

Printer interface specification

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1 Generality

- 1 PrinterLibs is JavaScript cross-platform SDK
- 2 PrinterLibs functions have the following category
 - A createWebSocketIO
Current JavaScript SDK only Support WebSocket Printer
 - B PAGE_XXX
Function start with PAGE, Encapsulate page mode command, it can control print to print by page mode.
 - ① PAGE_PageEnter
 - ② PAGE_SetPrintArea
 - ③ PAGE_DrawXXX
 - ④ PAGE_PagePrint
 - ⑤ PAGE_PageExitRemark:
②③can repeatedly call
Only the printer support page mode can use those functions.
 - C POS_XXX
Function start with POS, mainly encapsulate ESC/POS commands, can control printer to print.
 - ① Feed series function can control paper feeding
 - ② Setting series functions can set the printer format
 - ③ Printing series functions can print text, barcode, QR code, pictures
 - ④ Query series functions can check the status of printer.
 - ⑤ Other functions can control cash drawer, cutter, buzzer and so on.
 - D LABEL_XXX
Function start with POS, mainly encapsulate label commands, can control Label printer to print.
 - ① LABEL_PageBegin
 - ② LABEL_DrawXXX
 - ③ LABEL_PageEnd
 - ④ LABEL_PagePrint

3 History

Date	Change
20170830	1 Support WebSocket Printer 2 Support ESC/POS, LABEL, PAGE CMD

2 Function declaration

IO Function

createWebSocketIO

Syntax

```
function createWebSocketIO()
```

Parameters

Return value

Object for read write WebSocket

Remarks

```
io.open = function(address, port)
```

open port. address is printer name or ipaddress, port is websocket port.

```
io.close = function()
```

close port.

```
io.isOpened = function()
```

is opened

```
io.write = function(data)
```

write port

```
io.read = null
```

Page Function

PAGE_PageEnter

Choose page mode

Syntax

```
function PAGE_PageEnter(io)
```

Parameters

Return value

If the write command successfully, return TURE, or return false

Remarks

PAGE_PagePrint

Printing content at Page mode

Syntax

```
function PAGE_PagePrint(io)
```

Parameters

Return value

If the write command successfully, return TURE, or return false

Remarks

PAGE_PageExit

Exit page mode

Syntax

```
function PAGE_PageExit(io)
```

Parameters

Return value

If the write command successfully, return TURE, or return false

Remarks

PAGE_SetPrintArea

Setting printing area at page mode

Syntax

function PAGE_SetPrintArea(io, left, top, right, bottom, direction)

Parameters

left

x coordinate of left corner printing area

top

Y coordinate of top left corner printing area

right

X coordinate of bottom right corner

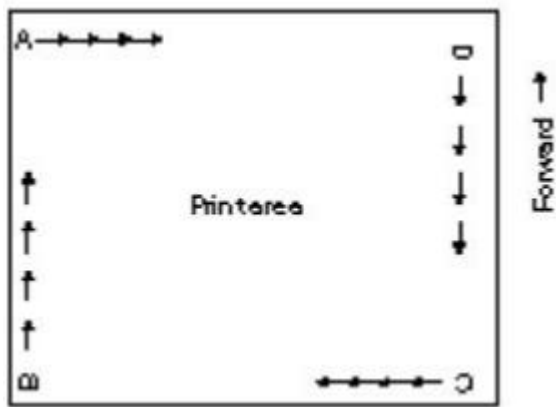
bottom

Y coordinate of bottom right corner

direction

Direction of printing area

direction	Printing direction	Starting position
0	from left to right	Top left corner(A in picture)
1	from bottom to top	Bottom left corner (B in picture)
2	from right to left	Bottom right corner (C in picture)
3	from top to bottom	Top right corner (D in picture)

