

# SDK guide

## ● Overview

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Describes overview of SDK

## ● Win32 API reference

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Describes syntax of API

## ● .net API reference

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Describes syntax of API used in .net environment.

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## **.net API Reference**

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# Overview

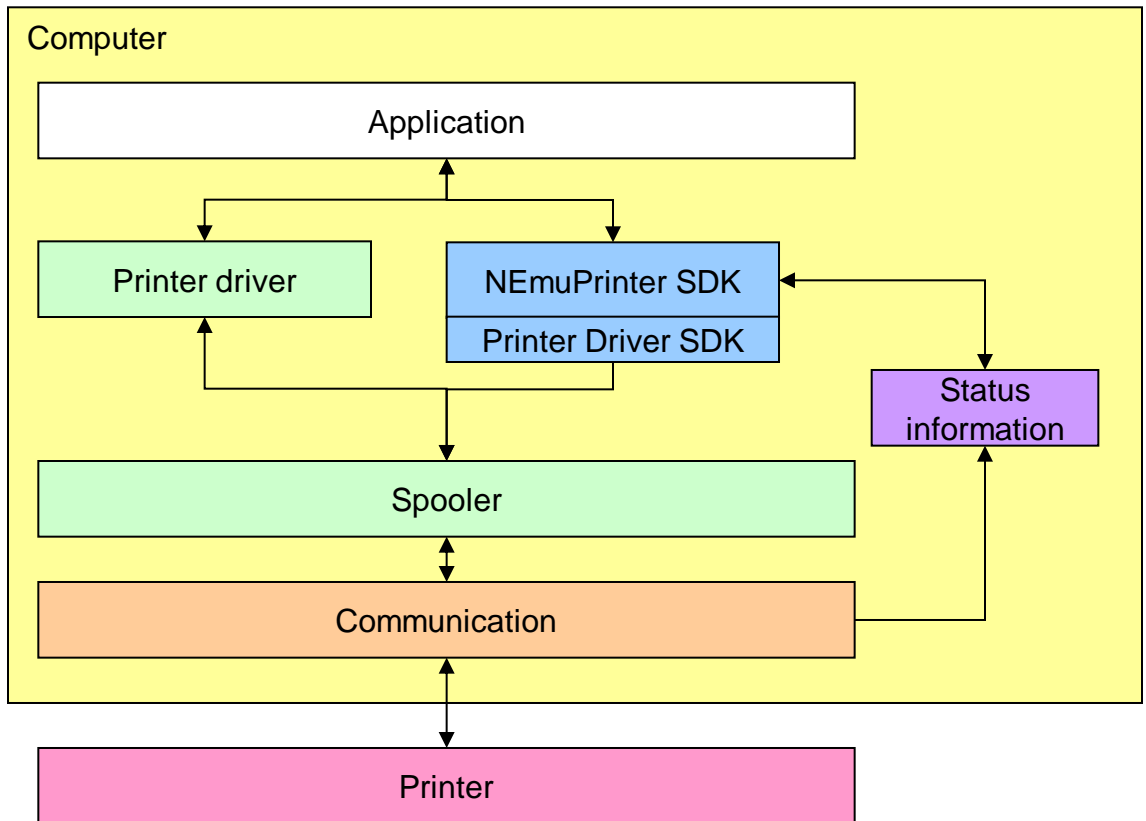
The function of printing and printer monitoring can be installed in targeted application by using SDK.

SDK is distributed as Dynamic Link Library (DLL).

File name: NEmuPrinterAPI.dll

NEmuPrinterAPIC.dll

## System configuration with SDK



## Development language

Win32

- Visual Basic 6.0
- Visual C++

.NET

- Visual Basic .NET
- Visual C#

## Install

NemuPrinter SDK is installed automatically when NExD (NPI EX Driver) is installed.

### Reference

You can find required files for environment construction in each sample in this manual.

## Construction of development environment

### Visual Basic 6.0

Following is an example of development environment construction for Visual Basic.

1. Copy API definition file (NEmuPrinterAPI.bas) from VBSample folder to working folder where you make a project for an application.
2. Run the Microsoft Visual Basic and open project window.
3. Select [Add standard module] from [Project] menu on menu bar.
4. A window to add module will open. Select [Existing file] tab, specify the definition file copied in above step #1 and click [Open] button.
5. [Module1.bas] will be added to project explorer.
6. Select [Reference] from [Project] menu on menu bar.
7. Development environment for Visual Basic 6.0 will be ready.

