[Caution]

- When check paper is selected with the TM-J9000/J9100, this function is available for the face specified by BiSCNSelectScanFace.

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 111	SHEET 110

3.79.BiESCNGetRotate

[Function]

Acquire the value of capRotate.

[Format]

```
int BiESCNGetRotate(int nHandle, LPBYTE pCapRotate);
```

[Argument]

int nHandle

Select a printer handle value. Specify a return value of BiOpenMonPrinter() to the handle value.

LPBYTE pCapRotate

Select a memory address to set a capRotate value.

[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:

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.

[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.

[Caution]

- When check paper is selected with the TM-J9000/J9100, this function is available for the face specified by BiSCNSelectScanFace.

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 112	SHEET 111

3.80.BiESCNSetRotate

[Function]

Select a value of capRotate.

[Format]

```
int BiESCNSetRotate(int nHandle, BYTE bCapRotate);
```

[Argument]

int nHandle

Select a printer handle value. Specify a return value of BiOpenMonPrinter() to the handle value.

BYTE bCapRotate

Select a value for capRotate.

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:

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.

[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.)

[Caution]

- When check paper is selected with the TM-J9000/J9100, this function is available for the face specified by BiSCNSelectScanFace.

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 113	SHEET 112

3.81.BiESCNGetDocumentSize

[Function]

Acquire the values of documentWidth and documentHeight.

[Format]

```
int    BiESCNGetDocumentSize(int nHandle, LPWORD pDocumentWidth,
                             LPWORD pDocumentHeight);
```

[Argument]

int nHandle
 Select a printer handle value. Specify a return value of BiOpenMonPrinter() to the handle value.

LPWORD pDocumentWidth
 Select a memory address to set a value of the width of the image data (unit: 0.1 mm).

LPWORD pDocumentHeight
 Select a memory address to set a value of the height of the image data (unit: 0.1 mm).

[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:

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.

[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.

[Caution]

- When check paper is selected with the TM-J9000/J9100, this function is available for the face specified by BiSCNSelectScanFace.

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 114	SHEET 113

3.82.BiESCNSetDocumentSize

[Function]

Select values of documentWidth and documentHeight.

[Format]

```
int    BiESCNSetDocumentSize(int nHandle, WORD wDocumentWidth);
                                WORD wDocumentHeight);
```

[Argument]

int nHandle

Select a printer handle value. Specify a return value of BiOpenMonPrinter() to the handle value.

WORD wDocumentWidth

Select the width of the image data (unit: 0.1 mm).

Selectable range is 100 to 3000.

WORD wDocumentHeight

Select the height of the image data (unit: 0.1 mm).

Selectable range is 100 to 3000.

[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:

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.

[Explanation]

Set the width and height selected to documentWidth and documentHeight.

[Note]

The argument unit is 0.1mm.

[Caution]

- When check paper is selected with the TM-J9000/J9100, this function is available for the face specified by BiSCNSelectScanFace.

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 115	SHEET 114

3.83.BiESCNDefineCropArea

[Function]

Register CropArea or delete all the CropArea registered.

[Format]

```
int BiESCNDefineCropArea(int nHandle, BYTE bCropAreaID, WORD wStartX,  
WORD wStartY, WORD wEndX, WORD wEndY);
```

[Argument]

int nHandle

Select a printer handle value. Specify a return value of BiOpenMonPrinter() to the handle value.

BYTE bCropAreaID

Select CropAreaID to be registered. Selectable values are 1 to 255.

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.

The argument other than the above: the coordinate selected is set.

WORD wStartX

Select a starting point (X) of CropArea. Selectable values are 0 to documentWidth-1 (unit: 0.1 mm)

WORD wStartY

Select a starting point (Y) of CropArea. Selectable values are 0 to documentHeight-1 (unit: 0.1 mm)

WORD wEndX

Select an ending point (X) of CropArea. Selectable values are 1 to documentWidth (unit: 0.1 mm)

CROP_AREA_RIGHT(65535): The value of documentWidth is set to the ending X coordinate.

WORD wEndY

Select an ending point (Y) of CropArea. Selectable values are 1 to documentHeight (unit: 0.1 mm)

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:

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.

[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.

[Caution]

- When check paper is selected with the TM-J9000/J9100, this function is available for the face specified by BiSCNSelectScanFace.

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 116	SHEET 115

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

	TITLE EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 117	SHEET 116

3.84.BiESCNGetMaxCropArea

[Function]

Acquire a maximum number of data of CropArea that can be registered .

[Format]

```
int BiESCNGetMaxCropAreas(int nHandle, LPBYTE pMaxCropAreas);
```

[Argument]

int nHandle

Select a printer handle value. Specify a return value of BiOpenMonPrinter() to the handle value.

LPBYTE pMaxCropAreas

Select a memory address to set a maximum number of data of CropArea that can be registered.

[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:

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.

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 118	SHEET 117

3.85.BiESCNCStoreImage

[Function]

Register a Crop image.

[Format]

```
int BiESCNCStoreImage(int nHandle, DWORD dwFileIndex, LPSTR pFileID,)
                          LPSTR pImageTagData, BYTE bCropAreaID);
```

[Argument]

int nHandle

Select a printer handle value. Specify a return value of BiOpenMonPrinter() to the handle value.

DWORD dwFileIndex

Select FileIndex that is identification data of the Crop image to be saved.

NULL can be selected.

LPSTR 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.

LPSTR 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.

BYTE bCropAreaID

Select CropAreaID that has already been defined by using BiESCNCDefineCropArea().

Selectable values are 1 to 255.

[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:

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.

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.

[Explanation]

Crop the CropArea from the image data saved in the WORK AREA by using CropAreaID selected and register the data to

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 119	SHEET 118

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\IESCN1_AA_BBB.jpg

When imageTagData=NULL, the file name is as follows:

File name: C:\Windows\Temp\IESCN1_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.

[Caution]

- When check paper is selected with the TM-J9000/J9100, this function is available for the face specified by BiSCNSelectScanFace.

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 120	SHEET 119

3.86.BiESCNRetrieveImage

[Function]

Acquire Crop image.

[Format]

```
int BiESCNRetrieveImage(int nHandle, DWORD dwFileIndex, LPSTR pFileID,
    LPSTR pImageTagData, LPDWORD pImageSize, LPBYTE pImageData);
```

[Argument]

int nHandle

Select a printer handle value. Specify a return value of BiOpenMonPrinter() to the handle value.

DWORD 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.

LPSTR 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.

LPSTR 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.

LPWORD 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.

LPBYTE pImageData

Select a memory address that sets Crop image data.

[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:

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.

[Explanation]

Acquire Crop image data that match the selected identification data from Crop image save table of statusAPI.

[Note]

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:

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 121	SHEET 120

In order of registration ↓	FILEINDEX	fileID	imageTagData	DATA	
	1	"A"	NULL	...	← 1
	1	"B"	NULL	...	← 3
	1	"C"	NULL	...	← 2
	2	"A"	NULL	...	
	2	"B"	NULL	...	
	2	"C"	NULL	...	
	3	"A"	"A"	...	
	.	.	.	.	
	.	.	.	.	

- (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.

If registered data that match all the selected identification data are already present, the error (ERR_EXIST) is returned.

If the method of saving Crop image is set to "Save in a file," if Crop image file fails to open, the error (ERR_IMAGE_FILEOPEN) is returned and if Crop image file cannot be read, the error (ERR_IMAGE_FILEREAD) is returned.

[Caution]

- When check paper is selected with the TM-J9000/J9100, this function is available for the face specified by BiSCNSelectScanFace.

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 122	SHEET 121

3.87.BiESCNClearImage

[Function]

Clear the registered Crop image.

[Format]

int BiESCNClearImage(int nHandle, BYTE bFlag, DWORD dwFileIndex,
LPSTR pFileID, LPSTR pImageTagData);

[Argument]

int nHandle

Select a printer handle value. Specify a return value of BiOpenMonPrinter() to the handle value.

BYTE bFlag

Select the flag for the method of clearing.

The Crop image to be cleared can be identified by a combination of flags.

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 pImageTagData.

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.

DWORD dwFileIndex

Select FileIndex, the identification data of the Crop image to be cleared.

LPSTR pFileID

Select FileID, the identification data of the Crop image to be cleared.

The symbols \ / : , ; * ? " ' < > and | cannot be used.

LPSTR pImageTagData

Select ImageTagData, the identification data of the Crop image to be cleared.

The symbols \ / : , ; * ? " ' < > and | cannot be used.

[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:

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.

[Explanation]

Clear the Crop image data that match the selected identification data from the saving table of Crop image data of statusAPI. 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.

[Caution]

- When check paper is selected with the TM-J9000/J9100, this function is available for the face specified by BiSCNSelectScanFace.

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 123	SHEET 122

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

	TITLE EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 124	SHEET 123

3.88.BiESCNGetRemainingImages

[Function]

Acquire the remaining number of data of the Crop image that can be registered.

[Format]

```
int BiESCNGetRemainingImages(int nHandle, LPBYTE, pRemainingImages);
```

[Argument]

int nHandle

Select a printer handle value. Specify a return value of BiOpenMonPrinter() to the handle value.

LPBYTE pRemainingImages

Select a memory address to set a value of the number of remaining data that can be registered.

[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:

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.

[Explanation]

Acquire the number of remaining data that can be registered in the saving table of Crop image data of statusAPI.

[Caution]

- When check paper is selected with the TM-J9000/J9100, this function is available for the face specified by BiSCNSelectScanFace.

[Supported Printers]

TM-H6000II with scanner, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 125	SHEET 124

3.89.BiSCNMICRFunction

[Function]

Acquire scanning an image and reading MICR characters..

[Format]

int BiSCNMICRFunction(int nHandle, LPVOID lpvStruct, WORD wFunction)

[Argument]

int nHandle
 Select a printer handle value. Specify a return value of BiOpenMonPrinter() to the handle value.

LPVOID lpvStruct
 Parameter structure addresses for specifying each unit.

WORD wFunction
 Specifies the content run by this API. Each setting is established for each read unit specified by BiSCNSelectScanUnit. Thus, when both the check sheet reading unit and the card reading unit are used, specifications must be made for each unit individually. In addition, settings for reading specify MF_SET_MICR_PARAM, etc., and StatusAPI is notified by running this function. When structure members are changed after notification, there must be notification once again using this function. The names of the definitions used in this API are to be included in the supplied header file(MF.h).

lpvStruct: Supplemental Description
The lpvStruct structures explained here. The members specified by the application are labeled (IN), and the members output by StatusAPI are labeled (OUT).

Basic Structure

```
typedef struct {  
// Base Section  
int iSize;                               IN  
int iVersion;                             IN  
int iRet;                                  OUT  
DWORD dwNotifyType;                       IN  
DWORD dwTimeout;                          IN  
union {  
LPHANDLE lphNotifyEvent;                 IN  
HWND hNotifyWnd;                         IN  
} uNotifyHandle;  
HWND hProgressWnd;                       IN  
WORD wErrorEject;                         IN  
BYTE bBuzzerHz[MF_BUZZER_TYPE_MAX];      IN  
BYTE bBuzzerCount[MF_BUZZER_TYPE_MAX];    IN  
BYTE bUseNVMemory;                       IN  
char cPortName[256];                     OUT  
WORD wSuccessEject;                       IN  
} MF_BASE01, *LPMF_BASE01;
```

int iSize; (IN)
This is the size of this structure.

int iVersion; (IN)
This is the structure version. Always specify MF_BASE_VERSION01. The MF_BASE_VERSION01 value differs for each StatusAPI version. The application uses the MF_BASE_VERSION01 for the supplied header file.

int iRet; (OUT)

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 126	SHEET 125

The return value for this function is set. Regardless of its being synchronous or asynchronous, this is set when the function ends. ERR_PARAM is returned when the API is called by MF_EXEC / MF_xxxx_RETRANS without the MF_BASE01 structure being specified and when the API is called by MF_EXEC / MF_xxxx_RETRANS when only the MF_BASE01 structure is specified.

DWORD dwNotifyType; (IN)

When MF_EXEC is specified in the third parameter for this API, it indicates the operating method for the API. This API can be run synchronously or asynchronously. When the API is run synchronously, MF_BASE_MESSAGE_NO_MESSAGE is used, and when it is run asynchronously, another value is used.

MF_BASE_MESSAGE_NO_MESSAGE

When MF_EXEC / MF_xxxx_RETRANS is used in the third parameter and it is called, the function does not generate a new thread, and control returns after completion of the operation specified by the structure. (It is run synchronously.)

MF_BASE_MESSAGE_EVENT

When MF_EXEC / MF_xxxx_RETRANS is used in the third parameter and it is called, the function runs a separate thread and immediately returns control. When the thread is started successfully, SUCCESS is returned. When there is a parameter error, invalid handle value or some other failure to meet prerequisite conditions for starting a thread, and error is returned according to the situation. When the value returned is SUCCESS, there is notification of completion of the function by setting the event handle specified by uNotifyHandle to signal status. Notification is carried out by the SetEvent function. The return value is set in iRet. When processing is canceled by BiSCNMICRCancelFunction, and event is generated. In this case, ERR_ABORT is set in iRet.