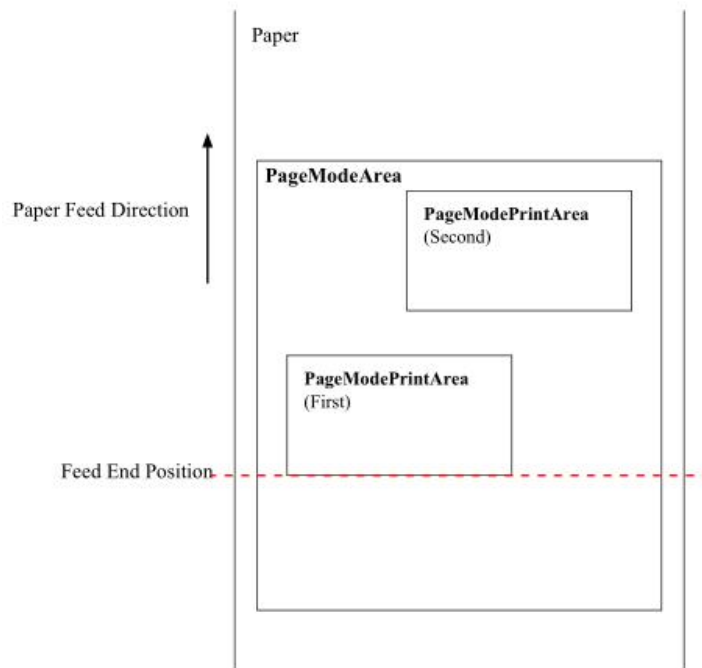


Return value

If the command was wrote successfully, return value true, or false

Remarks

Following picture show the concept of printing area



PAGE_DrawString

drawing the text

Syntax

function PAGE_DrawString(io, pszString, x, y, nWidthScale, nHeightScale, nFontType, nFontStyle)

Parameters

pszString

content need to print

x

specify number of dots from starting area of horizontal direction to left margin of printing area. (horizontal axis)

support left center right alignment

incoming x see table

x	implication
-1	Left alignment
-2	Center alignment
-3	Right alignment
Great than or equal to 0	Horizontal direction

y

specify number of dots from starting area of vertical direction to upper edge of printing area.(vertical direction)

nWidthScale

specified width magnification [0,7]

nHeightScale

specified height magnification [0,7]

nFontType

font type

0 standard font

1 compressed font

nFontStyle

specify font styles, can be one or more of following table,(add together)

Value	Meaning
-------	---------

0x00	normal
0x08	Bold
0x80	1 dot bold underline
0x100	2 dot bold underline
0x200	invert (only valid at the head of first line)
0x400	reverse (black and white)
0x1000	rotate each character 90 degrees clockwise

Return value

If the command was wrote successfully, return value true, or false

Remarks

Page mode Draw functions won' t print at once, just fill in the page, till call PAGE_PagePrint , it will print.

PAGE_DrawRect

draw rectangle

Syntax

```
function PAGE_DrawRect(io, x, y, nWidth, nHeight, nColor)
```

Parameters

x

specify number of dots from starting area of horizontal direction to left margin of printing area.(horizontal direction)

y

specify number of dots from starting area of vertical direction to upper edge of printing area.(vertical direction)

nWidth

specify the width of the rectangle

nHeight

specify the height of the rectangle

nColor

specify the color of the rectangle

0 white

1 black

Return value

If the command was wrote successfully, return value true, or false

Remarks

If want to draw lines, just need to set the width to 1, (if want to draw bolder line, set the number larger) will be OK.

Notes: please don't draw too large area rectangle, or the printer will reset as the power problem.

PAGE_DrawBarcode

Draw barcode

Syntax

```
function PAGE_DrawBarcode(io, pszContent, x, y, nBarcodeUnitWidth, nBarcodeHeight,  
nHriFontType, nHriFontPosition, nBarcodeType)
```

Parameters

pszContent

Barcode contents

x

It assigns the dots from the start point position to printing area margin in horizontal direction.(Horizontal coordinates)

y

It assigns the dots from start point position to printing area margin in vertical direction(vertical coordinates)

nBarcodeUnitWidth

It assigns the basic element width.

It can be any value(n) in the chart as below

n	Single basic module width(successive type)	Double basic module width(discrete type)	
		Narrow element width	Wide element width
2	0. 25mm	0. 25mm	0. 625mm
3	0. 375mm	0. 375mm	1. 0mm
4	0. 5mm	0. 5mm	1. 25mm
5	0. 625mm	0. 625mm	1. 625mm
6	0. 75mm	0. 75mm	1.875mm

nBarcodeHeight

Barcode height

nHriFontType

It assigns HRI (Human Readable Interpretation) character font types.

It can be any value (n) of the chart as below.