### Visual C++

Following is an example of development environment construction for Visual C++.

1. Run the Microsoft Visual C++ and open project window.
2. Copy API definition file (ImportApiEx.h) to working folder where you make a project for an application.
3. Open Source File. Define (ImportApiEx.h) by using #include directory.  
Definition method: #include "ImportApiEx.h"
4. Development environment for Visual C++ will be ready.

\* Use NEmuPrinterAPI.ba, ImportApiEx.h after the modification of those files depending on your usage since those files are just reference.

# Win32 API Reference

## Category of API

Following APIs are available.

Application	API	Description
Start/Finish NEmuPrinterAPI	EiOpenMonPrinter	Start to use NEmuPrinterAPI with the specified printer
	EiCloseMonPrinter	Finish to use NEmuPrinterAPI
Occupy printer	EiLockPrinter	Lock printer
	EiUnlockPrinter	Unlock printer
Sending command	EiDirectIO	Send/Receive binary data
	EiDirectIOEx	Send/Receive binary data (Other items than status can be specified)
Reset printer	EiResetPrinter	Reset printer
Obtaining status	EiGetStatus	Get printer status
	EiSetStatusBackFunction	Register call back function which will be called when auto status notice.
	EiSetStatusBackFunctionEx	Register call back function which will be called when auto status notice. (It is possible to get port name)
	EiSetStatusBackWnd	Register window handle of button to send click event when auto status notice and memory address to set status information.
	EiCancelStatusBack	Cancel auto status notice request process
Power OFF preprocessing	EiPowerOff	Power off printer or put it in standby mode
Get and reset maintenance counter	EiGetCounter	Get maintenance counter
	EiResetCounter	Reset maintenance counter
Get printer information	EiGetPrnCapability	Get printer information
Drawer control	EiOpenDrawer	Open drawer
Edit DevMode	EmuDM_GetProperty	Get the target DevMode information
	EmuDM_SetProperty	Set the target DevMode information
Draw barcode	EmuBarcode	Draw barcode



# Win32 API Reference

Function name	EiOpenMonPrinter / EiOpenMonPrinterW		
Argument name	IN/OUT	Type	Description
i_type	I	int	2 (fixed)
i_prt	I	PCHAR / PWCHAR	Output printer driver name
Return value	INT		
·Error (negative value), Normal end (returns handle which specifies printer)			
Processing Description	<p>·Starts to use NEmuPrinterAPI with the specified printer and returns a handle.</p> <p>Error description</p> <p>-10 : Parameter error for i_type</p> <p>-20 : The specified printer is already opened</p> <p>-30 : The specified printer does not exist</p> <p>-50 : Memory shortage</p> <p>-80 : Unable to R/W to printer</p> <p>(Printer is not powered on, bad cable connection etc)</p> <p>-340 : LM does not run or status information acquisition error from LM</p> <p>-350 : Spooler does not run</p>		

# Win32 API Reference

Function name	EiCloseMonPrinter		
Argument name	IN/OUT	Type	Description
i_hdl	I	int	Handle
Return value	INT		
·Error (negative value), Normal end (0)			
Processing Description			
·Finish to use NEmuPrinterAPI with the specified printer			
Error Description			
-60 : Handle value is invalid			

Function name	EiLockPrinter		
Argument name	IN/OUT	Type	Description
i_hdl	I	int	Handle
i_timeout	I	DWORD	Timeout period(msec)
Return value	INT		
·Error (negative value), Normal end (0)			
Processing Description			
·Lock printer			
Error Description			
-60 : Handle value is invalid			
-340 : Spooler does not run			
-1000 : Unable to execute this function because printer is locked			

Reference

Printer is locked by using Mutex in computer of host printer.

# Win32 API Reference

Function name	EiUnlockPrinter		
Argument name	IN/OUT	Type	Description
i_hdl	I	int	Handle
Return value	INT		
·Error (negative value), Normal end (0)			
Processing Description			
·Unlock printer			
Error Description			
-60 : Handle value is invalid			
-340 : Spooler does not run			
-1000 : Unable to execute this function because printer is locked			