MF_BASE_MESSAGE_HWND

When MF_EXEC / MF_xxxx_RETRANS is used in the third parameter and it is called, the function runs a separate thread and immediately returns control. When the thread is started successfully, SUCCESS is returned. When there is a parameter error, invalid handle value or some other failure to meet prerequisite conditions for starting a thread, an error is returned according to the situation. When the value returned is SUCCESS, there is notification of completion of the function in the window handle specified by uNotifyHandle. Notification is done by PostMessage, and regardless of whether it is normal or abnormal, WM_MF_DONE is sent when the function is completed. The return value is set in lParam. The return value is the same as for the API (ERR_SUCCESS, ERR_ACCESS, etc.). In addition, the same return value is set in iRet. When processing is canceled by BiSCNMICRCancelFunction, there is a WM_MF_DONE notification. In this case, ERR_ABORT is set lParam and in iRet.

MF_BASE_MESSAGE_BUTTON_CLICK

When MF_EXEC / MF_xxxx_RETRANS is used in the third parameter and it is called, the function runs a separate thread and immediately returns control. When the thread is started successfully, SUCCESS is returned. When there is a parameter error, invalid handle value or some other failure to meet prerequisite conditions for starting a thread, an error is returned according to the situation. When the value returned is SUCCESS, there is notification of completion of the function in the button control window handle specified by uNotifyHandle using a PostMessage with WM_COMMAND (BN_CLICKED). There is WM_COMMAND (BN_CLICKED) notification when the function is completed regardless of whether it is normal or abnormal. The return value is obtained by referencing iRet. When processing is canceled by BiSCNMICRCancelFunction, there is notification with the same message. In this case, ERR_ABORT is set in iRet.

DWORD dwTimeout; (IN)

The time to wait before paper insertion is specified in seconds. The values that can be specified are 0 to 300 (five minutes), and when 0 is specified, there is no timeout. When there is a timeout, ERR_PAPERINSERT_TIMEOUT is returned. Timeouts other than paper insertion cannot be specified. However, it is possible for the application to specify a window handle valid for hProgressWnd and manage timeout times while watching the status of message notifications using WM_MF_PROGRESS. When independent timeouts are executed, running BiSCNMICRCancelFunction is recommended. (This is not done, BiSCNMICRFunction will continue to run, and during that time a port will be occupied.) If BiSCNMICRCancelFunction is run, the BiSCNMICRFunction process will be interrupted, and a port will be opened.

union uNotifyHandle; (IN)

This sets the pointer for the event handle or the window handle for notification of completion. Since StatusAPI automatically generates and discards the event handle automatically, this is not done from the application.

HWND hProgressWnd; (IN)

This sets a window handle for notification of progress in processing. When each data block is read during scanning, there is notification of what percentage of the total amount has been read. In the message, MF_PHASE_INIT, MF_PHASE_SCAN, MF_PHASE_MICR, MF_PHASE_PRINT or MF_PHASE_EXIT is set in wParam by WM_MF_PROGRESS. The percentage value (0-100) is set in lParam. However, even if lParam is 100%, it does not mean that this function is complete. Completion of the function is always performed by WM_MF_DONE notification. There is no problem if the window handle set by hProgressWnd and uNotifyHandle are the same. When the progress notifications unnecessary, this parameter is set 0. See "Progress Status Message List" for each of the phases, the messages sent in each phase, and the message content acquisition macros.

WORD wErrorEject; (IN)

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 127	SHEET 126

This sets the paper discharge method when there is an error running BiSCNMICRFunction. When MF_EXIT_ERROR_DISCHARGE has been specified, the paper is discharged the pocket. When MF_EXIT_ERROR_RELEASE has been specified, the paper is released at that point. If a value other than these is specified, ERR_PARAM is returned.

BYTE bBuzzerHz[MF_BUZZER_TYPE_MAX]; (IN)

This sets the frequency of the buzzer for MICR reading. This member is made up of three array elements, and MF_BUZZER_TYPE_SUCCESS is for the case where reading is successful, MF_BUZZER_TYPE_ERROR for the case where read error is generated, and MF_BUZZER_TYPE_WFEED for the case where sending of multiple sheets is detected. One out of MF_BUZZER_HZ_4000, MF_BUZZER_HZ_440, and MF_BUZZER_HZ_880 is specified for each of the array elements. For example, if

MF_BASE01. bBuzzerHz[MF_BUZZER_TYPE_SUCCESS] = MF_BUZZER_HZ_440;

is set, a 440 Hz buzzer sounds when MICR reading is successful. Number of times the buzzer sounds can be set using bBuzzerCount. If a value other than the valid values is specified, ERR_PARAM is returned. Also, with Photo ID, this value is ignored. This value is ignored with the exception of scanning of the TM-J9100 transactions

BYTE bBuzzerCount[MF_BUZZER_TYPE_MAX]; (IN)

This sets the number of times the buzzer corresponding to each element in bBuzzerHz sounds. For example, if

MF_BASE. bBuzzerHz[MF_BUZZER_TYPE_ERROR] = MF_BUZZER_HZ_4000;

MF_BASE. bBuzzerCount [MF_BUZZER_TYPE_ERROR] = 2;

is set, a 4000 Hz buzzer sounds two times when there is a failure in MICR reading. If a value other than the valid values is specified, ERR_PARAM is returned. Also, with Photo ID, this value is ignored. This value is ignored with the exception of scanning of the TM-J9100 transactions.

BYTE bUseNVMemory; (IN)

When NV memory is used, MF_BASE_NVMEMORY_USE(1) is specified, and when saving is done in the working area, MF_BASE_NVMEMORY_NOT_USE(0) is specified. If values other than these are specified, ERR_PARAM is returned.

char cPortName[256]; (OUT)

This sets the port name. When ERR_HANDLE is generated, nothing is set. (zero clear)

WORD wSuccessEject; (IN)

Sets the paper ejection method in the case of successful execution of BiSCNMICRFunction.

Ejects the paper into the pocket when MF_EXIT_SUCCESS_DISCHARGE is specified.

When MF_EXIT_SUCCESS_RELEASE is specified, this only releases the paper. If values other than MF_EXIT_SUCCESS_RELEASE is specified, ERR_PARAM is returned.

SCAN Structure

```
typedef struct{
// Scan Section
    int iSize;                IN
    int iVersion;            IN
    int iRet;                OUT
        WORD wImageID;        IN
        short sResolution;    IN
    BYTE bAddInfoDataSize;    IN
    LPBYTE pAddInfoData;      IN
        BYTE bStatus;        OUT
        BYTE bDetail;        OUT
        DWORD dwXSize;        OUT
        DWORD dwYSize;        OUT
        DWORD dwScanSize;    OUT
        LPBYTE lpbScanData;    OUT
} MF_SCAN, *LPMF_SCAN;
```

int iSize; (IN)

This is the size of this structure.

int iVersion; (IN)

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 128	SHEET 127

This is the structure version. Always specify MF_SCAN_VERSION. Since the MF_SCAN_VERSION value is different for each StatusAPI version, the application must always use the supplied header file.

int iRet; (OUT)

The results for scanning are set. (SUCCESS, ERR_ACCESS, etc.)

WORD wImageID; (IN)

This specifies the ID for an image that is read.

short sResolution; (IN)

This specifies the resolution for an image that is read. With MF_SCAN_DPI_100, reading is at 100 DPI and with MF_SCAN_DPI_200, at 200 DPI. If MF_SCAN_DPI_DEFAULT is specified, reading is done at the default resolution for the printer. If a negative value is specified, reduction is done using the absolute value. For example, if -50 is specified, 50% is used. Values other than these, return ERR_PARAM.

BYTE bAddInfoDataSize; (IN)

This specifies the size of additional character data. When this value is 0, no characters are added even in cases when bAddInfoData is not NULL.

LPBYTE pAddInfoData; (IN)

This specifies the memory address where characters to be added are set. Even when this value is not NULL, no characters are added in cases when bAddInfoDataSize is 0.

BYTE bStatus; (OUT)

This sets the status when the scan is completed.

Bit	Function	Value	
		0	1
0,1,2	Reserved	Fixed to 0.	
3	Scanning face	Front.	Back
4	Rescanned	-	Disabled
5	Scanning results	Normal end	Abnormal end
6	Scanning data overflow	No overflow	Not (Fixed)
7	Scanning data translation error	No error	Ends with an error.

For the status when scan is complete, the value when readout of the first block of the image data is successful is stored. For this reason, if an error occurs before reading of the first block of the image data is successful, the value will not be set as the status when scan is complete.

BYTE bDetail; (OUT)

This sets the detailed status when the scan is completed.

Value	Information
40h	No error.
41h	The image scanning result do not exist.
42h	Canceling paper insertion standby
44h	Image scanning was interrupted because the cover was opened.
45h	A recoverable error/automatic reset error occurred during image scanning.
46h	Paper whose length is not the standard(longer than approximately 333 mm) was inserted.
47h	Compressed data error (The amount of data increased in data compression processing, and the memory was insufficient.)
48h	An error has been detected during the reading operation (paper of irregular length has been inserted, and an error has occurred during paper feed)

For the detailed status when scan is complete, the detailed status that has been stored in the first block of the image data that is readt from the printer, is stored. For this reason, if an error occurs before the first block of the image data is successfully read, the value will not be set as the status when scan is complete.

DWORD dwXSize; (OUT)

This sets the number of dots in the X direction for image reading.

DWORD dwYSize; (OUT)

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 129	SHEET 128

This sets the number of dots in the Y direction for image reading.

DWORD dwScanSize; (OUT)

This sets the size of the image read.

LPBYTE lpbScanData; (OUT)

This sets the address of the image read. StatusAPI automatically reserves and discards this memory. Therefore, the application must discard it in a timely manner. When discarding this memory on the application-side, specify this memory address for the WindowsAPI GlobalFree function

MICR Structure

```
typedef struct{
// MIC_OCR Section
    int iSize;                                     IN
    int iVersion;                                 IN
    int iRet;                                     OUT
    BYTE bFont;                                  IN
    BYTE bMicOcrSelect;                          IN
    BOOL bIParsing;                              IN
        BYTE bStatus;                            OUT
        BYTE bDetail;                            OUT
        CHAR szMicStr[MF_MICR_CHAR_MAX];          OUT
        MF_OCR_RELIABLE_INFO stOcrReliableInfo[MF_MICR_CHAR_MAX]; OUT
        CHAR szAccountNumber[MF_MICR_CHAR_MAX];   OUT
        CHAR szAmount[MF_MICR_CHAR_MAX];          OUT
        CHAR szBankNumber[MF_MICR_CHAR_MAX];      OUT
        CHAR szSerialNumber[MF_MICR_CHAR_MAX];    OUT
        CHAR szEPC[MF_MICR_CHAR_MAX];             OUT
        CHAR szTransitNumber[MF_MICR_CHAR_MAX];   OUT
        long lCheckType;                          OUT
        long lCountryCode;                        OUT
} MF_MICR, *LPMF_MICR;
```

int iSize; (IN)

This is the size of this structure.

int iVersion; (IN)

This is the structure version. Always specify MF_MICR_VERSION. Since the MF_MICR_VERSION value is different for each StatusAPI version, the application must always use the supplied header file.

int iRet; (OUT)

This sets the return values for running MIC OCR.

BYTE bFont; (IN)

E13B sets MF_MICR_FONT_E13B and CMC7 sets MF_MICR_FONT_CMC7. If a value other than these is specified, ERR_PARAM is returned. Only MF_MICR_FONT_E13B is valid for the J9100.

BYTE bMicOcrSelect; (IN)

When MICR is used, MF_MICR_USE_MICR is specified; when OCR is used, MF_MICR_USE_OCR is specified, and when both are specified, MF_MICR_USE_MICR | MF_MICR_USE_OCR is specified. If a value other than these is specified, ERR_PARAM is returned.

BOOL bIParsing; (IN)

When TRUE is specified, parsing is carried out, and the character string is set in szAccountNumber, szAmount, szBankNumber, szSerialNumber, szEPC and szTransitNumber. The number is set in lCheckType, lCountryCode. FALSE is specified, parsing is not carried out.

BYTE bStatus; (OUT)

This sets the MICR read status.

Bit	Function	Value
-----	----------	-------

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 130	SHEET 129

		0	1
0	Reading font	E13B	-
1,2	Reserved	Fixed to 0	
3	Detailed information	-	Added
4	Reread	-	Disabled
5	Reading results	Normal end	Abnormal end
6	OCR processing error	No	Yes
7	Readout data reception error	No	Yes

When a scan is complete, the value is stored in the status when the first block of the image data is successfully read. For this reason, if an error occurs before the first block of the image data is successfully read, the value will not be set as the status when scan is complete.

BYTE bDetail; (OUT)

This sets the MICR details read status.

Value	Information
40h	No abnormality
41h	Check reading was not executed even once.
44h	A check of irregular 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 the check reading operation.
48h	An error was detected in the noise measurement.
49h	Check reading processing was interrupted by the cover being opened.
4B	A paper feed error occurred during the reading operation. (Caused by insertion of check paper of irregular length, occurrence of a paper jam, or by other factors.)

CHAR szMicStr[MF_MICR_CHAR_MAX]; (OUT)

This sets the character string read.

MF_OCR_RELIABLE_INFO stOcrReliableInfo[MF_MICR_CHAR_MAX];

This sets the candidates and reliability for the characters read.

CHAR szAccountNumber[MF_MICR_CHAR_MAX];

AccountNumber property value.

CHAR szAmount[MF_MICR_CHAR_MAX];

Amount property value.

