The DLL for printer with EZPL command

ez2000.dll is the dynamic linked library for Windows 95,98, NT,ME,2000 and XP. This DLL uses Dlportio from Scientific Software Tools, Inc to access io port. The port95nt.exe should be run first to install this driver, then you can call ez2000.dll, else ".dll not found" error message will show up.

Ez98.dll is the same DLL specially designed for Windows 95/98. This dll has better performance compared with ez2000.dll. And it does not require port95nt.exe. i.e. you can call ez98.dll directly without Dlportio.

I. DLL Function list

Command	Description
1. setup	Set label size, darkness and speed of printer.
2. setbaudrate	Set the baud rate of host.
3. SetTimeOutTicks	Set the TimeOut value.
4. openport	Open serial or printer port.
5. closeport	Close the opened port.
6. sendcommand	Send EZPL command.
7. isready	Check the ready status of printer.
8. intloadimage	Download image(binary image of PCX or BMP) to internal memory of printer.
9. extloadimage	Download image (binary image of PCX or BMP) to external memory of printer.
10. ecTextOut	Printing the TrueType fonts directly.
11. ecTextOutR	Printing the TrueType fonts with orientation settings.
12. ecTextDownLoad	Download the TrueType fonts with orientation settings as a bitmap to be recalled by Y command.
13. putimage	Printing multi-tone image (format BMP and JPG) with orientation settings. Halftone will be applied to the image.
14. downloadimage	Download multi-tone image (format BMP and JPG) with orientation settings as a bitmap to be recalled by Y command. Halftone will be applied to the image.
15. SelectUsbPrinter	Set the USB ID of connecting USB Printer.
16. SelectUsbPortNumber	Set the communication port of connecting USB Printer.
17. readusb	Retrieve data from USB port.

II. DLL Function Description

1. setup

Description	setup parameters of printer
Command	setup(a,b,c,d,e,f)

Input parameters	a : (integer) label size setting (in mm)
	b : (integer) darkness (0~19)
	c : (integer) printing speed (1~3)
	d : (integer) label mode
	    0 : label with gap
	    1 : plain paper
	    2 : black mark label
	e : (integer) label gap (in mm)
	f : (integer) black top for black mark label

2. setbaudrate

Description	Set the baud rate of host
Command	setbaudrate(n)
Input parameters	n : (integer) the value of baud rate from for example 4800, 9600, 19200, 38400.

3. SetTimeOutTicks

Description	Set the TimeOut value.
Command	SetTimeOutTicks(time)
Input parameters	time : (integer) value of TimeOut (in ms)

4. openport

Description	select the output port
Command	openport(n)

Input parameters	n : (string) output port ref.
	    n = 0 → LPT1
	    n = 1 → COM1
	    n = 2 → COM2
	    n = 3 → COM3
	    n = 4 → COM4
	    n = 5 → LPT2
	    n = 6 → USB

5. closeport

Description	close output ports
Command	closeport()
Input parameters	none

6. sendcommand

Description	send EZPL command to printer
Command	sendcommand(command)
Input parameters	Command : (string) any EZPL command

7. isready

Description	check the ready status of printer
Command	isready()
Input parameters	none
Return value	1 = (integer) if printer is ready to receive data
	0 = (integer) if printer is not ready to receive data

8. intloadimage

Description	send EZPL command to printer
Command	intloadimage(filename, ID_name,image_type)
Input parameters	filename : (string) the file name of the image file
	ID_name : (string) the name to stand for the image file to be recalled by Y command.
	image_type : (string) image file type
	pcx : for .pcx image file
	bmp : for .bmp image file

9. extloadimage

Description	down load the image file to printer's external memory
Command	extloadimage(filename, image_name,image_type)
Input parameters	filename : (string) the file name of the image file
	ID_name : (string) the name to stand for the image file to be recalled by Y command.
	image_type : (string) image file type
	pcx : for .pcx image file
	bmp : for .bmp image file

10. ecTextOut

Description	printing the TrueType fonts of WINDOWS
Command	ecTextOut(x,y,b,c,d,e,f)
Input parameters	x : (integer) left-upper Hori. pos. (dots)
	y : (integer) left-upper Vert. pos. (dots)
	b : (integer) height of the text
	c : (string) name of the fonts
	d : (string) data string
Return value	1 = (integer) OK
	0 = (integer) FAIL

11. ecTextOutR

Description	printing the TrueType fonts of WINDOWS with orientation settings
Command	ecTextOut(x,y,b,c,d,e,f,g)
Input parameters	x : (integer) left-upper Hori. pos. (dots) y : (integer) left-upper Vert. pos. (dots) b : (integer) height of the text c : (string) name of the fonts d : (string) data string e : (integer) width of the text f : (integer) Specifies the weight of the font in the range 0 through 100. For example, 40 is normal and 70 is bold. g : (integer) set the rotation of the output text. 0 for degree 0, 90 for degree90, 180 for degree 180 and 270 for degree 270
Return value	1 = (integer) OK 0 = (integer) FAIL