# Win32 API Reference

Function name		EiDirectIO	
Argument name	IN/OUT	Type	Description
i_hdl	I	int	Handle
i_wlen	I	BYTE	Output size
i_wcmd	I	PBYTE	Output command
io_rlen	IO	PBYTE	Read size
o_rbuf	O	PBYTE	received data
i_timeout	I	DWORD	Timeout period
i_nt	I	BOOL	receiving flag
Return value	INT		
·Error (negative value), Normal end (0)			
Processing Description			
<div>·Send/Receive binary data</div> <div>·Argument detailed description</div> <div>    Read size: Specify the data length acquired from printer</div> <div>        Specify this argument if the command execution result from printer is necessary. The acquired buffer size is returned.</div> <div>        Specify “0” if it is not necessary to acquire the data.</div> <div>    Timeout period: Specify by msec (millisecond)</div> <div>    receiving flag: TRUE = until when something is received</div> <div>        FALSE = until either read size is received or timeout</div> <div>Error Description</div> <div>-60 : Handle value is invalid</div> <div>-70 : Timeout error</div> <div>-80 : Unable to R/W to printer</div> <div>-340 : Spooler does not run</div> <div>-1000 : Unable to execute this function because printer is locked</div>			

# Win32 API Reference

Function name	EiDirectIOEx		
Argument name	IN/OUT	Type	Description
i_hdl	I	int	Handle
i_wlen	I	DWORD	Output size
i_wcmd	I	PBYTE	Output command
io_rlen	IO	PDWORD	Read size
o_rbuf	O	PBYTE	received data
i_timeout	I	DWORD	Timeout period
i_nt	I	BOOL	receiving flag
i_op	I	BYTE	Receiving target
Return value	INT		
·Error (negative value), Normal end (0)			
Processing Description			
·Send/Receive binary data			
·Argument detailed description			
Read size: Specify the data length acquired from printer			
Specify this argument if the command execution result from printer is necessary. The acquired buffer size is returned.			
Specify "0" if it is not necessary to acquire the data.			
Timeout period: Specify by msec (millisecond)			
receiving flag: TRUE = until when something is received			
FALSE = until either read size is received or timeout			
Receiving target: 0 = All received data is targeted.			
1 = Exempt Status from target			
Error Description			
-60 : Handle value is invalid			
-70 : Timeout error			
-80 : Unable to R/W to printer			
-340 : Spooler does not run			
-1000 : Unable to execute this function because printer is locked			

# Win32 API Reference

Function name	EiResetPrinter		
Argument name	IN/OUT	Type	Description
i_hdl	I	int	Handle
Return value	INT		
·Error (negative value), Normal end (0)			
Processing Description	<div>·Reset printer</div> <div>Error Description</div> <div>-60 : Handle value is invalid</div> <div>-340 : Spooler does not run</div> <div>-1000 : Unable to execute this function because printer is locked</div> <div>*This function is not available on Windows 2000.</div>		

Function name	EiGetStatus		
Argument name	IN/OUT	Type	Description
i_hdl	I	int	Handle
o_status	O	PDWORD	Status
Return value	INT		
·Error (negative value), Normal end (0)			
Processing Description			
·Get printer status			
Error Description			
-60 : Handle value is invalid			
*Please refer to “Status list” for status description.			

# Win32 API Reference

Function name		EiSetStatusBackFunction		
Argument name		IN/OUT	Type	Description
i_hdl		I	int	Handle
i_stcb		I	Please see as follows	Callback function address
Return value	INT			
· Error (negative value), Normal end (0)				
Processing Description				
· Register callback function called for auto-status notice				
· Argument detailed description				
Callback function address: Application defined callback function to receive status				
int CALLBACK StatusCB(DWORD st)				
Error Description				
-60 : Handle value is invalid				

# Win32 API Reference

Function name	EiSetStatusBackFunctionEx		
Argument name	IN/OUT	Type	Description
i_hdl	I	int	Handle
i_stcb	I	Please see the following	Callback function address
Return value		INT	
·Error (negative value), Normal end (0)			
Processing Description			
·Register callback function called for auto-status notice (Enables to get a port name by callback function)			
·Argument detailed description Callback function address: Application defined callback function to receive status int CALLBACK StatusCBEx(DWORD st,LPSTR pname)			
Error Description -60 : Handle value is invalid			



# Win32 API Reference

Function name	EiSetStatusBackWnd		
Argument name	IN/OUT	Type	Description
i_hdl	I	int	Handle
i_Wnd	I	HANDLE	Windows handle
i_status	I	PDWORD	Status saving address
Return value	INT		
·Error (negative value), Normal end (0)			
Processing Description			
·Register window handle of button to send click event when auto status notice and memory address to set status information			
·Argument detailed description			
Status saving address : Save status at the address specified when issueing click event.			
Error Description			
-60 : Handle value is invalid			