CHAR szBankNumber[MF_MICR_CHAR_MAX];

BankNumber property value.

CHAR szSerialNumber[MF_MICR_CHAR_MAX];

SerialNumber property value.

CHAR szEPC[MF_MICR_CHAR_MAX];

EPC property value.

CHAR szTransitNumber[MF_MICR_CHAR_MAX];

TransitNumber property value.

long lCheckType;

CheckType property value.

long lCountryCode;

CountryCode property value.

Reliability Notification Structure

typedef struct{

char cRecogChar; OUT

long lPercentage; OUT

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 131	SHEET 130

```

} MF_OCR_RELIABILITY *LPMF_OCR_RELIABILITY;
char cRecogChar; (OUT)
    Recognized characters.
long lPercentage; (OUT)
    Reliability (%).

```

Reliability Notification Information Structure

```

typedef struct{
    long lPosition;                                OUT
    MF_OCR_RELIABILITY stFirstSelect;              OUT
    MF_OCR_RELIABILITY stSecondSelect;            OUT
}MF_OCR_RELIABLE_INFO, *LPMF_OCR_RELIABLE_INFO;

```

long lPosition; (OUT)
 Position (0 is left edge).
 MF_OCR_RELIABILITY stFirstSelect; (OUT)
 First recognition candidate.
 MF_OCR_RELIABILITY stSecondSelect; (OUT)
 Second recognition candidate.

Transaction Printing Structure

```

typedef struct{
// Print Section
    int iSize;                                IN
    int iVersion;                             IN
    int iRet;                                OUT
    BOOL bElectricEndorse;                   IN
    LPSTR lpString[3];                       IN
    DWORD dwAttribute[3];                    IN
    WORD wFont[3];                           IN
    WORD wFontSize[3];                       IN
    BYTE bSpeed;                             IN
    BOOL bDirection;                         IN
} MF_PRINT, *LPMF_PRINT;

```

int iSize; (IN)
 This is the size of this structure.

int iVersion; (IN)
 This is the structure version. Always specify MF_PRINT_VERSION. Since the MF_PRINT_VERSION value is different for each StatusAPI version, the application must always use the supplied header file.

int iRet; (OUT)
 This sets the return values for validation printing.

BOOL bElectricEndorse; (IN)

When TRUE is specified, ElectricEndorse processing is executed when transaction printing is successful, and the endorsement printing image data is merged with the scanned image (image for the back face). When "FALSE" is specified, ElectricEndorse processing is not executed.

Processing Electric Endorsement:

Because transaction printing is executed after scanning is complete, the endorsement printing (confirmation printing/receipt) does not appear in the scanned image. For this reason, the OS system font is used in place of the device font to generate the endorsement print image. Therefore, the font on the screen is somewhat different in appearance from that of the actual print result. Also, UnderLine of the endorsement print image is generated with the same width, regardless of whether MF_PRINT_UNDERLINE_1 or MF_PRINT_UNDERLINE_2 is specified for the dwAttribute member variable.

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 132	SHEET 131

LPSTR lpString[3]; (IN)

This specifies the ASCII character string address to be printed in validation. lpString[0] indicates the pointer for the character string in the first row, lpString[1] the pointer for the character string in the second row, and lpString[2] the pointer for the character string in the third row. When all are NULL pointers, ERR_PARAM is returned. . It is necessary to add LF at the end of the print line.

DWORD dwAttribute[3] (IN)

dwAttribute[0] indicates attributes for the character string in the first row, dwAttribute[1] attributes for the character string in the second row, and dwAttribute[2] attributes for the character string in the third row. attributes are specified by the following bids, and more than one can be specified.

MF_PRINT_BOLD	Carry out bold printing.
MF_PRINT_UNDERLINE_1	Add underlining one line wide.
MF_PRINT_UNDERLINE_2	Add underlining two lines wide.
MF_PRINT_BLACK	Print in the first color (normally black).
	(same as MF_PRINT_1ST_COLOR)
MF_PRINT_COLOR	Print in the second color.
	(same as MF_PRINT_2ND_COLOR)
MF_PRINT_MIXED	Print in the first color + second color.

Bits other than the above are ignored. When no attributes are specified, MF_PRINT_NO_ATTRIBUTE is specified.

Moreover, when MF_PRINT_UNDERLINE_1 and MF_PRINT_UNDERLINE_2 are specified at the same time, MF_PRINT_UNDERLINE_2 is used.

WORD wFont[3]; (IN)

wFont[0] indicates the font for the character string in the first row, wFont[1] the font for the character string in the second row, and wFont[2] the font for the character string in the third row. One of the following is set for the font.

MF_PRINT_FONT_A: print with font A.
MF_PRINT_FONT_B: print with font B.

If a value other than the above values is specified, ERR_PARAM is returned.

WORD wFontSize[3]; (IN)

wFontSize[0] indicates the font size for the character string in the first row, wFontSize[1] the font size for the character string in the second row, and wFontSize[2] the font size for the character string in the third row. One of the following is set.

MF_PRINT_FONT_W1_H1 : 1 high, 1 wide font.
MF_PRINT_FONT_W1_H2 : 2 high, 1 wide font.
MF_PRINT_FONT_W2_H1 : 1 high, 2 wide font.
MF_PRINT_FONT_W2_H2 : 2 high, 2 wide font.

If a value other than the above values is specified, ERR_PARAM is returned.

BYTE bSpeed; (IN)

This specifies printing speed and quality. When MF_PRINT_SPEED_NORMAL is specified, printing is done in high quality; when MF_PRINT_SPEED_HIGH is specified, high-speed printing is carried out (default), and when MF_PRINT_SPEED_ECONOMY is specified printing is done in a mode that conserves ink. If a value other than these is specified, ERR_PARAM is returned.

BOOL bDirection; (IN)

When MF_PRINT_DERECTION_DOUBLE (default) is specified, bidirectional printing is carried out, and when MF_PRINT_DERECTION_SINGLE is specified, single direction printing is carried out. If a value other than the above is specified, ERR_PARAM is returned.

Supplemental Description for wFunction

MF_EXEC

SCAN / MICR / Transaction printing is carried out according to the specified parameters. The second parameter is ignored.

MF_CONTINUE

If multiple seats being sent is detected, the running of BiSCNMICRFunction is interrupted, and the printer waits in that state. If BiSCNMICRFunction is run specified in this parameter at this time, StatusAPI restarts processing. The second parameter is ignored. When you do not want it restarted, BiSCNMICRCancelFunction is run. ERR_PARAM is returned if not in standby mode due to double delivery detection.

MF_MICR_RETRANS

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 133	SHEET 132

Reread previously read MICR data. If MF_EXEC has not been used, ERR_PARAM is returned.

MF_SCAN_FRONT_RETRANS

Reread SCAN data for previously read front side. This makes the image corresponding to wImageID for the front side structure currently set the target of reading. If MF_EXEC has not been used, ERR_PARAM is returned.

MF_SCAN_BACK_RETRANS

Reread SCAN data for previously read back side. This makes the image corresponding to wImageID for the back side structure currently set the target of reading. If MF_EXEC has not been used, ERR_PARAM is returned.

Definitions for Function Settings

MF_SET_BASE_PARAM

This sets base parameters. The MF_BASE structure address is specified in lpvStruct.

MF_SET_MICR_PARAM

This sets MICR parameters. The MF_MICR structure address is specified in lpvStruct.

MF_SET_SCAN_FRONT_PARAM

This sets front side read scanning parameters. The MF_SCAN structure address is specified in lpvStruct. The MF_SCAN structure has a different address from the structure for reading the back side. When the same address is specified, ERR_PARAM is returned. The operation is identical when MF_SET_SCAN_PARAM is specified.

MF_SET_SCAN_BACK_PARAM

This sets the back side read scanning parameters. The MF_SCAN structure address is specified in lpvStruct. The MF_SCAN structure has a different address from the structure for reading the front side. When the same address is specified, ERR_PARAM is returned.

MF_SET_PRINT_PARAM

This sets transaction printing parameters. The MF_PRINT structure address is specified in lpvStruct.

MF_CLEAR_BASE_PARAM

This clears all the specifications for base / MICR / SCAN / PRINT parameters. lpvStruct values are ignored.

MF_CLEAR_MICR_PARAM

This clears the MICR parameter specifications. lpvStruct values are ignored.

MF_CLEAR_SCAN_FRONT_PARAM

This clears the scan parameter specifications. lpvStruct values are ignored. The operation is identical when MF_CLEAR_SCAN_PARAM is specified.

MF_CLEAR_SCAN_BACK_PARAM

This clears the scan parameter specifications. lpvStruct values are ignored.

MF_CLEAR_PRINT_PARAM

This clears the transaction printing parameter specifications. lpvStruct values are ignored.

MF_GET_BASE_DEFAULT

This obtains the initial values for the printer base structure.

MF_GET_MICR_DEFAULT

This obtains the initial values for the printer MICR structure.

MF_GET_SCAN_DEFAULT

This obtains the initial values for the printer SCAN structure.

MF_GET_SCAN_FRONT_DEFAULT

This obtains the initial values for the printer SCAN (front side) structure.

MF_GET_SCAN_BACK_DEFAULT

This obtains the initial values for the printer SCAN (back side) structure.

MF_GET_PRINT_DEFAULT

This obtains the initial values for the transaction printing structure.

* With StatusAPI, the initial values of iSize and iVersion are not returned. The application must specify these two values. Also, the initial value for the structure must be obtained after zero clearing all member variables except iSize and iVersion.

Functions

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 134	SHEET 133

The parameters for the function to be used among SCAN / MICR / transaction printing are specified in a structure and this API is called. MF_SET_BASE_PARAM must always be set. When the structure is reset, the structure members are changed, MF_SET_xxxx_PARAM specified again, and this API called. All the structure content is stored by StatusAPI by the time BiCloseMonPrinter is run.

The specified function is run by specifying MF_EXEC in the third parameter. This API runs SCAN / MICR / transaction printing sequentially. The structure must be discarded before the API ends to set return values in the structure.

BID describes whether SCAN / MICR / transaction printing can be used or not. If an unsupported function is specified, ERR_PARAM is returned (not ERR_NOT_SUPPORT).

FONT A can print a maximum of two lines, and FONT B can print a maximum of three lines. When a long character string is input on one line and it overflows the columns because of a double height character specification, the remainder of the character string is discarded by the printer. If these functions are used with anything other than the internal USB port on the printer with the J9000/J9100, there is an error.

Progress Status Message List

Message	wParam	lParam	Description
WM_MF_DONE	-	Return value	End BiSCNMICRFunction.
WM_MF_PROGRESS	MF_PHASE_INIT	MF_PROGRESS_START	Start initialization.
		MF_PROGRESS_WAIT_PAPER	Wait for paper insertion. When the paper is already set, there is no notification with this message.
		MF_PROGRESS_CLUMP_PAPER	Clamp paper, in transport
		MF_PROGRESS_PAPER_PILED	Multiple sheets being sent detected.
		MF_PROGRESS_DONE	The printer has read the SCAN / MICR data and completed the operation.
	MF_PHASE_MICR	MF_PROGRESS_START	MIC_OCR reading has started.
		MF_PROGRESS_DONE	MIC_OCR reading has completed.
	MF_PHASE_SCAN	Status of progress (%) in reading front	MF_FACE_FRONT is set in the low BYTE to of the high WORD, and the percentage in the low BYTE of the low WORD. Notification is 0% at the beginning and 100% at the end.
		Status of progress (%) in reading back	MF_FACE_BACK is set in the low BYTE to of the low WORD, and the percentage in the low BYTE of the low WORD. Notification is 0% at the beginning and 100% at the end.
	MF_PHASE_PRINT	MF_PROGRESS_START	Transaction printing has begun.
		MF_PROGRESS_DONE	Transaction printing has completed.

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 135	SHEET 134

	MF_PHASE_EXIT	MF_PROGRESS_START	Processing was started after discharging paper, etc.
		MF_PROGRESS_DONE	Processing was completed after discharging paper, etc.

The read unit number for the WM_MF_PROGRESS message is set in wParam HIWORD LOBYTE. The phase number (MF_PHASE_INIT, etc.) is set in the LOWORD LOBYTE. The read unit number for check sheets is EPS_BI_SCN_UNIT_CHECKPAPER, and for cards EPS_BI_SCN_UNIT_CARD.

The content of wParam and lParam when a WM_MF_PROGRESS message is received can be acquired from the supplied macros. The macros are described in the following.

