

Barcode VCL Component

Manual



Version 1.7.4

Dec 17, 2003

Copyright© Han-soft software, All rights reserved.

Contents

Overview.....	3
Features.....	4
Installation.....	5
Registering and Prices.....	7
About us.....	8
Type Define.....	9
Properties.....	10
Methods.....	11
Events.....	16

Overview

Barcode VCL Component Include **TBarcode** and **TDBBarcode**. It create barcodes for your applications as easy as typing the code. Simply enter the desired characters and select the type. The barcode will be created!

Developers use Barcode like any other VCL component. Extend your applications with barcode technology with this effective and powerful component.

Barcode supports popular barcodes including Code 39, Code 39 Extended, Code 128, EAN 128, EAN-13, EAN-8, Code 25 Industrial, Code 25 Interleaved, Code 25 matrix, Codabar, UPC-A, UPC-E, UPC+2, UPC+5, Code 93, Code 93 Extended, MSI and Postnet.

Features

- All windows fonts can be used for the optional text, it's Fore- and background colors can be changed free.
- Fore- and background colors of barcode can be changed free.
- Visual in design time.
- Scaleable and rotatable barcodes and option text.
- All popular barcode types are supported.
- Verification digits are automatically calculated and added for most barcodes.
- Allows Draw the barcode to a canvas (with Scaleable and rotatable).
- Allows print the barcode to paper (with Scaleable and rotatable).
- Very popular barcode component software.

Installation

Installation (source included)

■ Delphi 5.x - 7.x

- Uninstall previous or evaluation version of Barcode from Delphi IDE. Remove or copy to other directory files of old version to prevent crossing old and new version of Barcode (Including BarcodeDx.bpl, BarcodeDx.dcp files).
- Create directory from which you will install Barcode library ('Barcode directory') (for example, C:\Delphi[X]\Barcode).
- Copy files from the Barcode archive to 'Barcode directory'.
- Use "File\Open..." menu item of Delphi IDE to open the package BarcodeDx.dpk, In "Package..." window click "Compile" button to compile the package and then click "Install" button to register Barcode components on the component palette.
- Add, (if needed) 'Barcode directory' in Tools->Environment Options->Library-> Library Path.
- Barcode components have to appear on 'Han-soft' page of components palette.

■ C++Builder 5.x - 6.x

- Uninstall previous or evaluation version of Barcode from C++Builder IDE. Remove or copy to other directory files of old version to prevent crossing old and new version of Barcode (Including BarcodeBx.bpl, BarcodeBx.tds files in C++Builder<Install Directory>\Projects\Bpl, and BarcodeBx.lib, BarcodeBx.bpi in C++Builder<Install Directory>\Projects\Lib).
- Create directory from which you will install Barcode library ('Barcode directory') (for example, C:\CBuilder[X]\Barcode).
- Copy files from the Barcode archive to 'Barcode directory'.
- Use "File\Open..." menu item of C++Builder IDE to open the package BarcodeBx.bpk, In "Package..." window click "Compile" button to compile the package.
- Add, (if needed) 'Barcode directory' in Tools->Environment Options->Library-> Library Path.
- Barcode components have to appear on 'Han-soft' page of components palette.

Installation (trial or without source)

■ Delphi 5.x - 7.x

- Uninstall previous or evaluation version of Barcode from Delphi IDE. Remove or copy to other directory files of old version to prevent crossing old and new version of Barcode (Including BarcodeDx.bpl, BarcodeDx.dcp files).
- Create directory from which you will install Barcode library ('Barcode directory') (for example, C:\Delphi[X]\Barcode).
- Copy files from the Barcode archive to 'Barcode directory'.

- Open "Component\Install packages..." menu item of Delphi IDE, then click "Add" Button to add BarcodeDx.bpl in 'Barcode directory'.
- Add, (if needed) 'Barcode directory' in Tools->Environment Options->Library-> Library Path.
- Barcode components have to appear on 'Han-soft' page of components palette.

■ C++Builder 5.x - 6.x

- Uninstall previous or evaluation version of Barcode from C++Builder IDE. Remove or copy to other directory files of old version to prevent crossing old and new version of Barcode (Including BarcodeBx.bpl, BarcodeBx.tds files in C++Builder<Install Directory>\Projects\Bpl, and BarcodeBx.lib, BarcodeBx.bpi in C++Builder<Install Directory>\Projects\Lib).
- Create directory from which you will install Barcode library ('Barcode directory') (for example, C:\CBuilder[X]\Barcode).
- Copy files from the Barcode archive to 'Barcode directory'.
- Open "Component\Install packages..." menu item of C++Builder IDE, then click "Add" Button to add BarcodeBx.bpl in 'Barcode directory'.
- Add, (if needed) 'Barcode directory' in Tools->Environment Options->Library-> Library Path.
- Copy 'BarcodeBx.bpl' and 'BarcodeBx.tds' to C++Builder <Install directory>\Projects\Bpl.
- Copy 'BarcodeBx.bpi' and 'BarcodeBx.lib' to C++Builder <Install directory>\Projects\Lib.
- Barcode components have to appear on 'Han-soft' page of components palette.

Registering and Prices

The Barcode is a Shareware product. If you find it useful and want to receive the latest versions please register your evaluation copy.