Function name	EiCancelStatusBack		
Argument name	IN/OUT	Type	Description
i_hdl	I	Int	Handle
Return value	INT		
·Error (negative value), Normal end (0)			
Processing Description	<div>·Cancel auto status notice request process</div> <div>Error Description</div> <div>-60 : Handle value is invalid</div>		

# Win32 API Reference

Function name	EiPowerOff		
Argument name	IN/OUT	Type	Description
i_hdl	I	int	Handle
Return value	INT		
·Error (negative value), Normal end (0)			
Processing Description	<div>·Power off printer</div> <div>Error Description</div> <div>-60 : Handle value is invalid</div> <div>-70 : Timeout error</div> <div>-80 : Unable to R/W to printer</div> <div>-1000 : Unable to execute this function because printer is locked</div>		

# Win32 API Reference

Function name	EiGetCounter		
Argument name	IN/OUT	Type	Description
i_hdl	I	int	Handle
i_readno	I	WORD	Acquisition counter ID
o_readcounter	O	PDWORD	Counter stored area
Return value	INT		
·Error (negative value), Normal end (0)			
Processing Description			
·Get maintenance counter			
·Argument detailed description			
Acquisition counter ID :			
14H: Number of travelling dot line (User maintenance counter)			
15H: Number of head energizing dot line (User maintenance counter)			
32H: Number of cut (User maintenance counter)			
94H: Number of travelling dot line			
95H: Number of head energizing dot line			
B2H: Number of cut			
Error Description			
-60 : Handle value is invalid			
-70 : Timeout error			
-80 : Unable to R/W to printer			
-100 : Unsupported model			
-1000 : Unable to execute this function because printer is locked			

# Win32 API Reference

Function name	EiResetCounter		
Argument name	IN/OUT	Type	Description
i_hdl	I	int	Handle
i_readno	I	WORD	Acquisition counter ID
Return value	INT		
·Error (negative value), Normal end (0)			
Processing Description			
·Reset maintenance counter			
·Argument detailed description			
Acquisition counter ID:			
14H: Number of travelling dot line			
15H: Number of head energizing dot line			
32H: Number of cut			
Error Description			
-60 : Handle value is invalid			
-70 : Timeout error			
-80 : Unable to R/W to printer			
-100 : Unsupported model			
-1000 : Unable to execute this function because printer is locked			

# Win32 API Reference

Function name		EiGetPrnCapability	
Argument name	IN/OUT	Type	Description
i_hdl	I	int	Handle
i_id	I	BYTE	Type ID (Refer to Extended Information)
io_datsize	IO	PBYTE	Data acquired size
o_dat	O	PBYTE	Data acquired area (NULL can be specified)
Return value	INT		
·Error (negative value), Normal end (0)			
Processing Description			
·Get printer information			
·Argument detailed description			
Data acquired area : End after setting data size to data acquired size when NULL is specified.			
Error Description			
-60 : Handle value is invalid			
-70 : Timeout error			
-80 : Unable to R/W to printer			
-1000 : Unable to execute this function because printer is locked			

## Extended Information

Please refer to the item of “**Extended Information**” of Setting guide regarding information that you can get by EiGetPrnCapabilit.

Except, you may get different information depending on printer version.

# Win32 API Reference

Function name	EiOpenDrawer		
Argument name	IN/OUT	Type	Description
i_hdl	I	int	Handle
i_drawer	I	BYTE	Target drawer
i_pulse	I	BYTE	Drawer kick period
Return value	INT		
·Error (negative value), Normal end (0)			
Processing Description			