MF_GETUNITID(wParam): read unit number acquisition macro

MF_GETPHASE(wParam): phase number acquisition macro

MF_GETFACE(lParam): image read surface acquisition macro

MF_PERCENT(lParam): image read percentage acquisition macro

[Caution]

- (1) The scan processing results will always be “read error” when this function is executed using an I/F other than the TM-J9000/9100 printer's built-in USB.
- (2) When the use of OCR is set to the MICR settings (the MF_MICR structure's bMicOcrSelect MF_MICR_USE_OCR bit is set to ON), ERR_PARAM is returned while executing MF_EXEC execution when the scan parameter of the front surface reading is not set. This is because the scanned image of the front surface is required for OCR processing.
- (3) When ElectricEndorsement processing is enabled in the transaction print settings (TRUE is set to the MF_PRINT structure's bElectricEndorsement), ERR_PARAM is returned during execution of MF_EXEC when scan parameters are not set for back face reading. This is because a scanned image of the back face is required for processing ElectricEndorsement. When ElectricEndorsement processing is enabled, no information is set to bStatus, bDetail, dwXSize, dwYSize, dwScanSize, or lpbScanData until transaction printing is complete, even if the scan of the back face is successful.
- (4) When transaction printing is executed and lines more than the limit number are printed, ERR_LINE_OVERFLOW is returned.
- (5) StatusAPI does not check whether print data causes a line overflow. Therefore, sending print data that does not cause a line overflow is recommended.
- (6) When ERR_LINE_OVERFLOW occurs, the printer does not eject the paper. Therefore, when ERR_LINE_OVERFLOW occurs, you must execute BiSCNMICRCancelFunction to eject the paper.
- (7) To change the threshold value for double delivery detection, you must change the memory switch using BiDirectSendRead. Define the following macro, and send them to the printer using BiDirectSendRead.
SetWFeedInfo=1D 28 45 03 00 01 49 4E 1D 28 45 04 00 05 74 xx 00 1D 28 45 04 00 02 4F 55 54
Set xx to the threshold value. See the specifications of the printer for available setting values.
Execution example: iRet = BiDirectSendRead(iHandle, "SetWFeedInfo", "", 0L, NULL, dwTimeout, FALSE);
- (8) To change print digit setting, you must change the memory switch, using BiDirectSendRead. Define the following macros, and send them to the printer using BiDirectSendRead.
SetSlipColumn=1D 28 45 03 00 01 49 4E 1D 28 45 0A 00 03 08 32 32 xx 32 32 32 32 32 1D 28 45 04 00 02 4F 55 54
Set xx to the digit number. See the specifications of the printer for available setting values.
Execution example: iRet = BiDirectSendRead(iHandle, "SetWFeedInfo", "", 0L, NULL, dwTimeout, FALSE)
- (9) Caution is required for such MF_xxx structure's member variables that store the address values. Executing this function with a nonexistent address value specified may cause TRAP. Make sure to specify Null when an address setting is not necessary.
- (10) Caution is required for MF_xxx structure's member variables that store character strings. Executing this function without a '\0' that indicates the end of the character string in the variable may cause a TRAP. '\0' must exist in the variable.
- (11) The double delivery detection notification does not operate when this function's MF_EXEC is executed with MF_BASE_MESSAGE_NO_MESSAGE set to the dwNotifyType member variable of the MF_BASE structure.
- (12) Data that has been already scanned can be obtained again by specifying MF_SCAN_FRONT_RETRANS/MF_SCAN_BACK_RETRANS after changing the conditions for image conversion with the following API.

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 136	SHEET 135

BiSCNSetImageQuality: Specifies the gray scale (2-level/256-level), print density, and sharpness.

BiSCNSetImageFormat: Specifies the output format.

BiSCNSetScanArea: Specifies the scanning area.

BiSCNSetCroppingArea: Specifies the cropping area.

The parameters that can be specified with SET_SCAN_FRONT_PARAM and MF_SET_SCAN_BACK_PARAM of BiSCNMICRFunction

[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:

SUCCESS(0)	Success
Error (negative value)	
ERR_NO_MEMORY (-50)	Insufficient memory
ERR_HANDLE (-60)	Incorrect handle value
ERR_TIMEOUT (-70)	Timeout error
ERR_ACCESS (-80)	Cannot read/write to printer
ERR_PARAM (-90)	Parameter error
ERR_NOT_SUPPORT (-100)	Not supported
ERR_OFFLINE (-110)	Cannot be used because of off-line return wait
ERR_EXEC_FUNCTION (-310)	Cannot be used because another API is running.
ERR_PAPERINSERT_TIMEOUT (-300)	Paper insertion time has passed.
ERR_THREAD (-420)	Failed to start thread
ERR_ABORT (-430)	Canceled by BiSCNMICRCancelFunction
ERR_MICR (-440)	Printer failed MICR read
ERR_SCAN (-450)	Printer failed to read image.
ERR_PUMP (-460)	Normal completion, but pump lifetime is almost over.
ERR_LINE_OVERFLOW (-460)	A line overflow has occurred during transaction printing.
•MF_BASE.iRet•	
SUCCESS•0•	Success
ERR_NO_MEMORY (-50)	Insufficient memory
ERR_TIMEOUT (-70)	Timeout error
ERR_ACCESS (-80)	Cannot read/write to printer
ERR_PARAM (-90)	Parameter error
ERR_PAPERINSERT_TIMEOUT (-300)	Paper insertion time has passed.
ERR_ABORT (-430)	Canceled by BiSCNMICRCancelFunction
ERR_MICR (-440)	Printer failed MICR read
ERR_SCAN (-450)	Printer failed to read image.
ERR_LINE_OVERFLOW (-460)	A line overflow has occurred during transaction printing.
ERR_NOT_EXEC (-470)	Processing is not executed
•MF_SCAN.iRet•	
SUCCESS•0•	Success
ERR_NO_MEMORY (-50)	Insufficient memory
ERR_TIMEOUT (-70)	Timeout error
ERR_ACCESS (-80)	Cannot read/write to printer
ERR_PARAM (-90)	Parameter error
ERR_ABORT (-430)	Canceled by BiSCNMICRCancelFunction
ERR_SCAN (-450)	Printer failed to read image.
ERR_NOT_EXEC (-470)	Processing is not executed
•MF_MICR.iRet•	
SUCCESS•0•	Success

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 137	SHEET 136

ERR_NO_MEMORY (-50)	Insufficient memory
ERR_TIMEOUT (-70)	Timeout error
ERR_ACCESS (-80)	Cannot read/write to printer
ERR_PARAM (-90)	Parameter error
ERR_BUFFER_OVERFLOW (-140)	Insufficient buffer capacity error
ERR_NOT_FOUND (-220)	No data
ERR_ABORT (-430)	Canceled by BiSCNMICRCancelFunction
ERR_SCAN (-450)	Printer failed to read image.
ERR_NOT_EXEC (-470)	Processing is not executed

•MF_PRINT.iRet•

SUCCESS•0•	Success
ERR_NO_MEMORY (-50)	Insufficient memory
ERR_TIMEOUT (-70)	Timeout error
ERR_ACCESS (-80)	Cannot read/write to printer
ERR_ABORT (-430)	Canceled by BiSCNMICRCancelFunction
ERR_SCAN (-450)	Printer failed to read image.
ERR_LINE_OVERFLOW (-460)	A line overflow has occurred
ERR_NOT_EXEC (-470)	Processing is not executed

* When the life of the printer pump is near the end, from each of the return values 1 will be –subtracted. This means that when BiSCNMICRFunction is executed normally, SUCCESS –1 = -1 and ERR_PARAM –1 = -91 are returned.

[Supported Printers]

TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 138	SHEET 137

3.90.BiSCNMICRCancelFunction

[Function]

BiSCNMICRFunction is interrupted.

[Format]

int BiSCNMICRCancelFunction(int nHandle, WORD wEjectType)

[Argument]

int nHandle

Select a printer handle value. Specify a return value of BiOpenMonPrinter() to the handle value.

WORD wEjectType

This specifies the method for discharging paper. If MF_EJECT_DISCHARGE is specified, the paper is discharged to the pocket, and if MF_EJECT_RELEASE is specified, the paper is released.

[Explanation]

BiSCNMICRFunction is interrupted. Alternatively, paper-eject is executed after the ERR_LINE_OVERFLOW error occurs with the BiSCNMICRFunction. When interrupting the BiSCNMICRFunction, if the interruption is not complete after a maximum of 20 seconds has elapsed, ERR_TIMEOUT is returned. Once interrupted, the results are set in the storage area for the structure specified by BiSCNMICRFunction. When a window handle is specified in hProgressWnd, there is also window message notification. If this function is run without running BiSCNMICRFunction, ERR_WITHOUT_CB is returned. The only times that ERR_EXEC_FUNCTION is returned by this API is when there are overlapping calls of this API with multiple threads and when the printer is initialized after print setup and turning the printer power off and on.

[Return Values]

SUCCESS(0)	Success
Error (negative value)	
ERR_HANDLE(-60)	Incorrect handle value
ERR_TIMEOUT (-70)	A time out error occurred.
ERR_ACCESS(-80)	Cannot read/write to printer.
ERR_PARAM(-90)	Parameter error
ERR_NOT_SUPPORT(-100)	Not supported
ERR_OFFLINE(-110)	Cannot be used because of off-line return wait
ERR_WITHOUT_CB(-130)	BiSCNMICRFunction has not been run.
ERR_EXEC_FUNCTION(-310)	Cannot be used because another API is running.

[Supported Printers]

TM-J9000/9100(USB)

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 139	SHEET 138

3.91.BiSCNSelectScanFace

[Function]

Specifies the back or front for an image that is being read.

[Format]

int BiSCNSelectScanFace(int nHandle, BYTE bFace)

[Argument]

int nHandle

Select a printer handle value. Specify a return value of BiOpenMonPrinter() to the handle value.

BYTE bFace

This specifies the back or front for an image that is being read.

[Explanation]

MF_SCAN_FACE_FRONT is specified for the front and MF_SCAN_FACE_BACK for the back. If values other than these are set, ERR_PARAM is returned. However, with the J9000/J9100, ERR_PARAM is returned if the back is specified for the card unit. Specification of the side to be read in this API is stored for each unit specified by BiSCNSelectScanUnit. Therefore, after specifying the back side of the check sheet, the reading surface remains the front if the reading device is changed to card. In addition, the front side is the default if this API cannot be called. This API does not affect BiSCNMICRFunction, so when back or front is specified by BiSCNMICRFunction, it is necessary to specify in the structure members. APIs affected by this function are as follows.

BiSCNSetImageQuality,	BiSCNGetImageQuality
BiSCNSetImageFormat,	BiSCNGetImageFormat
BiSCNSetScanArea,	BiSCNGetScanArea
BiSCNSetCroppingArea,	BiSCNGetCroppingArea
BiSCNDeleteCroppingArea,	BiSCNDeleteImage
BiSCNGetImageList,	BiESCNGetAutoSize
BiESCNSetAutoSize,	BiESCNGetCutSize
BiESCNSetCutSize,	BiESCNGetRotate
BiESCNSetRotate,	BiESCNGetDocumentSize
BiESCNSetDocumentSize,	BiESCNDefineCropArea
BiESCNSStoreImage,	BiESCNRetrieveImage
BiESCNClearImage,	BiESCNGetRemainingImages

[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:

ERR_PARAM(-90)	Parameter error
ERR_NOT_SUPPORT(-100)	Not supported (BA-T500, etc.)
ERR_EXEC_FUNCTION(-310)	Cannot be used because another API is running.

[Supported Printers]

TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 140	SHEET 139

3.92. BiCloseMonPrinter

[Function]

This closes the printer that is undergoing status monitoring.

[Format]

```
int BiCloseMonPrinter ( int nHandle);
```

[Argument]

int nHandle

This specifies the handle value of the printer to be closed. The value returned from BiOpenMonPrinter() is used as the handle value.

[Return Value]

If closing of the printer was successful, a 0 is returned. If there is an error, the following error code (less than zero) is returned.

ERR_HANDLE The handle value that specifies the printer is incorrect.

[Explanation]

None

[Supported printer]

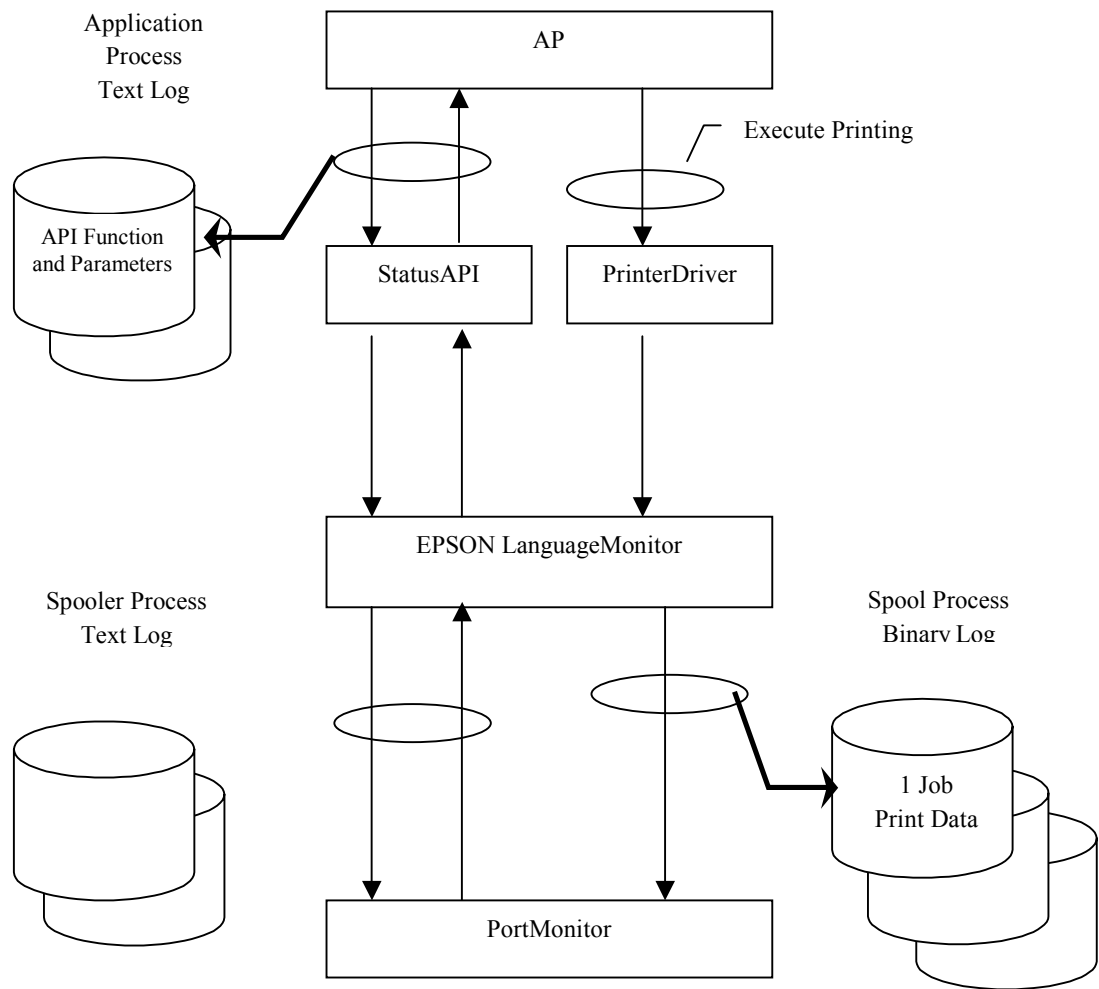
TM-T88II(R), TM-T88III, TM-T90, TM-L90, TM-H5000II, TM-H5200, TM-U590, TM-U675, TM-U375, TM-H6000, TM-H6000II, TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, TM-H3000(R), TM-U230, TM-U220, TM-U210, TM-U950, TM-U295, TM-L60II, TM-P60, TM-J9000/9100

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 141	SHEET 140

4.Log Collection Function

4.1. Log File Outline

The trace log is collected in accordance with Registry specifications.



TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 142	SHEET 141

4.2.Registry Details

The log is output in accordance with the contents that are already set in the Registry. When the Registry is corrected and the OS is rebooted, the new settings become valid. (The Registry may be corrected unintentionally and the OS may not start. Be sure to create a backup copy before correcting the Registry.)

Also delete existing log files in advance if you are correcting this Registry.

A tool for changing this registry is provided separately. Use it for your convenience.

- Key: HKEY_LOCAL_MACHINE\SOFTWARE\EPSON\SD APD 3

Name	Type	Pre-determined value	Example of Data	Explanation
LogPath	REG_SZ	\windows	C:\log	Specifies the log output destination path. The number of characters that can be specified is 240 or less. No log is output if nothing is specified, or if the directory does not exist.
LogLevel	REG_DWORD	111	1	Specifies the log output level 0x00000001: API function sequence output to EpsStmApi.log 0x00000010: Port I/O data output to EpsStmMon.log 0x00000100: Print data output to EpsStmMon.log and EpsStmMon.bin 0x00001000: Image reading data output. (EpsScnImg.bin, EpsScnImgR.bin from output) Specifications which combine the above bits are possible. If anything other than the above bits is specified, it is regarded as if 1 was specified.
MaxLogSize	REG_DWORD	5120	5120	Specifies maximum text log size (Kbyte). The specifiable range is 1 to 10240. If a value outside the above range is specified, it will be regarded as if 5120 was specified. Since this specified size is the minimum guaranteed size, the actual file size may become larger depending on the final record length.
MaxBinFile	REG_DWORD	3	3	Specifies the maximum number of binary log files. The specifiable range is 1 to 9. If a value other than a value in the above range is specified, it is regarded as if a 3 was specified. The size of this file is in accordance with 1 job of print data.
APRegKey	REG_SZ	None	HKEY_LOCAL_MACHINE\SOFTWARE\EPSON\SD APD	Specifies an application inherent registry key which shows the same setting contents as the above log settings. If nothing is specified, or if the key does not exist, the application inherent setting is disregarded, and the setting is in accordance with the HKEY_LOCAL_MACHINE\SOFTWARE\EPSON\SD setting. If each of the values preceding the specified value are incorrect, (values which are not in the specification range) and in the case that the HKEY_LOCAL_MACHINE\SOFTWARE\EPSON\SD APD setting is a value within the correct range, this value is used.

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 143	SHEET 142

4.3. Log File Details

File Name	Outline	Remarks
EpsStmApi3.log EpsStmApi3_BAK.log	A variable length record text log file output by the application process. Output only if 0x00000001: API Function Sequence is specified in LogLevel, and the contents of the API function and parameters, and the status information from before and after the callback call, respectively, are output in single record units. At the point when the file specified in MaxLogSize is exceeded, the current log file name is renamed to "EpsStmApi_BAK.log," then output resumes from the header of "EpsStmApi.log" with the subsequent record cleared.	[Source] EpsStmApi.dll EpsCom.dll EpsLoif.dll EpsNetif.dll [Destination] LogPath specification directory
EpsStmMon3.log EpsStmMon3_BAK.log	A variable length record text log file output by the spooler process. Output is 0x00000010: Port I/O Data is specified or 0x00000100: Print Data is specified in LogLevel, and StartDoc/EndDoc/ReadPort and accompanying data as well as WritePort and accompanying data, respectively, are output in single record units. At the point when the file specified in MaxLogSize is exceeded, the current log file name is renamed to "EpsStmMon_BAK.log," then output resumes from the header of "EpsStmMon.log" with the subsequent record cleared.	[Source] Tmstmmon.dll [Destination] LogPath specification directory
EpsStmMon3.bin EpsStmMon3_BAK*.bin *:1 to 8(MaxBiFile-1)	Binary file output by the spooler process. Output only if 0x00000100: Print Data is specified in LogLevel. Outputs the print data for 1 job (WritePort data from StratDoc to EndDoc) in binary format. If previous print data files exist, they are renamed with backup file names up to the upper limit for the number of files specified in MaxBinFile. When the number of backup files reaches the upper limit specified in MaxBinFile, then for subsequent files, the oldest backup file is treated as the object of the next backup file. (The latest file is always EpsStmMon.bin) The file size is indefinite (it depends on the print data).	[Source] Tmstmmon.dll [Destination] LogPath specification directory
EpsScnImg3.bin EpsScnImgR3.bin	Binary file that is output in the application process. 0x00001000 in the LogLevel: Output if image reading data are specified. Outputs image data after calling the BiSCNReadImage function to EpsScnImg.bin in binary format. After that, it outputs retransmission image data to EpsScnImgR.bin in binary format after calling the BiSCNRetransmissionImage function. EpsScnImg.bin/EpsScnImgR.bin are both overwritten as a new log each time an image is scanned.	[Source] EpsStmApi.dll [Destination] LogPath specification directory

- Variable Length Record Text Log (EpsStmApi3.log/EpsStmMon3.log) Format

For 1 Variable length record

32	Indefinite	2
Common Header	Log Data	CRLF
:	:	:
Common Header	Log Data	CRLF

Common Header

18	1	3	1	8	1
Output Date and Time “YYYYMMDDhhmmss.sss”	,	Type [Application Process Log] “FUI”: Calls a function “FUO”: Returns a function “CBI”: Calls a callback “CBO”: Returns a callback [Spool Process Log] “WDI”: Write command call “WDO”: Write command return “WPI”: Write print data call “WPO”: Write print data return “RDI”: Read data call “RDO”: Read data return “STD”: Start sending print data (StartDoc) “EDD”: End sending print data (EndDoc) “RPN”: Reset printer	,	Thread ID “00000000” to “FFFFFFFF”	,

Log Data

Indefinite	1
<1> If the type is “FUI”, “CBI” “Function name, parameter value 1, ..., parameter value n” If there are multiple parameters they are continued in the order in which they are specified, using ‘,’ as a separator. For structural parameters, break down the members and let 1 parameter = 1 member. Output parameter values in decimal character string format or in hexadecimal character string format. Output if 0x00000001 is specified in the LogLevel. <2> If the type is “FUO”, “CBO” “Function name, parameter value 1, ..., parameter value n, <Return value>” If there are multiple parameters they are continued in the order in which they are specified, using ‘,’ as a separator. For structural parameters, break down the members and let 1 parameter = 1 member. Output parameter values in decimal character string format or in hexadecimal character string format. The values shown within the final <> is the function’s return value. The return value is output in hexadecimal character string format. Output if 0x00000001 is specified in the LogLevel. <3> If the type is “WDI” “Write request size, write data” The output format when command data are sent from the API. Write request size: The write request size to the port monitor is output in hexadecimal character string format. Write data: Write data to the port monitor are output in hexadecimal character string format. Output when 0x00000010 or 0x00000100 is specified in the LogLevel.	,

TITLE	Revision	No	
EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	D	NEXT 145	SHEET 144

<4> If the type is “WDO” “Return size” Format output when returned from the port monitor. Return Size: The size of the data returned from the port monitor is output in hexadecimal character string format. Output if 0x00000010 or 0x00000100 is specified in LogLevel. <5> If the type is “WPI” ”Write request size Format that is output when sending print data from the printer driver. Write request size: The write request size to the port monitor is output in hexadecimal character string format. Output if 0x00000010 or 0x00000100 is specified in LogLevel. <6> If the type is “WPO” “Return Size” Format that is output when returning from the port monitor Return Size: The written size of data returned from the port monitor is output in hexadecimal character string format. Output if 0x00000010 or 0x00000100 is specified in LogLevel. <7> If the type is “RDI” “Read Request Size” Format that is output when receiving data from the API. Read Request Size: The read request size to the port monitor is output in hexadecimal character string format. Output if 0x00000010 or 0x00000100 is specified in LogLevel. <8> If the type is “RDO” “Return size, read data” Format that is output when data are returned from the port monitor. Return Size: The read size of data returned from port monitor is output in hexadecimal character string format. Read Data: Read data from the port monitor are output in hexadecimal character string format. Output if 0x00000010 or 0x00000100 is specified in LogLevel. <5> If the type is “STD” , “EDD” or “RPN” None. Output if 0x00000010 or 0x00000100 is specified in LogLevel.	
---	--

- Variable length binary log (EpsStmMon.bin) format
The latest print data are treated as 1 job of binary data.
Output if 0x00000100 is specified in the LogLevel.
- Variable length binary log (EpsScnImg.bin/EpsScnImgR.bin) format
Converts the latest image reading data and retransmission image data to binary data.
Image data change to the format specified by the BiSCNSetImageFormat function.
Output if 0x00001000 is specified in the LogLevel

<1> Shows the log output results in the case that the maintenance counter (number of paper feed lines) is acquired.

Reference: int BiGetCounter(int nHandle, WORD readno, LPDWORD eradcounter)

[EpsStmApi.log]

“20010409130000.000,FUI,000000FF,BiGetCounter,00000001,0014,00000000CRLF”

“20010409130001.000,FUO,000000FF,BiGetCounter,00000001,0014,000007D0,<00000000>CRLF”

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 146	SHEET 145

The 1st record shows that the BiGetCounter function was called and that the contents of the 3 parameters are nHandle=1 (0x00000001), readno=20 (0x0014), *readcounter=0 (0x00000000).

The 2nd record shows that the BiGetCounter function was returned, that the contents of the 3 parameters are nHandle=1 (0x00000001), readno=20 (0x0014), *readcounter=2000 (0x000007D0) and that the function's return value = 0 (SUCCESS).

[EpsStmMon.log]

```
"20010409130000.200,WDI,00000055,6,1D 67 32 00 14 00CRLF"...<1>
"20010409130000.210,WDO,00000055,6CRLF"...<2>
"20010409130000.220,RDI,00000055,1CRLF"...<3>
"20010409130000.230,RDO,00000055,1,5FCRLF"...<4>
"20010409130000.240,RDI,00000055,1CRLF"
"20010409130000.250,RDO,00000055,1,32CRLF"
"20010409130000.260,RDI,00000055,1CRLF"
"20010409130000.270,RDO,00000055,1,30CRLF"
"20010409130000.280,RDI,00000055,1CRLF"
"20010409130000.290,RDO,00000055,1,30CRLF"
"20010409130000.300,RDI,00000055,1CRLF"
"20010409130000.310,RDO,00000055,1,30CRLF"
"20010409130000.320,RDI,00000055,1CRLF"
"20010409130000.330,RDO,00000055,1,00CRLF"
"20010409130000.340,RDI,00000055,1CRLF"
"20010409130000.350,RDO,00000055,0,00CRLF"...<5>
```

The 1st record <1> shows that writing of 6 bytes of data (1D6732001400) to the port monitor was required.

The 2nd record <2> shows that the writing of 6 bytes of data is completed, from the port monitor.

The 3rd record <3> shows that reading of 1 byte of data to the port monitor was required.

The 4th record <4> shows that reading of 1 byte of data from the port monitor was completed, and that that data was (5F) .

Thereafter, reading of data one byte at a time is recorded, then at <5>, the status becomes No Data (reading data size: 0).

<2> Shows the log output results if BiRestPrinter (printer reset) is executed during printing.

Reference: int BiRestPrinter(int nHandle)

[EpsStmApi.log]

```
"20010409130010.000,FUI,000000FF,BiResetPrinter,00000001CRLF"
"20010409130011.000,FUO,000000FF,BiResetPrinter,00000001,<00000000>CRLF"
```

The 1st record shows that the BiResetPrinter function was called and that the content of 1 parameter is nHandle=1 (0x00000001).