12. ecTextDownLoad

Description	Download the TrueType fonts with orientation settings as a bitmap to be recalled by ^Y command
Command	ecTextOut(b,c,d,e,f,g,name)
Input parameters	b : (integer) height of the text c : (string) name of the fonts d: (string) data string e : (integer) width of the text f : (integer) Specifies the weight of the font in the range 0 through 100. For example, 40 is normal and 70 is bold. g : (integer) set the rotation of the output text. 0 for degree 0, 90 for degree90, 180 for degree 180 and 270 for degree 270 name : (string)ID name of the downloaded font to be recalled by Y command.
Return value	1 = (integer) OK 0 = (integer) FAIL

13. putimage

Description	Printing multi-tone image (format BMP and JPG) directly. Halftone will be applied to the image.
Command	putimage(x,y,filename, degree)

Input parameters	x : (integer) left-upper Hori. pos. (dots).
	y : (integer) left-upper Vert. pos. (dots).
	filename : (string) the file name of the image support BMP and JPG file type.
	degree : (integer)
	   0 : no rotation
	   90 : rotate 90 degree

Return value	1 = (integer) OK 0 = (integer) FAIL

14. downloadimage

Description	Download multi-tone image (format BMP and JPG) with orientation settings as a bitmap to be recalled by ^Y command. Halftone will be applied to the image.
Command	downloadimage (filename, degree,name)
Input parameters	filename : (string) the file name of the image support BMP and JPG file type. degree : (integer) 　　0 : no rotation 　　90 : rotate 90 degree name : (string) ID name to stand for the downloaded image file to be recalled by Y command.
Return value	1 = (integer) OK 0 = (integer) FAIL

15. SelectUsbPrinter

Description	Set the USB ID of USB Printer that you want to connect.
Command	SelectUsbPrinter(ID)
Input parameters	ID : (string) the USB ID of USB Printer, it should be 8 characters.

16. SelectUsbPortNumber

Description	Set the communication port of connecting USB Printer.
Command	SelectUsbPortNumber(portnumber)
Input parameters	portnumber : (integer) the number of USB port, it should be 0~127.

17. readusb

Description	Retrieve data from USB port.
Command	readusb(buff,length)
Input parameters	buff : (string) set the address that will be used to store received data. length : (integer) set the data size of received data in byte.

III. Example

A. For connection of USB printer

```
SelectUsbPrinter("01234587");
SelectUsbPortNumber(2);

SetTimeOutTicks(1000);
openport(6);

sendcommand("~B");
Sleep(200);
readusb(buff,&length);
buff[length] = '\0';

closeport();
```

B. FoxPro 5.0 for Windows 95

```
* PROGRAM FILE NAME :EZTT.PRG

path="C:\EZ2\WIN95\ez2000.DLL"
declare mb[10]
value=0

i=0
j=0
for i=1 to 10
mb[i]=0
next

SET LIBRARY TO c:\vfp\foxtools.fll     ADDITIVE

mb [1]= RegFn32("openport","C","",path)
mb [2] = RegFn32("setup","IIIIII","",path)
mb [3] = RegFn32("closeport","","",path)
mb [4] = RegFn32("sendcommand","C","",path)
mb [5] = RegFn32("intloadimage","CCC","",path)
mb [6] = RegFn32("extloadimage","CCC","",path)
mb [7] = RegFn32("isready","","I",path)

for   j=1 to 7

    if mb[j]= -1
        RELEASE LIBRARY C:\vfp\FoxTools.FLL
        WAIT WINDOW "FAILURE!!" NOWAIT
        RETURN
    endif
next

value = CallFn(mb[7])

if value=1
    = CallFn(mb[1],"0")
    = CallFn(mb[2],75,5,2,0,3,0)
    = CallFn(mb[4],"^P2")
    = CallFn(mb[5],"aeer.pcx","aeer","pcx")
    = CallFn(mb[4],"^L")
    = CallFn(mb[4],"BA,40,40,2,4,25,0,1,12345")
    = CallFn(mb[4],"Y40,100,aeer")
    = CallFn(mb[4],"E")

else
    wait windows "PRINTER ERROR" nowait
endif

RELEASE LIBRARY C:\vfp\FoxTools.FLL
```

C. Visual Basic 5.0 for Windows 98

```
Private Declare Sub setup Lib "Ez98.dll" (ByVal a%, ByVal b%, ByVal c%, ByVal
d%, ByVal e%, ByVal f%)
Private Declare Sub openport Lib "Ez98.dll" (ByVal command$)
Private Declare Sub sendcommand Lib "Ez98.dl" (ByVal command$)
Private Declare Sub intloadimage Lib "Ez98.dl" (ByVal filename$, ByVal
image_name$, ByVal image_type$)
Private Declare Sub extloadimage Lib "Ez98.dl l" (ByVal filename$, ByVal
image_name$, ByVal image_type$)
Private Declare Sub ecTextOut Lib "Ez98.dl" (ByVal x%, ByVal y%, ByVal b%,
ByVal c$, ByVal d$)
Private Declare Sub closeport Lib "Ez98.dl" ()
Private Sub command1_Click()
Call openport("0")
Call setup(30, 7, 2, 1, 0, 0)
Call sendcommand("^W70")
Call sendcommand("^P1")
Call sendcommand("^L")
Call sendcommand("AC,20,60,1,1,1,0,TEST")
Call ecTextOut(20, 10, 34, "Arial", "Win Font") Call sendcommand("E")
Call closeport
End Sub
```