·Open drawer

·Argument detailed description

Target drawer: 1 = Open Drawer 1

2 = Open Drawer 2

Draw kick period: 1 = Activate drawer after 100 msec

2 = Activate drawer after 200 msec

3 = Activate drawer after 300 msec

4 = Activate drawer after 400 msec

5 = Activate drawer after 500 msec

Error Description

-60 : Handle value is invalid

-70 : Timeout error

-80 : Unable to R/W to printer

-90 : Parameter error

-100 : Unsupported model

-1000 : Unable to execute this function because printer is locked

# Win32 API Reference

Function name	EmuDM_GetProperty		
Argument name	IN/OUT	Type	Description
i_devmode	I	PDEVMODEA	DevMode address
i_pid	I	BYTE	Property ID
o_dat	O	PBYTE	Data save address
io_size	IO	PDWORD	Data size
Return value	INT		
·Error (negative value), Normal end (0)			
Processing Description		<div>·Returns property status set by the specified DevMode.</div> <div>·Argument detailed description</div> <div>Property ID : 0 = All Image</div> <div>Property ID : 1 = Printer Initialization</div> <div>Property ID : 2 = Print speed</div> <div>Property ID : 3 = Margin</div> <div>Property ID : 4 = Density</div> <div>Property ID : 5 = Watermark</div> <div>Property ID : 6 = Scale</div> <div>Property ID : 7 = Rotation</div> <div>Property ID : 8 = Disable setting</div> <div>Property ID : 9 = Color print mode</div> <div>Property ID : 10 = Print notice setting at printing start</div> <div>Property ID : 11 = Cutter operation at printing start</div> <div>Property ID : 12 = Drawer at printing start</div> <div>Property ID : 13 = Drawer kick ON TIME at printing start</div> <div>Property ID : 14 = Drawer kick OFF TIME at printing start</div> <div>Property ID : 15 = Custom command at printing start</div> <div>Property ID : 16 = Back feed at printing start</div> <div>Property ID : 17 = Feed at printing start</div> <div>Property ID : 19 = Move to the cutting position at printing start</div>	

Please refer to "property value" for each property value.



# Win32 API Reference

Function name	EmuDM_GetProperty
Processing Description	<div><div>·Argument detailed description</div><div>Property ID : 21 = Cutter operation at page start</div><div>Property ID : 22 = Drawer at page start</div><div>Property ID : 23 = Drawer kick ON TIME at page start</div><div>Property ID : 24 = Drawer kick OFF TIME at page start</div><div>Property ID : 25 = Custom command at page start</div><div>Property ID : 26 = Back feed at page start</div><div>Property ID : 27 = Feed at page start</div><div>Property ID : 29 = Move to cutting position at page start</div><div> </div><div>Property ID : 31 = Cutting operation at page end</div><div>Property ID : 32 = Drawer at page end</div><div>Property ID : 32 = Drawer kick ON TIME at page end</div><div>Property ID : 34 = Drawer kick OFF TIME at page end</div><div>Property ID : 35 = Custom command at page end</div><div>Property ID : 36 = Back feed at page end</div><div>Property ID : 37 = Feed at page end</div><div>Property ID : 39 = Move to cutting position at page end</div><div> </div><div>Property ID : 40 = Print notice setting at print end</div><div>Property ID : 41 = Cutter operation at print end</div><div>Property ID : 42 = Drawer at print end</div><div>Property ID : 43 = Drawer kick ON TIME at print end</div><div>Property ID : 44 = Drawer kick OFF TIME at print end</div><div>Property ID : 45 = Custom command at print end</div><div>Property ID : 46 = Back feed at print end</div><div>Property ID : 47 = Feed at print end</div><div>Property ID : 49 = Move to cutting position at print end</div><div> </div><div>Error Description</div><div>-90 : Parameter error</div><div> </div><div>* This function is not available for Windows 2000.</div></div>

# Win32 API Reference

Function name	EmuDM_SetProperty		
Argument name	IN/OUT	Type	Description
i_devmode	I	PDEVMODEA	DevMode address
i_pid	I	BYTE	Property ID
i_dat	I	PBYTE	Setting data address
i_size	I	DWORD	Data size
Return value	INT		
·Error (negative value), Normal end (0)			
Processing Description			
·Set data specified at specified DevMode			
·Argument detailed description			
Property ID : 0 = All Image			
Property ID : 1 = Printer Initialization			
Property ID : 2 = Print speed			
Property ID : 3 =Margin			
Property ID : 4 =Density			
Property ID : 5 =Watermark			
Property ID : 6 = Scale			
Property ID : 7 = Rotation			
Property ID : 8 = Disable setting			
Property ID : 9 = Color print mode			
Property ID : 10 = Print notice setting at printing start			
Property ID : 11 = Cutter operation at printing start			
Property ID : 12 = Drawer at printing start			
Property ID : 13 = Drawer kick ON TIME at printing start			
Property ID : 14 = Drawer kick OFF TIME at printing start			
Property ID : 15 = Custom command at printing start			
Property ID : 16 = Back feed at printing start			
Property ID : 17 = Feed at printing start			
Property ID : 19 = Move to the cutting position at printing start			
Property ID : 21 = Cutter operation at page start			
Property ID : 22 = Drawer at page start			
Property ID : 23 = Drawer kick ON TIME at page start			
Property ID : 24 = Drawer kick OFF TIME at page start			
Property ID : 25 = Custom command at page start			

Please refer to "property value" for each property value.