The 2nd record shows that the BiResetPrinter function was returned, that the content of 1 parameter is nHandle=1 (0x00000001) and that the function's return value = 0 (SUCCESS).

[EpsStmMon.log]

```
"20010409130000.000,STD,00000055CRLF"...<1>
"20010409130000.010,WPI,00000055,1000CRLF"...<2>
"20010409130000.020,WPO,00000055,1000CRLF"...<3>
:
"20010409130009.990,WPI,00000055,1000CRLF"
"20010409130010.000,WPO,00000055,1000CRLF"
```

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 147	SHEET 146

“20010409130010.010,RPN,00000055CRLF” ...<4>
 “20010409130010.300,RDI,00000055,1CRLF” ...<5>
 “20010409130010.310,RDO,00000055,1,xxCRLF” ...<6>
 “20010409130010.320,RDI,00000055,1CRLF”
 “20010409130010.330,RDO,00000055,1,xxCRLF”
 “20010409130010.340,RDI,00000055,1CRLF”
 “20010409130010.350,RDO,00000055,1,xxCRLF”
 “20010409130010.360,RDI,00000055,1CRLF”
 “20010409130010.370,RDO,00000055,1,xxCRLF”
 “20010409130010.380,RDI,00000055,1CRLF”
 “20010409130010.390,RDO,00000055,0,00CRLF” ...<7>
 “20010409130010.400,EDD,00000055CRLF” ...<8>

<1> shows that a print start request was sent to the port monitor.

<2> shows that 4096 bytes of print data were written to the port monitor and that the print data were written to “EpsStmMon.bin.”

<3> shows writing of 4096 bytes in response to the write request to the port monitor was completed. Thereafter, writing of print data is repeated.

<4> shows that there was a printer reset request from the API.

<5> shows 1 byte of a status reception request to the port monitor.

<6> shows that 1 byte of data xx was received from the port monitor.

Thereafter, status reception is repeated.

<7> shows a return from the port monitor indicating that there are no reception data.

<8> shows that a print end request was sent to the port monitor.

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 148	SHEET 147

5. Notes

- 1) There are certain computers with which printing will not be performed normally and the status API cannot be used when the parallel operations mode is set to the ECP mode. In this event, cancel the ECP mode.
- 2) When using the printer driver for EPSON Terminal Printers (Page printer, ink-jet printer and others) and TM printer driver at the same time, the installation and uninstallation goes by the following order:

[Installation]

1. EPSON Terminal Printer driver
2. TM printer driver

[Uninstallation]

1. TM printer driver
2. EPSON Terminal Printer driver

Furthermore, after installation pay attention to the following:

- When installing the EPSON Terminal Printer driver after the TM printer driver is installed, uninstall first the TM printer driver.
 - When EPSON Printer Port is unwanted, make BIOS LPT setting other than ECP mode.
 - When uninstalling the EPSON Printer Port after the TM printer driver is installed, uninstall first the TM printer driver.
- 3) During statusAPI monitoring, macro execution for DM-D is not working correctly.
 - 4) When printer is connected to an Ethernet and is reset (e.g. OFF to ON), the printer is unusable for 20 seconds. Therefore, error is returned when using API within this duration.
 - 5) StatusAPI can only monitor printers that are local connected. If the printer is connected over Ethernet I/F, it cannot monitor the shared printer via print server.
 - 6) When using MICR in a high speed interface connection, set the handshake to Xon/Xoff. DTR/DSR cannot use MICR functions.
 - 7) With the USB interface, see the following document.
C:\EPSON Advanced Printer Driver\Setup_TM\Usb\readme_e.txt
 - 8) TM printers other than the following printer must be set to "Receive buffer full" for the BUSY condition with the DIP switch. However, the following printer can be set automatically with BiOpenMonPrinter:
TM-T90, TM-L90, TM-J2000/2100, TM-J7000/7100, TM-J7500/7600, TM-P60
 - 9) It is set that a log is output with StatusAPI installed. If outputting a log is not necessary, change a folder name so that LogPath does not exist or change LogLevel to 0.
 - 10) A status callback doesn't occur when the following conditions exist.
 - If multiple status information is received simultaneously, the latest status only is notified. Simultaneous is the case where the status changes within an interval of approximately 400 msec or less.
 - In some cases, the status that is received during callback processing is not notified. As a criterion, this may occur in cases where a callback processing time of approximately 800 msec or longer is required.
 - If the receiving buffer is specified in BiDirectIOEx (if ASB suppression is not specified), the altered Status is not sent back during execution of BiDirectIO or BiDirectIOEx. BiDirectIO or BiDirectIOEx read the Status, so processing of the receiving data should be done by the calling side.
 - If BiDirectIO and BiDirectIOEx (if ASB suppression is specified) do not specify the receiving buffer, the altered Status is not sent back during command execution and for approximately 1.5 sec. after BiDirectIO or BiDirectIOEx is executed.
 - After the above conditions exist, changes in the Status cannot be detected just as in the case when BiGetStatus is used, so the Status acquired last is sent back.
 - 11) When an Ethernet connection is used, the following functions related to Check Scanner are not supported.
BiSCNSetImageQuality, BiSCNSetImageFormat, BiSCNSetScanArea, BiSCNPreScan, BiSCNGetImageQuality, BiSCNGetImageFormat, BiSCNGetScanArea, BiSCNSetReadBackFunction, BiSCNSetReadBackWnd, BiSCNCancelReadBack, BiSCNReadImage, BiSCNRetransmissionImage, BiSCNGetClumpStatus, BiSCNClumpPaper, BiSCNSetCroppingArea, BiSCNGetCroppingArea, BiSCNDeleteCroppingArea
 - 12) If printer status is checked by BiGetStatus continuously, it is recommended to have an appropriate Sleep setting so that the resource is not occupied.
 - 13) When recovering from the Dump mode, turn the printer power off and back on. Otherwise the status might not be acquired correctly.
 - 14) StatusAPI can be used with multisleds; however, it is not possible to access one port from multiple sleds. Therefore,

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 149	SHEET 148

while one sled is calling for Status API, other sleds cannot call for Status API. In this case, StatusAPI ends in an error with a return of ERR_EXEC_FUNCTION.

- 15) It is possible to call for StatusAPI from the callback routine. However, it is prohibited to call contradictory operations or anything that might fail in infinite loop logically such as calling BiCloseMonPrinter from the callback routine. In this case, StatusAPI ends in error with a return of ERR_NOT_ALLOW_IN_CB (-410). The relationship between APIs and callbacks are as follows. For example, BiGetStatus can be called from all callbacks except for the ASB callback.

	ASB	INK	Presenter	MICR	SCAN
BiOpenMonPrinter	NG	NG	NG	NG	NG
BiCloseMonPrinter	NG	NG	NG	NG	NG
BiGetStatus	NG	OK	OK	OK	OK
BiSetStatusBackFunction	NG	NG	NG	NG	NG
BiSetStatusBackWnd	NG	NG	NG	NG	NG
BiCancelStatusBack	NG	NG	NG	NG	NG
BiDirectIO	NG	NG	NG	NG	NG
BiResetPrinter	NG	NG	NG	NG	NG
BiSetMonInterval	OK	OK	OK	OK	OK

Appendix A. Header file

```
// EPSStmApi.h
//

/////////////////////////////////////////////////////////////////
// ERROR CODE :
#define SUCCESS 0 // Success
#define ERR_TYPE -10 // nType error
#define ERR_OPENED -20 // Already opened
#define ERR_NO_PRINTER -30 // There is not printer driver
#define ERR_NO_TARGET -40 // Printer out of object
#define ERR_NO_MEMORY -50 // No memory
#define ERR_HANDLE -60 // Invalid handle
#define ERR_TIMEOUT -70 // Ttime out
#define ERR_ACCESS -80 // cannot read/write
#define ERR_PARAM -90 // param error
#define ERR_NOT_SUPPORT -100 // not support
#define ERR_OFFLINE -110 // now offline
#define ERR_NOT_EPSON -120 // not epson printer
#define ERR_WITHOUT_CB -130 // without callback function
#define ERR_BUFFER_OVER_FLOW -140 // Read buffer over flow
#define ERR_REGISTRY -150 // Registry error
#define ERR_ENABLE -160 // BiOpenMonPrinter() is already called
#define ERR_DISK_FULL -170 // Capacity of a disk is insufficient
#define ERR_NO_IMAGE -180 // No image data
#define ERR_ENTRY_OVER -190 // Registration number-of-cases over
#define ERR_CROPAREAID -200 // No specific CropAreaID
#define ERR_EXIST -210 // Already the same thing
#define ERR_NOT_FOUND -220 // Not found
#define ERR_IMAGE_FILEOPEN -230 // Open failure
#define ERR_IMAGE_UNKNOWNFORMAT -240 // Format injustice
#define ERR_IMAGE_FAILED -250 // Image creation failure
#define ERR_WORKAREA_NO_MEMORY -260 // No memory for WORKAREA
#define ERR_WORKAREA_UNKNOWNFORMAT -270 // Image creation failure because of format injustice
#define ERR_WORKAREA_FAILED -280 // WORKAREA creation failure
#define ERR_IMAGE_FILEREAD -290 // Image file read error
#define ERR_PAPERINSERT_TIMEOUT -300 // Image paper insert error of timeout
#define ERR_EXEC_FUNCTION -310 // Other API is running (3.01)
#define ERR_EXEC_MICR -320 // Now reading MICR (3.01)
#define ERR_EXEC_SCAN -330 // Now scanning image(3.01)
#define ERR_SS_NOT_EXIST -340 // Status service not started (3.01)
#define ERR_SPL_NOT_EXIST -350 // Spooler service not started (3.01)
#define ERR_SPL_PAUSED -370 // Spooler service paused (3.01)
#define ERR_RESET -400 // Now printer is reseting (3.01)
#define ERR_THREAD -420 // Thread error (3.03)
#define ERR_ABORT -430 // Call BiSCNMICRCancelFunction(3.03)
#define ERR_MICR -440 // MICR error (3.03)
#define ERR_SCAN -450 // SCAN error (3.03)
#define ERR_LINE_OVERFLOW -460 // Tranzaction print error (3.03)
#define ERR_NOT_EXEC -470 // Not Process (3.03)

/////////////////////////////////////////////////////////////////
// ASB Bit :
```

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 151	SHEET 150

```

#define ASB_NO_RESPONSE 0x00000001 //No response
#define ASB_PRINT_SUCCESS 0x00000002 //Finish to print
#define ASB_UNRECOVER_ERR 0x00002000 //Unrecoverable error
#define ASB_AUTORECOVER_ERR 0x00004000 //Auto-Recoverable error
#define ASB_OFF_LINE 0x00000008 //Off-line
#define ASB_WAIT_ON_LINE 0x00000100 //Waiting for on-line recovery
#define ASB_WAIT_PEPRT_EJECT 0x00000100 // Waiting for slip remove (3.03)
#define ASB_PANEL_SWITCH 0x00000200 //Panel switch
#define ASB_PRINTER_FEED 0x00000040 //Paper is being fed
#define ASB_HEAD_TEMPERATURE_ERR 0x00004000 //Mechanical error
#define ASB_MECHANICAL_ERR 0x00000400 //Mechanical error
#define ASB_LABEL_ERR 0x00000400 //LABEL check error
#define ASB_AUTOCUTTER_ERR 0x00000800 //Auto cutter error

#define ASB_DRAWER_KICK 0x00000004 //Drawer kick-out connector pin3 is HIGH
#define ASB_PRESENTER_COVER 0x00000004 //Presenter cover is open

#define ASB_JOURNAL_END 0x00040000 //Journal paper roll end
#define ASB_EJECT_SENSOR_NO_PAPER 0x00040000 //Eject sensor no paper (3.03)
#define ASB_RECEIPT_END 0x00080000 //Receipt paper roll end

#define ASB_COVER_OPEN 0x00000020 //Cover is open
#define ASB_PLATEN_OPEN 0x00000020 //Platen is open

#define ASB_JOURNAL_NEAR_END 0x00010000 //Journal paper roll near-end
#define ASB_JOURNAL_NEAR_END_FIRST 0x00010000 //Journal paper roll near-end-first
#define ASB_NOT_CARD_INSERT 0x00010000 //Not card insert (3.03)

#define ASB_RECEIPT_NEAR_END 0x00020000 //Receipt paper roll near-end
#define ASB_RECEIPT_NEAR_END_FIRST 0x00020000 //Receipt paper roll near-end-first

#define ASB_SLIP_TOF 0x00200000 //SLIP TOF
#define ASB_SLIP_TOF_2 0x00400000 //SLIP TOF 2
#define ASB_PSUPPLIER_END 0x00200000 //Paper supply end

#define ASB_SLIP_BOF 0x00400000 //SLIP BOF
#define ASB_SLIP_BOF_2 0x00200000 //SLIP BOF 2
#define ASB_RECEIPT_NEAR_END_SECOND 0x00400000 //Receipt paper roll near-end-second
#define ASB_ASF_PAPER 0x00400000 //No paper ASF(3.03)

#define ASB_SLIP_SELECTED 0x01000000 //Slip is not selected
#define ASB_PRESENTER_TE 0x01000000 //Presenter T/E receipt end

#define ASB_PRINT_SLIP 0x02000000 //Cannot print on slip
#define ASB_PRESENTER_TT 0x02000000 //Presenter T/T receipt end

#define ASB_VALIDATION_SELECTED 0x04000000 //Validation is not selected
#define ASB_RETRACTOR_R1JAM 0x04000000 //Retractor receipt end R1JAM

#define ASB_PRINT_VALIDATION 0x08000000 //Cannot print on validation
#define ASB_RETRACTOR_BOX 0x08000000 //Retractor box

#define ASB_VALIDATION_TOF 0x20000000 //Validation TOF
#define ASB_RETRACTOR_R2JAM 0x20000000 //Retractor receipt end R2JAM
#define ASB_WAIT_INSERT 0x20000000 //Wait insert (3.03)

#define ASB_VALIDATION_BOF 0x40000000 //Validation BOF
#define ASB_RETRACTOR_SENSOR3 0x40000000 //Retractor sensor NO.3

