/**

PrinterControl DLL User Guide 2.0

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1. Development Environment

(1) Install the provided SDK by executing the"MF-2351_SDK.msi".
(2) Execute Microsoft VS2005.
(3) Select "MF-2351" as the target of your application.

2. Usage

(1) Library header
: "Printer_DLL.h" is the library header file.
(2) Print API
: Call the API functions provided by the printer library.

3. Execution

(1) Copy the provided Printer_DLL.dll and MF2351DLL.dll to the device. The location can be " \ Windows" directory or the same directory with the application which uses the library.
(2) Copy the application that uses the printer library to the device and execute it.

4. API Reference

[1] _DLL_EXPORT_ int WINAPI PRN_Open(void);

Description :

Turns on the printer and prepares it to print.

Return Values :

PRN_ERROR_NOFONTLIB: Failed to open
PRINTER_OK : Success.

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[2] _DLL_EXPORT_ int WINAPI PRN_Close(void);

Description :

Turns off the printer.

Return Values :

PRINTER_FAIL: Failed to close.
PRINTER_OK : Success.

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[3] (1) _DLL_EXPORT_ int WINAPI PRN_PrintText(TCHAR *pszData);
(2) _DLL_EXPORT_ int WINAPI PRN_PrintData(char *pchData);

Description :

Prints the data.

Return Values :

PRINTER_OK : Success.
PRN_ERROR_BUFFOVERFLOW : Failed to transfer data.

Parameter :

TCHAR* pszData: [in] Pointer to data to print out.
char * pszData: [in] Pointer to data to print out.

---

[4] _DLL_EXPORT_ int WINAPI PRN_FeedLine (int nNum);

Description :

Prints the data in the print buffer and feeds one line based on the current line spacing.

Return Values :

PRN_ERROR_FAULT: the printer has not been opened .

PRINTER_OK : Success

Parameter :

int nNum : [in] Number of lines to feed.

---

[5] _DLL_EXPORT_ int WINAPI PRN_SetFont(BYTE AsciiFontHeight, BYTE ExtendFontHeight, BYTE Zoom);

Description :

Sets the font and double height/width.

Return Values :

None.

Parameters :

BYTE AsciiFontHeight：[in] Set the height of Ascii characters

PRN_FONT_16

PRN_FONT_24

PRN_FONT_32

PRN_FONT_48

BYTE ExtendFontHeight：[in] Set the height of extend characters

PRN_FONT_16

PRN_FONT_24

PRN_FONT_32

PRN_FONT_48

BYTE Zoom：[in] Set double height or width

The combination of following:

PRN_ASCII_X_DOUBLE

PRN_ASCII_Y_DOUBLE

PRN_EXT_X_DOUBLE

PRN_EXT_Y_DOUBLE

Such as the parameters ‘Zoom ’can be set PRN_ASCII_Y_DOUBLE| PRN_EXT_Y_DOUBLE to set Ascii characters and extend characters double height.

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[6] _DLL_EXPORT_ int WINAPI PRN_GetFont (BYTE *AsciiFontHeight, BYTE *ExtendFontHeight, BYTE *Zoom);

Description :

Gets the font.

Return Values :

None.

Parameters :

BYTE *AsciiFontHeight：[out] Get the height of Ascii characters

PRN_FONT_16
PRN_FONT_24
PRN_FONT_32
PRN_FONT_48

BYTE *ExtendFontHeight：[out] Get the height of extend characters

PRN_FONT_16
PRN_FONT_24
PRN_FONT_32
PRN_FONT_48

BYTE Zoom：[out] Get double height or width

The combination of following:

PRN_ASCII_X_DOUBLE
PRN_ASCII_Y_DOUBLE
PRN_EXT_X_DOUBLE
PRN_EXT_Y_DOUBLE

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[7] _DLL_EXPORT_ int WINAPI PRN_SetInvert (int nInvert);

Description :

Turns white/black reverse printing mode on or off.

Return Values :

PRINTER_OK : Success

Orther value: Failed

Parameter :

int nInvert : [in]

0 : Off (default).

1 : On

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[8] _DLL_EXPORT_ int WINAPI PRN_GetInvert ();

Description :

Get status of white/black reverse printing mode on or off.

Return Values :

0 : Off

1 : On

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[9] _DLL_EXPORT_ int WINAPI PRN_SetFlip (int nFlip);

Description :

Turns upside-down printing mode on or off.

Return Values :

PRINTER_OK : Success

Orther value: Failed

Parameter :

int nFlip:[in]

0 : Off (default)

1 : On

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[10] _DLL_EXPORT_ int WINAPI PRN_SetRotate (int nRotate);

Description :

Turns 90 degree clockwise rotation mode on or off.

Return Values :

PRINTER_OK : Success.

Orther value: Failed

Parameter :

int nRotate : [in]

0 : Off (default)

1 : On

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[11] _DLL_EXPORT_ int WINAPI PRN_SetBold (BOOL isBold);

Description :

Turns emphasized mode on/off.

Return Values :

PRINTER_OK : Success.

Orther value: Failed

Parameter :

BOOL nBold : [in]

0 : Off (default).