# Win32 API Reference

Function name	EmuDM_SetProperty
Processing Description	<p>•Argument detailed description</p> <p>Property ID : 26 = Back feed at page start Property ID : 27 = Feed at page start Property ID : 29 = Move to cutting position at page start</p> <p>Property ID : 31 = Cutting operation at page end Property ID : 32 = Drawer at page end Property ID : 32 = Drawer kick ON TIME at page end Property ID : 34 = Drawer kick OFF TIME at page end Property ID : 35 = Custom command at page end Property ID : 36 = Back feed at page end Property ID : 37 = Feed at page end Property ID : 39 = Move to cutting position at page end</p> <p>Property ID : 40 = Print notice setting at print end Property ID : 41 = Cutter operation at print end Property ID : 42 = Drawer at print end Property ID : 43 = Drawer kick ON TIME at print end Property ID : 44 = Drawer kick OFF TIME at print end Property ID : 45 = Custom command at print end Property ID : 46 = Back feed at print end Property ID : 47 = Feed at print end Property ID : 49 = Move to cutting position at print end</p> <p>Property ID : 50 = Paper size</p> <p>Property ID : 60 = 58mm POS setting Property ID : 61 = 80mm POS setting Property ID : 62 = 58mm Ticket setting Property ID : 63 = 80mm Ticket setting Property ID : 66 = A4-58mm reduced printing Property ID : 67 = A4-80mm reduced printing Property ID : 68 = Return to default</p> <p>•Error Description</p> <p>-90 : Parameter error</p> <p>* This function is not available for Windows 2000/XP up to and including Service Pack2.</p>

# Win32 API Reference

## Property value

Property ID : 0 = All Image      0 : False   1 : True

Property ID : 1 = Printer Initialization      0:Printer Initialization  
  1 : None(each font setting initialization)

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Property ID : 2 = Print speed      0-4

Property ID : 3 = Margin 0 : Standard 1: Saving

Property ID : 4 = Density                      0 : Standard   1 : Dark   2 : Light

Property ID : 5 = Watermark    0: None    1: Upper left    2: Top center    3: Upper right  
4: Center left    5: Center    6: Center right  
7: Lower left    8: Center bottom    9: Lower right

Property ID : 6 = Scale(%) 25-100

Property ID : 7 = Rotation      0: 0°    1: 90°    2: 180°    3: 270°

Property ID : 8 = Setting is disabled      0: False    1 : TRUE

Property ID : 9 = Color print mode      0: Black and white 1: Gray Scale(halftone)

Property ID : 10/40 = Print notice setting 0: None 1: Flag 2: Data hold  
3 : Flag + Notice  
4 : Flag + Notice + Data hold

Property ID : 11/21/31/41 = Cutter operation 0: None 1: Partial cut  
2 : Full cut

Property ID : 12/22/32/42 = Drawer      0 : None 1: 2PIN   2: 5PIN

Property ID : 13/23/33/43 = Drawer kick ON TIME 1-255

Property ID : 14/24/34/44 = Drawer kick OFF TIME 1-255

Property ID : 15/25/35/45 = Custom command (100BYTE)      Specifying Hex character

Property ID : 16/26/36/46 = Back feed 0-255

Property ID : 17/27/37/47 = Feed 0-255

Property ID : 19/29/39/49 = Feed to cut position 0: Does not feed to cut position  
1: Feed to cut position

## Property dedicated for setting

Property ID : 50 = Paper size      0 : Letter    1 : A4        2 : A4 Extra  
    3 : 80mm        4 : 58mm      5 : PostCard  
Others: Paper number created by user

Property ID : 60 = 58mm POS setting,                      61 = 80mm POS setting,  
62 = 58mm Ticket setting,                      63 = 80mm Ticket setting,  
66 = A4-58mm reduced printing, 67 = A4-80mm reduced printing,  
68 = Return to default

The setting data is ignored when specifying the above values.