Value	Meaning
0x00	standard ASCII
0x01	compressed ASCII

nHriFontPosition

It assigns HRI (Human Readable Interpretation) character position

It can be any value (n) of the chart as below.

Value	Meaning
0x00	Doesn't print
0x01	Only print in upward side of barcode
0x02	Only print in downward side of barcode
0x03	Print both in upward side and downward

nBarcodeType

It can be any value as below chart

Value	Meaning
0x41	UPC-A
0x42	UPC-C
0x43	JAN13(EAN13)
0x44	JAN8(EAN8)
0x45	CODE39
0x46	ITF
0x47	CODEBAR
0x48	CODE93
0x49	CODE 128

Return value

If the command is written successfully, it returns true. Or it returns false.

Remarks

PAGE_DrawQRCode

Draw QR code

Syntax

```
function PAGE_DrawQRCode(io, pszContent, x, y, nQRCodeUnitWidth, nVersion, nEcLevel)
```

Parameters

pszContent

QR code text

x

It assigns the dots from the start point position to printing area margin in horizontal direction.(Horizontal coordinates)

y

It assigns the dots from start point position to printing area margin in vertical direction(vertical coordinates)

nQRCodeUnitWidth

QR code unit width, the range is [1,16].

QR code unit is wider, QR code is bigger.

nVersion

QR code version. 0 means to calculate version automatically.

QR code version is bigger, the edited characters are more, and the QR code is bigger.

nEcLevel

QR code error correction level.[1,4]

Return value

If the command is written successfully, it returns true. Or it returns false.

Remarks

PAGE_DrawImageRGBA

Draw BMP bitmap

Syntax

```
function PAGE_DrawImageRGBA(io, img, w, h, x, y, nBinaryAlgorithm)
```

Parameters

img

img data. RGBA format array.

w

The img width

h

The img height

x

It assigns the dots from the start point position to printing area margin in horizontal direction.(Horizontal coordinates)

It only supports left justifying, mediate, right justifying

Introduce x as below chart

x	implication
-1	Left alignment
-2	Center alignment
-3	Right alignment
Great than or equal to 0	Horizontal direction

y

It assigns the dots from start point position to printing area margin in vertical direction(vertical coordinates)

nBinaryAlgorithm

Binary algorithm

0 dither method

1 threshold method

Return value

If the command is written successfully, it returns true. Or it returns false.

Remarks

Pos Function

POS_TextOut

Print text

Syntax

```
function POS_TextOut(io, str, x, nWidthScale, nHeightScale, nFontType, nFontStyle)
```

Parameters

str

The printed contents. UNICODE coded string.

x

It assigns the dots from the start point position to printing area margin in horizontal direction.(Horizontal coordinates)

It supports left justifying, mediate, right justifying

Introduce x as below chart

x	implication
-1	Left alignment
-2	Center alignment
-3	Right alignment
Great than or equal to 0	Horizontal direction

nWidthScale

It assigns the width magnification times [0,7]

nHeightScale

It assigns the height magnification times [0,7]

nFontType

Font type

0 standard font

1 constringent font

nFontStyle

It assigns the font style, and can be any one or several meanings as below(add together)

Value	Meaning
-------	---------

0x00	Normal
0x08	Bold
0x80	1 dot bold underline
0x100	2 dots bold underline
0x200	Convert(only can be efficient in the start of the line)
0x400	Invert(Black in white)
0x1000	Every character rotates clockwise 90°

Return value

If the command is written successfully, it returns true. Or it returns false.

Remarks

POS_TextOut doesn't print immediately, and need to call POS_FeedXXX series function, and can print the contents in the buffer area.

POS_SetBarcode

Print barcode

Syntax

```
function POS_SetBarcode(io, str, x, nBarcodeUnitWidth, nBarcodeHeight, nHriFontType,  
nHriFontPosition, nBarcodeType)
```

Parameters

str

Barcode contents

x

It supports left justifying, mediate, right justifying

Introduce x as below chart

x	implication
-1	Left alignment
-2	Center alignment
-3	Right alignment

nBarcodeUnitWidth

It assigns the code basic element width.