1 : Set boldface font.

---

[12] _DLL_EXPORT_ int WINAPI PRN_SetAlign(int nMode);

Description :

Aligns all the data in one line to the specified position.

Return Values :

PRINTER_OK : Success.

Orther value: Failed

Parameter :

int nMode : [in]

0 : left justification (default).

1 : centering.

2 : right justification.

---

[13] _DLL_EXPORT_ int WINAPI PRN_GetAlign();

Description :

Get states of aligns.

Return Values :

0 : left justification (default).

1 : centering.

2 : right justification.

---

[14] _DLL_EXPORT_ void WINAPI PRN_SetSpace (int SpaceX, int SpaceY);

Description :

Set the word spacing and the line spacing.

Return Values :

No.

Parameter :

int SpaceX: [in] word spacing (0 ≤ SpaceX < 255).

int SpaceY: [in] line spacing (0 ≤ SpaceY< 255).

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[15]_DLL_EXPORT_ int WINAPI PRN_SetLeftMargin(int nVal);

Description :

Set the left Margin.

Return Values :

None

Parameters :

int nVal : [in] the value of the left Margin . 0 ≤nVal≤255

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[16]_DLL_EXPORT_ int WINAPI PRN_Image(TCHAR * pszFile);

Description :

Prints the bit image.

Return Values :

PRINTER_OK : Success

PRN_ERROR_BUFFOVERFLOW: Failed

Parameters :

TCHAR *pszFile : [in] name of the image file

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[17]_DLL_EXPORT_ void WINAPI PRN_SetGray(BYTE nLevel);

Description :

Set the gray of printer. Value 0~7, default 1.

Return Values :

No

Parameters :

BYTE nLevel : [in] value of gray

0~7

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[18]_DLL_EXPORT_ int WINAPI PRN_GetGray();

Description :

Get the gray of printer. Value 0~7.

Return Values :

Value of gray0~7

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[19]_DLL_EXPORT_ void PRN_SetSpeed(int iSpeed);

Description :

Set the printer speed. range 0~23, default 23

Return Values :

No

Parameters :

int iSpeed : [in] printer speed

0~23

---

[20]_DLL_EXPORT_ int WINAPI PRN_CheckStatus();

Description :

Check the printer status.

Return Values :

PRN_FONT_NORMAL: Normal working

PRN_ERROR_NOPAPER : No paper

---

[21] _DLL_EXPORT_ UINT WINAPI PRN_PrintAndWaitComplete (void);

Description :

Start printing and waiting for the completion.

Return Values :

PRINTER_OK : Success.

PRN_ERROR_NOPAPER : No paper.

---

[22] _DLL_EXPORT_ int WINAPI `PRN_SetBlackMark(int nMode, int nSize);`

Description :

Enable/Disable the function of Search Mark ,and set the scope of searching mark.

Return Values :

PRINTER_OK : Success.

Orther value : Failed.

Parameters :

int `nMode`: [in] 0 Disable 1 Enable

int `nSize`: [in] the scope of searching mark.(To inch unit)

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[23] _DLL_EXPORT_ int WINAPI `PRN_SearchMark(int nFeed);`

Description :

Find the black mark and move motor from black-mark end to `nFeed` step position.

The distance between them is `nFeed steps` .

Return Values :

PRINTER_OK : Success.

Orther value : Failed.

Parameters :

int `nFeed`: [in] indicates the total number of steps wants to move (To step unit).

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5. Program Flow Sheet:

(1)Print text

step1: Open the printer

PRN_Open() ;

step2: Set font and others setting information

PRN_SetFont(BYTE AsciiFontHeight, BYTE ExtendFontHeight, BYTE Zoom);

PRN_SetAlign(int nMode);

……

Step3: Print the text you want to print

PRN_PrintText(TCHAR *pszData);

Step4: Start printing and waiting for the completion

PRN_PrintAndWaitComplete ();

Step5: Close the printer

PRN_Close();

(4)**Print bit Image**

step1: Open the printer

PRN_Open()

step2: Load image file

PRN_Image(TCHAR * pszFile);

Step3: Start printing and waiting for the completion

PRN_PrintAndWaitComplete ();

Step4: Close the printer

PRN_Close();

6. Example for VS2005.

```
/************* Print Text**************/
Void CPRNTestProgramDlg::print_text()
{
    PRN_Open();

    PRN_SetFont(PRN_FONT_24, PRN_FONT_24, PRN_ASCII_Y_DOUBLE |
                PRN_EXT_Y_DOUBLE);
    PRN_PrintText(_T("abcdABCD1234KLLKD"));

    PRN_PrintAndWaitComplete ();

    PRN_Close();
```

```
}



/************* print bit image file***************/

    void CPRNTestProgramDlg::print_image()
    {
     PRN_Open();

     PRN_SetFont(PRN_FONT_24,  PRN_FONT_24,  PRN_ASCII_Y_DOUBLE  |
                       PRN_EXT_Y_DOUBLE);
     PRN_Image (_T("\\Windows\\Test_8bpp.bmp" ));

     PRN_PrintAndWaitComplete ();

     PRN_Close();
     }
```