# Win32 API Reference

Function name	EmuBarcode		
Argument name	IN/OUT	Type	Description
i_hdl	I	int	Handle
i_fname	I	PCHAR	Font name
i_bmp	IO	HDC	Device context handle
i_x	I	DWORD	X
i_y	I	DWORD	Y
i_width	I	DWORD	Width
i_height	I	DWORD	Height
i_dat	I	PBYTE	Barcode data
i_size	I	DWORD	Data size
Return value	INT		
·Error (negative value), Normal end (0)			
Processing Description		·Draw the barcode/2D barcode specified at the barcode font/2D barcode font setting of printer on the device context.	
Error Description			
-50 : Memory shortage			
-60 : Handle value is invalid			
-90 : Parameter error			

## Class description

Name space: NEmuPrinterAPIC

Class name: NEmuPrinterAPIClass

Type	Name	Remarks
Property	Status	Final status
Property	LastError	The last executed API error code
Type	Name	Remarks
Method	OpenMonPrinter	Win32 API wrapper
Method	CloseMonPrinter	Win32 API wrapper
Method	LockPrinter	Win32 API wrapper
Method	UnlockPrinter	Win32 API wrapper
Method	DirectIOEx	Win32 API wrapper
Method	ResetPrinter	Win32 API wrapper
Method	SetStatusBack	Win32 API wrapper
Method	CancelStatusBack	Win32 API wrapper
Method	PowerOff	Win32 API wrapper
Method	GetCounter	Win32 API wrapper
Method	ResetCounter	Win32 API wrapper
Method	GetPrnCapability	Win32 API wrapper
Method	OpenDrawer	Win32 API wrapper
Method	DM_GetProperty	Win32 API wrapper
Method	DM_SetProperty	Win32 API wrapper
Method	Barcode	Win32 API wrapper
Event	StatusCallback	Event to process the notified status
Event	StatusCallbackEx	Event to process the notified status

## Property

Property Name	LastError	
Type	uint	
Processing Description	Get	
	·The return value of the last executed API	
	Set	
	..	
Remark		
·Default value is 0		

Property Name	Status	
Type	long	
Processing Description	Get	
	·Get the latest printer status	
	Set	
	·-	
Remark		
·Default value is 0		

## Method

Function name	OpenMonPrinter		
Argument name	IN/OUT	Type	Description
i_type i_prt	I I	int [MarshalAs(UnmanagedType.LPStr)] string	2 (Fixed) Output printer driver name
Return value	int		
Processing Description			
Remark			

**Please refer to EiOpenMonPrinter “Win32 API reference” for Return value,  
Processing Description**

Function name	CloseMonPrinter		
Argument name	IN/OUT	Type	Description
Return value	int		
Processing Description			
Remark			

**Please refer to EiCloseMonPrinter “Win32 API reference” for Return value,  
Processing Description**



Function name	LockPrinter		
Argument name	IN/OUT	Type	Description
i_timeout	l	long	Timeout period
Return value	int		
Processing Description			
Remark			

**Please refer to EiLockPrinter “Win32 API reference” for Return value, Processing Description**

Function name	UnlockPrinter		
Argument name	IN/OUT	Type	Description
Return value	int		
Processing Description			
Remark	·Use this function after setting PrinterName propetry		

**Please refer to EiUnlockPrinter “Win32 API reference” for Return value, Processing Description**

# .net API Reference

Function name	DirectIOEx		
Argument name	IN/OUT	Type	Description
i_wlen	I	long	Output size
i_wcmd	I	byte[]	Output command
io_rlen	IO	out long	Read size
o_rbuf	O	out byte[]	received data
i_timeout	I	long	Timeout
i_nt	I	byte	receiving flag
i_op	I	byte	Receiving target
Return value	int		
Processing Description			
Remark			

**Please refer to EiDirectIOEx "Win32 API reference" for Return value, Processing Description.**

Function name	DirectIOEx		
Argument name	IN/OUT	Type	Description
i_wlen	I	long	Output size
i_wcmd	I	byte[]	Output command
i_timeout	I	long	Timeout
Return value	int		
Processing Description			
Remark			

**Please refer to EiDirectIOEx "Win32 API reference" for Return value, Processing Description.**

Function name	ResetPrinter		
Argument name	IN/OUT	Type	Description
Return value	int		
Processing Description			
Remark			

**Please refer to EiResetPrinter "Win32 API reference" for Return value, Processing Description.**

Function name	SetStatusBack		
Argument name	IN/OUT	Type	Description
Return value	int		
Processing Description			
Remark			

**Please refer to EiSetStatusBackFunctionEx "Win32 API reference" for Return value, Processing Description.**

Function name	CancelStatusBack		
Argument name	IN/OUT	Type	Description
Return value	int		
Processing Description			
Remark			

**Please refer to EiCancelStatusBack "Win32 API reference" for Return value, Processing Description.**

Function name	PowerOff		
Argument name	IN/OUT	Type	Description
Return value	int		
Processing Description			
Remark			