It can be any value (n) of the chart as below.

n	Single basic module width(successive type)	Double basic module width(discrete type)	
		Narrow element width	Wide element width
2	0. 25mm	0. 25mm	0. 625mm
3	0. 375mm	0. 375mm	1. 0mm
4	0. 5mm	0. 5mm	1. 25mm
5	0. 625mm	0. 625mm	1. 625mm
6	0. 75mm	0. 75mm	1.875mm

nBarcodeHeight

Barcode height

nHriFontType

It assigns HRI (Human Readable Interpretation) character font types.

It can be any value (n) of the chart as below

Value	Meaning
0x00	standard ASCII
0x01	compressed ASCII

nHriFontPosition

It assigns HRI (Human Readable Interpretation) character position

It can be any value (n) of the chart as below.

Value	Meaning
0x00	Doesn't print
0x01	Only print in upward side of barcode
0x02	Only print in downward side of barcode
0x03	Print both in upward side and downward

nBarcodeType

It can be any value (n) of the chart as below.

Value	Meaning
0x41	UPC-A
0x42	UPC-C
0x43	JAN13(EAN13)
0x44	JAN8(EAN8)
0x45	CODE39
0x46	ITF
0x47	CODEBAR
0x48	CODE93
0x49	CODE 128

Return value

If the command is written successfully, it returns true. Or it returns false

Remarks

POS_PrintQRcode

Print QR code

Syntax

```
function POS_PrintQRcode(io, str, x, nUnitWidth, nVersion, nECCLevel)
```

Parameters

str

QR code text

x

It supports left justifying, mediate, right justifying

Introduce x as below chart

x	implication
-1	Left alignment
-2	Center alignment
-3	Right alignment

nQRCodeUnitWidth

QR code unit width, the range is [1,16]。

QR code unit width is wider, then QR code is bigger.

nVersion

QR code version. 0 means to calculate version automatically.

QR code version is bigger, the edited characters are more, and QR code is bigger.

nECCLevel

QR code error correcting level. [1,4]

Return value

If the command is written successfully, it returns true. Or it returns false.

Remarks

POS_PrintPicture

Print bitmap

Syntax

```
function POS_PrintImageRGBA(io, img, w, h, x, nBinaryAlgorithm)
```

Parameters

img

the bitmap img data RGBA format array

w

The img width

h

The img height

x

It supports left justifying, mediate, right justifying

Introduce x as below chart

x	implication
-1	Left alignment
-2	Center alignment
-3	Right alignment

nBinaryAlgorithm

Binary algorithm

0 dither method

1 threshold method

Return value

If the command is written successfully, it returns true. Or it returns false.

Remarks

POS_Reset

Reset printer will empty setting.

Syntax

```
function POS_Reset(io)
```

Parameters

Return value

If command is written successfully, it returns true. Or it returns false.

Remarks

POS_PrintSelfTestPage

Print self-test page

Syntax

```
function POS_PrintSelfTestPage(io)
```

Parameters

Return value

If the command is written successfully, it returns true. Or it returns false.

Remarks

POS_FeedAndCutPaper

Printer feeds paper [the distance from the printing position to cutter],then cut paper.

Syntax

```
function POS_FeedAndCutPaper(io)
```

Parameters

Return value

If command is written successfully, it returns true. Or it returns false.

Remarks

POS_FullCutPaper

Cut paper(full cut).

Syntax

```
function POS_FullCutPaper(io)
```

Parameters

Return value

If command is written successfully, it returns true. Or it returns false.

Remarks

POS_HalfCutPaper

Cut paper(half cut)

Syntax

```
function POS_HalfCutPaper(io)
```

Parameters

Return value

If command is written successfully, it returns true. Or it returns false.

Remarks

POS_Beep

Buzzer call

Syntax

```
function POS_Beep(io, nBeepCount, nBeepMillis)
```

Parameters

nBeepCount

Calling times

nBeepMillis

Calling time:100ms is the unit

Return value

If command is written successfully, it returns true. Or it returns false.

Remarks

POS_KickOutDrawer

Turn on cashbox

Syntax

```
function POS_KickDrawer(io, nDrawerIndex, nHightLevelTime, nLowLevelTime)
```

Parameters

nID

Cashbox serial no.

0 Cashbox pin 2

1 Cashbox pin 5

nHighLevelTime

Cashbox pulse high potential ms time

nLowLevelTime

Cashbox pulse low potential ms time

Return value

If command is written successfully, it returns true. Or it returns false.