```

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 152	SHEET 151

```

#define ASB_VALIDATION_NO_PAPER 0x40000000 //Validation no paper (3.03)

#define ASB_BATTERY_OFFLINE 0x00000004 //Off-line for BATTERY QUANTITY

#define ASB_PAPER_FEED 0x00000040 //Paper is now feeding by PF FW (3.01)
#define ASB_PAPER_END 0x00040000 //Detected paper roll end (3.01)

#define INK_ASB_NEAR_END 0x0001 //Ink near-end
#define INK_ASB_END 0x0002 //Ink end
#define INK_ASB_NO_CARTRIDGE 0x0004 //Cartridge is not present
#define INK_ASB_CLEANING 0x0020 //Being cleaned
#define INK_ASB_NEAR_END2 0x0100 //Ink near-end2
#define INK_ASB_END2 0x0200 //Ink end2

```

```

////////////////////////////////////
///GetBatteryStatus() :

```

```

#define POWER_AC_ST 0x30
#define POWER_BT_ST 0x31

#define BATTERY_ST_H 0x30
#define BATTERY_ST_M 0x31
#define BATTERY_ST_L 0x32
#define BATTERY_ST_S 0x33
#define BATTERY_ST_N 0x34

```

```

////////////////////////////////////
// BiOpenMonPrinter() :

```

```

// Type
#define TYPE_PORT 1 // use port name
#define TYPE_PRINTER 2 // use printer driver name

```

```

////////////////////////////////////
// BiOpenDrawer() :

```

```

// Drawer Number
#define EPS_BI_DRAWER_1 1 // Drawer 1
#define EPS_BI_DRAWER_2 2 // Drawer 2

```

```

// Start Time
#define EPS_BI_PULSE_100 1 // 100 m sec
#define EPS_BI_PULSE_200 2 // 200 m sec
#define EPS_BI_PULSE_300 3 // 300 m sec
#define EPS_BI_PULSE_400 4 // 400 m sec
#define EPS_BI_PULSE_500 5 // 500 m sec
#define EPS_BI_PULSE_600 6 // 600 m sec
#define EPS_BI_PULSE_700 7 // 700 m sec
#define EPS_BI_PULSE_800 8 // 800 m sec

```

```

////////////////////////////////////
// BiSCNSetImageQuality() :

```

```

// Scale Option
#define EPS_BI_SCN_1BIT 1 // Monochrome
#define EPS_BI_SCN_8BIT 8 // Gray scale

```

```

// Color Option

```

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 153	SHEET 152

```

#define EPS_BI_SCN_MONOCHROME 48 // Monochrome
#define EPS_BI_SCN_COLOR 49 // Color

// Extensive Option
#define EPS_BI_SCN_AUTO 48 // Auto
#define EPS_BI_SCN_MANUAL 49 // Manual
#define EPS_BI_SCN_SHARP 50 // Sharpness

////////////////////////////////////
// BiSCNSetImageFormat() :

// Format Option
#define EPS_BI_SCN_TIFF 1 // TIFF format(CCITT Group 4)
#define EPS_BI_SCN_RASTER 2 // Raster Image
#define EPS_BI_SCN_BITMAP 3 // Bitmap
#define EPS_BI_SCN_TIFF256 4 // TIFF format(Glay scale)
#define EPS_BI_SCN_JPEGHIGH 5 // Jpeg format(High complessed)
#define EPS_BI_SCN_JPEGNORMAL 6 // Jpeg format(Normal)
#define EPS_BI_SCN_JPEGLow 7 // Jpeg format(Low complessed)

////////////////////////////////////
// BiSCNReadImage() :

// Select Sheet Option
#define EPS_BI_SCN_JOURNAL 1 // Select Journal
#define EPS_BI_SCN_RECEIPT 2 // Select Receipt
#define EPS_BI_SCN_SLIP 4 // Select Slip (3.03)
#define EPS_BI_SCN_CARD 16 // Select Card
#define EPS_BI_SCN_CHECKPAPER 32 // Select Check Paper

// Timing Option
#define EPS_BI_SCN_TRANSMIT_BATCH 48 // Batch mode
#define EPS_BI_SCN_TRANSMIT_SEQUENCE 49 // Sequence mode

// Memory Option
#define EPS_BI_SCN_NVMEMORY_NOTSAVE 48 // Not save (save to work area)
#define EPS_BI_SCN_NVMEMORY_SAVE 49 // Save

////////////////////////////////////
// BiSCNSelectScanUnit() :

// Scan unit ID
#define EPS_BI_SCN_UNIT_CHECKPAPER 48 // Checkpaper scanner unit
#define EPS_BI_SCN_UNIT_CARD 49 // Card scanner unit

////////////////////////////////////
// BiESCNEnable() :

// Saved Method
#define CROP_STORE_MEMORY 0 // Saved memory
#define CROP_STORE_FILE 1 // Saved file

////////////////////////////////////
// BiESCNSetAutoSize() :

// Enable/Disable Autosize
#define CROP_AUTOSIZE_DISABLE 0 // Enabled auto size
#define CROP_AUTOSIZE_ENABLE 1 // Disabled auto size

```

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 154	SHEET 153

```

////////////////////////////////////
// BiESCNSetRotate() :

// Enable/Disable Rotate
#define CROP_ROTATE_DISABLE 0 // Enabled rotate
#define CROP_ROTATE_ENABLE 1 // Disabled rotate

////////////////////////////////////
// BiESCNClearImage() :

// CropArea Setting
#define CROP_AREA_RESET_ALL 0 // Delete all crop area
#define CROP_AREA_ENTIRE_IMAGE 1 // CropArea entire image
#define CROP_AREA_RIGHT 65535 // End X Point
#define CROP_AREA_BOTTOM 65535 // End Y Point

////////////////////////////////////
// BiESCNClearImage() :

// Delete Method
#define CROP_CLEAR_ALL_IMAGE 0 // Delete all image
#define CROP_CLEAR_BY_FILEINDEX 1 // Clear by fileIndex
#define CROP_CLEAR_BY_FILEID 2 // Clear by fileId
#define CROP_CLEAR_BY_IMAGETAGDATA 3 // by imageTagData

////////////////////////////////////
// BiAutoPowerOffTime() :

#define EPS_BI_GET 0
#define EPS_BI_SET 1

typedef int (WINAPI* DLL_BiOpenMonPrinter)( int, LPSTR);
typedef int (WINAPI* DLL_BiSetMonInterval)( int, WORD, WORD);
typedef int (WINAPI* DLL_BiGetStatus)( int, LPDWORD);
typedef int (WINAPI* DLL_BiSetStatusBackFunction)( int, int (CALLBACK EXPORT *pStatusCB)(DWORD dwStatus));
typedef int (WINAPI* DLL_BiSetStatusBackWnd)( int, long, LPDWORD);
typedef int (WINAPI* DLL_BiCancelStatusBack)( int );
typedef int (WINAPI* DLL_BiDirectIO)( int, BYTE, LPBYTE, LPBYTE, LPBYTE, DWORD, BOOL);
typedef int (WINAPI* DLL_BiDirectIOEx)( int, DWORD, LPBYTE, LPDWORD, LPBYTE, DWORD, BOOL, BYTE);
typedef int (WINAPI* DLL_BiResetPrinter)( int);
typedef int (WINAPI* DLL_BiGetCounter)( int, WORD, LPDWORD);
typedef int (WINAPI* DLL_BiResetCounter)( int, WORD);
typedef int (WINAPI* DLL_BiCancelError)( int);
typedef int (WINAPI* DLL_BiGetType)( int, LPBYTE, LPBYTE, LPBYTE, LPBYTE);
typedef int (WINAPI* DLL_BiGetOfflineCode)( int, LPBYTE);
typedef int (WINAPI* DLL_BiGetInkStatus)( int, LPWORD);
typedef int (WINAPI* DLL_BiSetInkStatusBackFunction)( int, int (CALLBACK EXPORT *pInkCB)(WORD wStatus));
typedef int (WINAPI* DLL_BiSetInkStatusBackWnd)( int, long, LPDWORD);
typedef int (WINAPI* DLL_BiCancelInkStatusBack)( int);
typedef int (WINAPI* DLL_BiMICRSetReadBackFunction)( int, int (CALLBACK EXPORT *pMicrCB)(void), LPBYTE, LPBYTE, LPBYTE, LPBYTE);
typedef int (WINAPI* DLL_BiMICRSetReadBackWnd)( int, long, LPBYTE, LPBYTE, LPBYTE, LPBYTE);
typedef int (WINAPI* DLL_BiMICRSelectDataHandling)( int, BYTE, BYTE, BYTE);
typedef int (WINAPI* DLL_BiMICRReadCheck)( int, BYTE, BYTE);
typedef int (WINAPI* DLL_BiMICRCancelWaitChaeckInsertion)( int);
typedef int (WINAPI* DLL_BiMICRCancelWaitCheckInsertion)( int);
typedef int (WINAPI* DLL_BiMICRCancelReadBack)( int);

```

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 155	SHEET 154

```

typedef int (WINAPI* DLL_BiMICRRetransmissionCheckData)( int, LPBYTE, LPBYTE, LPBYTE, LPBYTE, DWORD);
typedef int (WINAPI* DLL_BiMICRGetStatus)( int, LPBYTE);
typedef int (WINAPI* DLL_BiMICREjectCheck)( int);
typedef int (WINAPI* DLL_BiMICRLoadCheck)( int);
typedef int (WINAPI* DLL_BiMICRCleaning)( int);
typedef int (WINAPI* DLL_BiOpenDrawer)( int, BYTE, BYTE);
typedef int (WINAPI* DLL_BiSetMonEtherInterval)( int, WORD);
typedef int (WINAPI* DLL_BiSetDefaultEchoTime)( BYTE, WORD);
typedef int (WINAPI* DLL_BiSetEtherEchoTime)( int, BYTE, WORD);
typedef int (WINAPI* DLL_BiEjectSheet)( int);
typedef int (WINAPI* DLL_BiRetractSheet)( int);
typedef int (WINAPI* DLL_BiSetPresenterTimeOut)( int, BYTE, BYTE);
typedef int (WINAPI* DLL_BiSetPresenterEventBackFunction)( int, int (CALLBACK EXPORT *pEventCB)(BYTE returncode));
typedef int (WINAPI* DLL_BiSetPresenterEventBackWnd)( int, long, LPBYTE);
typedef int (WINAPI* DLL_BiCancelPresenterEventBack)( int);
typedef int (WINAPI* DLL_BiCheckPrint)( int, LPBYTE);
typedef int (WINAPI* DLL_BiPreparePaperChange)( int);
typedef int (WINAPI* DLL_BiSCNSetImageQuality)( int, BYTE, char, BYTE, BYTE);
typedef int (WINAPI* DLL_BiSCNSetImageFormat)( int, BYTE);
typedef int (WINAPI* DLL_BiSCNSetScanArea)( int, BYTE, BYTE, BYTE, BYTE);
typedef int (WINAPI* DLL_BiSCNPreScan)( int, LPBYTE, char *);
typedef int (WINAPI* DLL_BiSCNGetImageQuality)( int, LPBYTE, char *, LPBYTE, LPBYTE);
typedef int (WINAPI* DLL_BiSCNGetImageFormat)( int, LPBYTE);
typedef int (WINAPI* DLL_BiSCNGetScanArea)( int, LPBYTE, LPBYTE, LPBYTE, LPBYTE);
typedef int (WINAPI* DLL_BiSCNSetReadBackFunction)( int, int (CALLBACK EXPORT *pScanCB)(void), LPDWORD, LPBYTE,
LPBYTE, LPBYTE, LPBYTE);
typedef int (WINAPI* DLL_BiSCNSetReadBackWnd)( int, long, LPDWORD, LPBYTE, LPBYTE, LPBYTE, LPBYTE);
typedef int (WINAPI* DLL_BiSCNCancelReadBack)( int);
typedef int (WINAPI* DLL_BiSCNReadImage)( int, WORD, BYTE, BYTE, BYTE, LPBYTE, BYTE);
typedef int (WINAPI* DLL_BiSCNRetransmissionImage)( int, WORD, LPDWORD, LPBYTE, LPBYTE, LPBYTE, LPBYTE,
DWORD);
typedef int (WINAPI* DLL_BiSCNGetClumpStatus)( int, LPBYTE);
typedef int (WINAPI* DLL_BiSCNClumpPaper)( int);
typedef int (WINAPI* DLL_BiSCNSetCroppingArea)( int, BYTE, BYTE, BYTE, BYTE, BYTE);
typedef int (WINAPI* DLL_BiSCNGetCroppingArea)( int, LPWORD, LPBYTE);
typedef int (WINAPI* DLL_BiSCNDeleteCroppingArea)( int, BYTE);
typedef int (WINAPI* DLL_BiSCNDeleteImage)( int, WORD);
typedef int (WINAPI* DLL_BiSCNGetImageList)( int, LPWORD, LPWORD);
typedef int (WINAPI* DLL_BiSCNGetImageRemainingCapacity)( int, LPDWORD);
typedef int (WINAPI* DLL_BiGetPrnCapability)( int, BYTE, LPBYTE, LPBYTE);
typedef int (WINAPI* DLL_BiCloseMonPrinter)( int );

typedef int (WINAPI* DLL_BiSCNSelectScanUnit)( int, BYTE);
typedef int (WINAPI* DLL_BiGetRealStatus)( int, LPWORD);
typedef int (WINAPI* DLL_BiSendDataFile)( int, LPCSTR);
typedef int (WINAPI* DLL_BiDirectSendRead)( int, LPCSTR, LPCSTR, LPDWORD, LPBYTE, DWORD, BOOL);

typedef int (WINAPI* DLL_BiSetStatusBackFunctionEx)( int, int (CALLBACK EXPORT *pStatusCB)(DWORD dwStatus, LPSTR
lpPortName));
typedef int (WINAPI* DLL_BiSetInkStatusBackFunctionEx)( int, int (CALLBACK EXPORT *pStatusCB)(WORD wStatus, LPSTR
lpPortName));
typedef int (WINAPI* DLL_BiSetPresenterEventBackFunctionEx)( int, int (CALLBACK EXPORT *pEventCB)(BYTE returncode,
LPSTR lpPortName));
typedef int (WINAPI* DLL_BiMICRSetReadBackFunctionEx)( int, int (CALLBACK EXPORT *pMicrCB)(LPSTR lpPortName),
LPBYTE, LPBYTE, LPBYTE, LPBYTE, LPBYTE pDetail);
typedef int (WINAPI* DLL_BiSCNSetReadBackFunctionEx)( int, int (CALLBACK EXPORT *pScnCB)(LPSTR lpPortName),
LPDWORD, LPBYTE, LPBYTE, LPBYTE, LPBYTE);

typedef int (WINAPI* DLL_BiGetBatteryStatus)( int, LPBYTE, LPBYTE);