**Please refer to EiPowerOff "Win32 API reference" for Return value, Processing Description.**

Function name	GetCounter		
Argument name	IN/OUT	Type	Description
i_readno	I	short	Acquisition counter ID
o_readcounter	O	out long	Counter stored area
Return value	int		
Processing Description			
Remark			

**Please refer to EiGetCounter "Win32 API reference" for Return value, Processing Description.**

Function name	ResetCounter		
Argument name	IN/OUT	Type	Description
i_readno	I	short	Acquisition counter ID
Return value	int		
Processing Description			
Remark			

**Please refer to EiResetCounter "Win32 API reference" for Return value, Processing Description.**

# .net API Reference

Function name	GetPrnCapability		
Argument name	IN/OUT	Type	Description
i_id	I	byte	Type ID (Refer to Extended Information)
io_datsize	IO	ref byte[]	Data acquisition size
o_dat	O	byte[]	Data stored area (Enables to acquire NULL)
Return value	int		
Processing Description			
Remark			

**Please refer to EiGetPrnCapability "Win32 API reference" for Return value, Processing Description.**

Function name	OpenDrawer		
Argument name	IN/OUT	Type	Description
i_drawer	I	byte	Target drawer
i_pulse	I	byte	Drawer kick period
Return value	int		
Processing Description			
Remark			

**Please refer to EiOpenDrawer "Win32 API reference" for Return value, Processing Description.**

# .net API Reference

Function name	DM_GetProperty		
Argument name	IN/OUT	Type	Description
i_devmode	I	IntPtr	DevMode address
i_pid	I	byte	Property ID
o_dat	O	byte[]	Data save address
io_size	IO	ref long	Data size
Return value	int		
Processing Description			
Remark			

**Please refer to EmuDM\_GetProperty "Win32 API reference" for Return value, Processing Description.**

Function name	DM_SetProperty		
Argument name	IN/OUT	Type	Description
i_devmode	I	IntPtr	DevMode address
i_pid	I	byte	Property ID
i_dat	I	byte[]	Setting data address
i_size	I	long	Data size
Return value	int		
Processing Description			
Remark			

**Please refer to EmuDM\_SetProperty "Win32 API reference" for Return value, Processing Description.**

Function name	Barcode		
Argument name	IN/OUT	Type	Description
i_fname	I	[MarshalAs(UnmanagedType.LPStr)]	Font name
i_bmp	IO	string	Device context handle
i_x	I	IntPtr	X
i_y	I	long	Y
i_width	I	long	Width
i_height	I	long	Height
i_dat	I	long	Barcode data
i_size	I	byte[]	Data size
		long	
Return value	int		
Processing Description			
Remark			

Please refer to EmuBarcode "Win32 API reference" for Return value, Processing Description.



## Event

Function name	StatusCallback		
Argument name	IN/OUT	Type	Description
i_status	I	long	Status
Return value	int		
Processing Description			
Remark			

Please refer to EiSetStatusBackFunction "Win32 API reference" for Return value, Processing Description.

Function name	StatusCallbackEx		
Argument name	IN/OUT	Type	Description
i_status	I	long	Status
i_port	I	string	Port Name
Return value	int		
Processing Description			
Remark			

Please refer to EiSetStatusBackFunctionEx "Win32 API reference" for Return value, Processing Description.

# Status List

Emu Status	Value
ESB_NO_RESPONSE	0x00000001 Printer no response
	0x00000000 Printer response
ESB_DRAWER_KICK	0x00000004 Drawer kick connector status of 3 <sup>rd</sup> pin ="H"
	0x00000000 Drawer kick connector status of 3 <sup>rd</sup> pin ="L"
ESB_OFF_LINE	0x00000008 Offline
	0x00000000 Online
ESB_COVER_OPEN	0x00000020 Cover open
	0x00000000 Cover close
ESB_AUTOCUTTER_ERR	0x00000800 Auto cutter error occurred
	0x00000000 Auto cutter error not occurred
ESB_AUTORECOVER_ERR	0x00004000 Auto recovery error occurred
	0x00000000 Auto recovery error not occurred
ESB_RECEIPT_NEAR_END	0x00020000 No paper at receipt near end detector
	0x00000000 Paper at receipt near end detector
ESB_RECEIPT_END	0x00080000 No paper at receipt end detector
	0x00000000 Paper at receipt end detector
ESB_SPOOLER_IS_STOPPED	0x80000000 Stop spooler
	0x00000000 -
ESB_NOW_PRINTING	0x00000080 Printing
	0x00000000 -