Remarks

POS_FeedLine

Syntax

function POS_FeedLine(io)

Parameters

Return value

If command is written successfully, it returns true. Or it returns false.

Remarks

Printer feeds paper one line

POS_FeedLines

Syntax

```
function POS_FeedLines(io, lines)
```

Parameters

lines

Paper feed lines

Return value

If command is written successfully, it returns true. Or it returns false.

Remarks

Feed paper lines

POS_FeedDots

Syntax

```
function POS_FeedDots(io, dots)
```

Parameters

dots

Paper feed dots

Return value

If command is written successfully, it returns true. Or it returns false.

Remarks

Feed paper dots. Generally, 1mm has 8 dots.

POS_SetMotionUnit

Set horizontal and vertical movement unit

Syntax

```
function POS_SetMotionUnit(io, nHorizontalMU, nVerticalMU)
```

Parameters

nHorizontalMU

Horizontal movement unit

nVerticalMU

Vertical movement unit

Return value

If command is written successfully, it returns true. Or it returns false.

Remarks

When nHorizontalMU and nVerticalMU are both set as 200,1 point is 0.125mm

POS_SetLineHeight

Set line height

Syntax

```
function POS_SetLineHeight(io, nHeight)
```

Parameters

nHeight

Line height

Return value

If command is written successfully, it returns true. Or it returns false.

Remarks

POS_SetCharRightSpacing

Set character right space

Syntax

```
function POS_SetCharRightSpacing(io, nDistance)
```

Parameters

nDistance

Character right space

Return value

If command is written successfully, it returns true. Or it returns false.

Remarks

Label Function

LABEL_PageBegin

Description: assign the start of a Page, and set Page size, reference point coordinates and page rotating angle.

Parameters

Syntax

```
function LABEL_PageBegin(io, startx, starty, width, height, rotate)
```

Parameters

startx

page start point x coordinates

starty

page start point y coordinates

width

page width

startx + width range is [1,384]. The printer is 384 dots/line when editing SDK. Pls refer to printer specification if you are not sure the dots number per line. Normally there are three specification 384,576,832.

height

page height

starty + height range is [1,936]. The limited is 936 when editing SDK. But this value is not sure, which is about the printer resource. Even though, we don't suggest to set page width too wide. We suggest to set page width and height to be fit for label paper.

rotate

page rotating. The value range of rotate is {0,1}. Page doesn't rotate to print as 0, and rotate 90° to print as 1.

Return value

If command is written successfully, it returns true. Or it returns false.

Remarks

LABEL_PageEnd

Description: It is only the end of a Page

Syntax

```
function LABEL_PageEnd(io)
```

Parameters

Return value

If command is written successfully, it returns true. Or it returns false.

Remarks

LABEL_PagePrint

Description: print the Page contents to label paper

Syntax

```
function LABEL_PagePrint(io, num)
```

Parameters

num

printing times,1-255.

Return value

If command is written successfully, it returns true. Or it returns false.

Remarks

LABEL_PageFeed

Feed paper to gap

Syntax

```
function LABEL_PageFeed(io)
```

Parameters

Return value

If command is written successfully, it returns true. Or it returns false.

Remarks

LABEL_PageCalibrate

Calibrate Paper

Syntax

```
function LABEL_PageCalibrate(io)
```

Parameters

Return value

If command is written successfully, it returns true. Or it returns false.

Remarks

LABEL_DrawPlainText

Description: draw text in assigned position of Page.
only for single line

Syntax

function LABEL_DrawPlainText(io, startx, starty, font, style, str)

Parameters

startx

define text start position x coordinates,the value range is: [0, Page_Width-1]

starty

define text start position y coordinates,the value range is: [0, Page_Height-1]

font

Choose font, the efficient value range is {16, 24, 32, 48, 64, 80, 96},this printer only can use 24.

style

chracter style.