```

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 156	SHEET 155

```

typedef int (WINAPI* DLL_BiSetBatteryStatusBackFunctionEx)( int, int (CALLBACK EXPORT *pBattCB)(BYTE, BYTE, LPSTR));

typedef int (WINAPI* DLL_BiSetBatteryStatusBackWndEx)( int, long, LPBYTE, LPBYTE, LPSTR);
typedef int (WINAPI* DLL_BiCancelBatteryStatusBack)( int);
typedef int (WINAPI* DLL_BiAutoPowerOffTime)( int, BYTE, LPBYTE);
typedef int (WINAPI* DLL_BiPowerOff)( int);

typedef int (WINAPI* DLL_BiESCNEnable)(BYTE);
typedef int (WINAPI* DLL_BiESCNGetAutoSize)(int, LPBYTE);
typedef int (WINAPI* DLL_BiESCNSetAutoSize)(int, BYTE);
typedef int (WINAPI* DLL_BiESCNGetCutSize)(int, LPWORD);
typedef int (WINAPI* DLL_BiESCNSetCutSize)(int, WORD);
typedef int (WINAPI* DLL_BiESCNGetRotate)(int, LPBYTE);
typedef int (WINAPI* DLL_BiESCNSetRotate)(int, BYTE);
typedef int (WINAPI* DLL_BiESCNGetDocumentSize)(int, LPWORD, LPWORD);
typedef int (WINAPI* DLL_BiESCNSetDocumentSize)(int, WORD, WORD);
typedef int (WINAPI* DLL_BiESCNDefineCropArea)(int, BYTE, WORD, WORD, WORD, WORD);
typedef int (WINAPI* DLL_BiESCNGetMaxCropAreas)(int, LPBYTE);
typedef int (WINAPI* DLL_BiESCNSaveImage)(int, DWORD, LPSTR, LPSTR, BYTE);
typedef int (WINAPI* DLL_BiESCNRetrieveImage)(int, DWORD, LPSTR, LPSTR, LPDWORD, LPBYTE);
typedef int (WINAPI* DLL_BiESCNClearImage)(int, BYTE, DWORD, LPSTR, LPSTR);
typedef int (WINAPI* DLL_BiESCNGetRemainingImages)(int, LPBYTE);
typedef int (WINAPI* DLL_BiSCNMICRFunction)(int iHandle, LPVOID lpvStruct, WORD wFunction);
typedef int (WINAPI* DLL_BiSCNMICRCancelFunction)(int iHandle, WORD wEjectType);
typedef int (WINAPI* DLL_BiSCNSelectScanFace)(int iHandle, BYTE bFace);

```

TITLE	EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 157	SHEET 156

Appendix A Operation of each Function According to Printer Status

Function Name	Printer Online Status	Printer Offline Status	Printer Power Off, Cable Disconnected Status	API Open Status Offline (Period during which the API is opened offline, until the Online status is recovered)	Remarks
BiOpenMonPrinter	The API is normally Open if the parameters are normal.	In the Offline Open status until the printer recovers Online status.	Ends with No Target.	After Online recovery is confirmed, API should be executed or printing should be executed.	The Status API cannot be used from a thread other than a thread that calls this function.
BiGetStatus BiGetInkStatus BiMICRGetStatus	Status notified	←	←	←	
BiSetStatusBack Function BiSetStatusBackWnd and other functions which register the callback function.	Callback registration is completed	←	←	←	The Status API cannot be used from inside a registered function.
BiCancelStatusBack and other functions which cancel registration of the callback function.	Callback cancellation is completed.	←	←	←	
BiDirectIO BiDirectIOEx	The command is executed normally.	If Readlen is not specified, the function ends normally, but the commands ESC, GS and FS are executed when Online recovery takes place. If Readlen is specified, ERR_TIMEOUT is made a return value and the function ends.	ERR_ACCESS is made a return value, then the function ends.	ERR_OFFLINE is made a return value, then the function ends.	ERR_ACCESS is made a return value during sending of print data from the driver, then the function ends.
BiResetPrinter	Reset is executed normally. It is judged from the Status	If the Offline cause is not removed, the reset is completed, but the	The function ends normally, but reset is not executed.	If the Offline cause is not removed, the reset is completed,	After reset is executed, the Status is transferred as shown

EPSON

TITLE
EPSON Advanced Printer Driver for TM series
StatusAPI
Reference Manual

Revision

D

No

NEXT
2

SHEET
1

	that Online recovery occurred and reset was completed.	Offline state remains as is.	It remains in the No Response state.	but the Offline state remains as is.	below. No Response→ Without cause Offline→Online If there is an error, No Response→ Without cause Offline→With cause Offline The intermediate Status may not be sent back depending on the conditions.
BiGetOfflineCode	No cause is sent back.	The function can get data normally. The latest Offline cause is sent back.	The function ends normally, but the Offline cause is not sent back.	The function ends normally, but the Offline cause is not sent back.	The cause cannot be acquired if it is not done approximately 500 msec after reset.
BiGetCounter	The counter value is acquired normally.	ERR_TIMEOUT is made a return value, then the function ends.	ERR_ACCESS is made a return value, then the function ends.	ERR_OFFLINE is made a return value, then the function ends.	ERR_ACCESS is made a return value during sending of print data from the driver, then the function ends.
BiResetCounter	The counter value is reset normally.		ERR_ACCESS is made a return value, then the function ends.	ERR_OFFLINE is made a return value, then the function ends.	ERR_ACCESS is made a return value during sending of print data from the driver, then the function ends.
BiGetType	The ID is acquired normally.	ERR_TIMEOUT is made a return value, then the function ends.	ERR_ACCESS is made a return value, then the function ends.	ERR_OFFLINE is made a return value, then the function ends.	ERR_ACCESS is made a return value during sending of print data from the driver, then the function ends.
BiMICRSelect DataHandling BiMICRReadCheck BiMICRCancelWait CheckInsertion BiMICRRetrans missionCheckData BiMICREjectCheck BiMICRLoadcheck BiMICRCleaning	Set normally.	The function ends normally, but the parameter is not set. It is reset when Online recovery takes place.	The function ends normally, but the parameter is not set	ERR_OFFLINE is made a return value, then the function ends.	

EPSON	TITLE EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 3	SHEET 2

BiSCNSetImageQuality BiSCNSetImage Format BiSCNSetScanArea BiSCNReadImage BiSCNClumpPaper BiSCNSetCropping Area BiSCNDelete CroppingArea	Set normally.	The function ends normally, but the parameter is not set. It is reset when Online recovery takes place.	The function ends normally, but the parameter is not set	ERR_OFFLINE is made a return value, then the function ends.	
BiSCNPreScan	Set normally.	ERR_TIMEOUT is made a return value, then the function ends.	ERR_ACCESS is made a return value, then the function ends.	ERR_OFFLINE is made a return value, then the function ends.	ERR_ACCESS is made a return value during sending of print data from the driver, then the function ends.
BiSCNGetImageQuality BiSCNGetImageFormat BiSCNGetScanArea BiSCNRetransmission Image BiSCNGetClump Status BiSCNGetCropping Area	Set normally.	ERR_TIMEOUT is made a return value, then the function ends.	ERR_ACCESS is made a return value, then the function ends.	ERR_OFFLINE is made a return value, then the function ends.	ERR_ACCESS is made a return value during sending of print data from the driver, then the function ends.
BiOpenDrawer	The drawer opens normally.	←	The function ends normally, but the drawer does not pen	ERR_OFFLINE is made a return value, then the function ends.	
BiSetMonInterval BiSetDefaultEchoTime BiSetEtherEchoTime	Set normally.	←	←	←	
BiCloseMonPrinter	Ends normally.	←	←	←	

Appendix B End of Processing Judgment Method after Each Function is Executed

Function Name	Normal End	Abnormal End	Remark
BiOpenMonPrinter	Return value > 0	Return value < 0	
BiGetStatus BiGetInkStatus BiMICRGetStatus	Return value = 0	Return value < 0	
BiSetStatusBack Function BiSetStatusBackWnd and other functions which register the callback function.	Return value = 0	Return value < 0	
BiCancelStatusBack and other functions which cancel registration of the callback function	Return value = 0	Return value < 0	
BiDirectIO BiDirectIOEx (If Readlen is specified)	Return value = 0	Return value < 0	If a command to return a response is sent, specify ReadLen. (except for a presenter command)
BiDirectIO BiDirectIOEx (If Readlen is not specified)	Return value = 0 and Judgment is made by the printer's status, such as paper position.	Return value < 0 or Judgment is made by the printer's status, such as paper position.	
BiResetPrinter	Return value = 0 and Finally, the printer goes Online. (No Response → without cause Offline → Online)	Return value < 0 or Finally, the printer does not go Online. (No Response → Without cause Offline → With cause Offline)	
BiGetOfflineCode	Return value = 0	Return value < 0	
BiGetCounter	Return value = 0	Return value < 0	It is preferable for the Status just before execution to be confirmed to be Online and that there be a Call.
BiResetCounter	Return value = 0 and	Return value < 0 or	It is preferable for the Status just before

EPSON	TITLE EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 5	SHEET 4

	the specified counter acquired by BiGetCounter is 0.	the specified counter acquired by BiGetCounter is not 0.	execution to be confirmed to be Online and that there be a Call.
BiGetType	Return value = 0	Return value < 0	It is preferable for the Status just before execution to be confirmed to be Online and that there be a Call.
BiMICRSelect DataHandling BiMICRReadCheck BiMICRCancelWait CheckInsertion BiMICRRetrans missionCheckData BiMICREjectCheck BiMICRLoadcheck BiMICRCleaning	Return value = 0	Return value < 0 or Judgment is made by the printer's status, such as paper position.	It is preferable for the Status just before execution to be confirmed to be Online and that there be a Call.
BiSCNSetImageQuality BiSCNSetImageFormat BiSCNSetScanArea BiSCNReadImage BiSCNClumpPaper BiSCNSetCroppingArea BiSCNDeleteCropping Area	Return value = 0	Return value < 0 or Judgment is made by the printer's status, such as paper position.	It is preferable for the Status just before execution to be confirmed to be Online and that there be a Call.
BiSCNGetImageQuality BiSCNGetImageFormat BiSCNGetScanArea BiSCNRetransmission Image BiSCNGetClumpStatus BiSCNGetCroppingArea	Return value = 0	Return value < 0	It is preferable for the Status just before execution to be confirmed to be Online and that there be a Call.
BiOpenDrawer	Return value = 0	Return value is < 0 or judgment is made by the printer's status, such as the drawer open or closed state.	

EPSON	TITLE EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 6	SHEET 5

BiSetMonInterval	Return value = 0	Return value < 0	
BiSetDefaultEchoTime			
BiSetEtherEchoTime			
BiCloseMonPrinter	Return value = 0	Return value < 0	

EPSON	TITLE EPSON Advanced Printer Driver for TM series StatusAPI Reference Manual	Revision D	No	
			NEXT 7	SHEET 6