Databits	define
0 Bold flag bit:	font bold for 1,don' t bold if reset zero clearing.
1 underline flag bit:	underline text for 1, don' t underline if rest zero clearing
2 inverse flag bit:	inverse for 1(white in black), don' t inverse rest zero clearing
3 delete line flage bit:	for 1 text with delete line,don' t delete line if reset zero clearing.
[5,4] rotate flag bit:	00 rotates 0°
	01 rotates 90°
	10 rotates 180°
	11 rotates 270°
[11,8] font width magnification times;	
[15,12] font height magnification times;	

`str`

character set data flow

Return value

If command is written successfully, it returns true. Or it returns false.

Remarks

LABEL_DrawLine

Description: Draw a straightway in the assigned position of Page

Syntax

```
function LABEL_DrawLine(io, startx, starty, endx, endy, width, color)
```

Parameters

startx

straightway start point x coordinates,the value range is: [0, Page_Width-1]

starty

straightway start point y coordinates,the value range is: [0, Page_Height-1]

endx

straightway end point x coordinates,the value range is: [0, Page_Width-1]

endy

straightway end point y coordinates,the value range is: [0, Page_Height-1]

width

straightway width,the value range is: [1, Page_Height-1]

color

straightway color,
the value range is: {0, 1}.
When Color is 1, straightway is black.
When Color is 0, straightway is white.

Return value

If command is written successfully, it returns true. Or it returns false.

Remarks

LABEL_DrawBox

Description: draw assigned size rectangular frame in the fixed position of Page

Syntax

```
function LABEL_DrawBox(io, left, top, right, bottom, borderwidth, bordercolor)
```

Parameters

left

rectangular frame top left corner x coordinates, the value range is:
[0, Page_Width-1]

top

rectangular frame top left corner y coordinates, the value range is:
[0, Page_Height-1]

right

rectangular frame top right corner x coordinates, the value range is:
[0, Page_Width-1]

bottom

rectangular frame top right corner y coordinates, the value range is:
[0, Page_Height-1]

borderwidth

rectangular line width

bordercolor

rectangular line color,
range is {0, 1}.

When Color = 1 ,draw black rectangular ,
when Color = 0 ,draw white rectangular

Return value

If command is written successfully, it returns true. Or it returns false.

Remarks

LABEL_DrawRectangel

Description: draw rectangular frame in assigned position of Page

Syntax

```
function LABEL_DrawRectangel(io, left, top, right, bottom, color)
```

Parameters

left

rectangular block top left corner x coordinates, the value range is: [0, Page_Width-1]

top

rectangular block top left corner y coordinates, the value range is: [0, Page_Height-1]

right

rectangular block top right corner x coordinates, the value range is: [0, Page_Width-1]

bottom

rectangular block top right corner y coordinates, the value range is: [0, Page_Height-1]

color

rectangular block color,

the value range is: {0, 1}.

When color is 1, rectangular block is black.

When Color is 0, rectangular block is white.

Return value

If command is written successfully, it returns true. Or it returns false.

Remarks

LABEL_DrawBarcode

Description: Draw 1D code in the assigned position of Page

Syntax

```
function LABEL_DrawBarcode(io, startx, starty, type, height, unitwidth,  
rotate, str)
```

Parameters

startx

barcode top left corner x coordinates, the value range is: [0, Page_Width-1]

starty

barcode top left corner y coordinates, the value range is: [0, Page_Height-1]

type

indetify barcode type, the value range is: [0, 29]. Definitions are as below:

type	name	length	barcode value range (Dec.)
0	UPC-A	11	48-57
1	UPC-E	6	48-57
2	EAN13	12	48-57
3	EAN8	7	48-57
4	CODE39	1-	48-57, 65-90, 32, 36, 37, 43, 45, 46, 47
5	I25	1-even number	48-57
6	CODABAR	1-	48-57, 65-68, 36, 43, 45, 46, 47, 58
7	CODE93	1-255	0-127
8	CODE128	2-255	0-127
9	CODE11		
10	MSI		
11	128M		
12	EAN128		
13	25C		
14	39C		
15	39		
16	EAN13+2		
17	EAN13+5		

18	EAN8+2		
19	EAN8+5		
20	POST		
21	UPCA+2		
22	UPCA+5		
23	UPCE+2		
24	UPCE+5		
25	CPOST		
26	MSIC		
27	PLESSEY		
28	ITF14		
29	EAN14		

`height`

define barcode height

`unitwidth`

It assigns the basic element width.

It can be any value(n) in the chart as below

n	Single basic module width(succesive type)	Double basic module width(discrete type)	
		Narrow element width	Wide element width
2	0. 25mm	0. 25mm	0. 625mm
3	0. 375mm	0. 375mm	1. 0mm
4	0. 5mm	0. 5mm	1. 25mm
5	0. 625mm	0. 625mm	1. 625mm

`rotate`

Mean barcode rotating angle,

the value range is: [0, 3].

Definitions are as below:

Rotate value define

0 barcode doesn' t rotate to draw

1 barcode rotates 90° draw.

2 barcode rotates 180° draw.

3 barcode rotates 270° draw

`str`

Text character data flow

Return value

If command is written successfully, it returns true. Or it returns false.

Remarks

LABEL_DrawQRCode

Description: Draw QR code in assigned position of Page

Syntax

```
function LABEL_DrawQRCode(io, startx, starty, version, ecc, unitwidth,  
rotate, str)
```

Parameters

startx

QRCode code top left corner x coordinates, the value range is: [0, Page_Width-1]

starty

QRCode code top left corner y coordinates, the value range is: [0, Page_Height-1]

version

Assign charater version. The value range is:[0,20]. When version is 0, printer caculates version number according to character set automatically.

ecc

Assign error correction level.

The value range is: [1, 4].

Definitios are as below:

ECC error correction level

1 L: 7%, low error correction, much data.

2 M: 15%, medium error correction

3 Q: optimize error correction

4 H: 30%, the highest error correction, less data.

unitwidth

QRCode code block, the value range Is:[1, 4]. Definitions are the same parameter as UniWidth of 1D code command.

rotate

QRCode code rotating angle, the value range is: [0, 3]. Definitions are the smae paramter as Rotate of 1D code command.

str

QRCode test character data flow

Return value

If command is written successfully, it returns true. Or it returns false.

Remarks

LABEL_DrawPDF417

Description: draw PDF417 code in the assigned position of Page

Syntax

```
function LABEL_DrawPDF417(io, startx, starty, colnum, lwratio, ecc,  
unitwidth, rotate, str)
```

Parameters

startx

PDF417 code top left corner x coordinates, the value range is: [0, Page_Width-1]

starty

PDF417 code top left corner y coordinates, the value range is: [0, Page_Height-1]

colnum

ColNum is colnum, which means how many digits in per line. A digit is 17*UnitWidth dots. Line number is produces automatically by printer, the limited range is 3~90. ColNum value range:[1,30].

lwratio

width height ratio. The value range: [3,5]

ecc

Error correction level, the value range is: [0. 8]

Ecc value error correction number stored files number(byte)

0 2 1108

1 4 1106

2 8 1101

3 16 1092

4 32 1072

5 64 1024

6 128 957

7 256 804

8 512 496

unitwidth

PDF417 code block, the value range is: [1, 3]. Definitions are the same parameter as UniWidth of 1D code.

`rotate`

PDF417 code rotating angle, the value range is: [0, 3]. Definitions are the parameter as Rotate of 1D code

`str`

PDF417 text character data flow.

Return value

If command is written successfully, it returns true. Or it returns false.

Remarks

LABEL_DrawImageRGBA

Description: Draw picture in the assigned position of Page

Syntax

```
function LABEL_DrawImageRGBA(io, startx, starty, width, height, style,  
img, nBinaryAlgorithm)
```

Parameters

startx

Bitmap top left corner x coordinates, the value range is: [0, Page_Width]

starty

Bitmap top left corner y coordinates, the value range is: [0, Page_Height]

width

Bitmap pixel width

height

Bitmap pixel height

style

Bitmap print special effects, and definitions are as below:

bit	definition
0	inverse flag bit, inverse 1 bitmap to print, and rest to print
[2:1]	rotates flag bit 00 Rotate 0° 01 rotates 90° 10 rotates 180° 11 rotates 270°
[7:3]	reserved
[11:8]	Bitmap width magnification times.
[15:12]	bitmap height magnification times

img

Bitmap dot matrix data RGBA Format ARRAY

nBinaryAlgorithm

Two-valued conversion method

```
0 uses shake method, which has good efficiency to colorful pictures.  
1 uses average threshold value method, which has good efficiency to  
text pictures.
```

Return value

If command is written successfully, it returns true. Or it returns false.

Remarks