Barcode - without source: \$79

Barcode - source included: \$189

Barcode – site license: \$369

You can read detail information about registration at <http://www.han-soft.com/purc.php>

After registration you will receive (e-mail only) address of registered version for downloading and password for unpacking.

By registering the components you get the following advantages:

1. You will be notified about new versions of the library.
2. You will receive new versions of Barcode FREE till version 3.0.
3. You encourage the author do make the components even better.

About us

Contact us if you have any questions, comments or suggestions:

Programmer : Han-soft software

Home page : <http://www.han-soft.com/>

E-mail : support@han-soft.com

Type Define

TUnits =

(utMillimeter,utInch);

TOrientation =

(toLeftRight, toRightLeft, toTopBottom, toBottomTop);

TChecksum =

(csNone, csModulo10);

TTextShow =

(tsNone, tsBarCode, tsBarType, tsBoth);

TTextPosition =

(tpTopLeft, tpTopRight, tpTopCenter, tpBottomLeft, tpBottomRight, tpBottomCenter);

TBarType =

(bcCode_2_5_interleaved,
bcCode_2_5_industrial,
bcCode_2_5_matrix,
bcCode39,
bcCode39Extended,
bcCode128A,
bcCode128B,
bcCode128C,
bcCode93,
bcCode93Extended,
bcCodeMSI,
bcCodePostNet,
bcCodeCodabar,
bcCodeEAN8,
bcCodeEAN13,
bcCodeUPC_A,
bcCodeUPC_E0,
bcCodeUPC_E1,
bcCodeUPC_Supp2,
bcCodeUPC_Supp5,
bcCodeEAN128A,
bcCodeEAN128B,
bcCodeEAN128C);

Properties

Property	Type	Descriptions
BarType	TBarType	Contains the type of the barcode(bcCode39, bcCode39Extended, bcCode128A, bcCode128B,etc, See also the Type Define)
BarCode	string	Contains the barcode number (or text), general without check digit
BarHeight	Integer	Height of Barcode in Pixels
ColorBar	TColor	Sets the foreground color of the barcode. Black is default
ColorSpc	TColor	Sets the background color of the barcode. White is default
HMargin	Integer	Left and right margin when auto width
Checksum	TChecksum	Enable or disable checksum auto-calculation and Algorithms of checksum (csNone, csModulo10)
Modul	Integer	Width of the smallest line in the barcode.
Ratio	Double	Ratio between a wide and a narrow line in a barcode. Normal Values are from 2.0 to 3.0 .
Alignment	TAlignment	Controls the horizontal placement of the barcode within the barcode component(taLeftJustify,taRightJustify,taCenter)
AutWidth	Boolean	Auto adjust component width by barcode width and HMargin (pixels)
Orientation	TOrientation	Orientation of barcode(toLeftRight, toRightLeft, toTopBottom, toBottomTop)
TextShow	TTextShow	Content of barcode line text to display (tsNone, tsBarCode, tsBarType, tsBoth)
TextColor	TColor	Background color of text line
TextPosition	TTextPosition	Position of text line(tpTopLeft, tpTopRight, tpTopCenter, tpBottomLeft, tpBottomRight, tpBottomCenter)
Font	TFont	You can specify the font by name, color, style, effects and the size for the text line
BarTypeName	string	Name of barcode type (read only)
BarWidth	Integer	Width of barcode in pixels (read only)
DataSource	TDataSource	Link the DBBarcode control to a dataset in which the data can be found(Only TDBBarcode)
DataField	String	Use DataField to bind the DBBarcode control to a field in the dataset(Only TDBBarcode)
ReadOnly	Boolean	Set ReadOnly to true to prevent the user from changing the contents of the database field(Only TDBBarcode)
Field	TField	Read Field to get direct access to the contents and properties of the database field without going through the DBBarcode control's Barcode property(Only TDBBarcode)
Color	TColor	See also the help of TPanel in Delphi/C++Builder help.
Align	TAlign	
Anchors	TAnchors	
BevelInner	TPanelBevel	
BevelOuter	TPanelBevel	
BevelWidth	Integer	
BorderStyle	TBorderStyle	
BorderWidth	TBorderWidth	
Ctl3D	Boolean	
Constraints	TConstraints	
Enabled	Boolean	
Left	Integer	
Height	Integer	
Top	Integer	
Visual	Boolean	
Other properties		See the also help of TPanel in Delphi/C++Builder help.

Methods

Assign		The Assign method copies all properties from a barcode component to another
Parameters	Source: TPersistent	Source barcode component

Paint		The Paint method is called automatically when a barcode needs update its display area
--------------	--	---

AutoSetWidth		Auto adjust component width by barcode width and HMargin (pixels)
Parameters	H_Margin: Integer	Left and right margin between barcode and component border (pixels)
Return	Integer	Component width after autowidth (pixels)

Draw		Draw the current barcode to a canvas (with rotate angle)
Parameters	DCanvas:TCanvas	Canvas for draw
	const DLeft:Integer	Left margin with Canvas (pixels)
	const DTop:Integer	Top margin with Canvas (pixels)
	const DHeight:Integer	Height of barcode (pixels)
	const DAngle:Double	Angle of left rotate (degree)

Draw		Draw the current barcode to a canvas (current orientation)
Parameters	DCanvas:TCanvas	Canvas for draw
	const DLeft:Integer	Left margin with Canvas (pixels)
	const DTop:Integer	Top margin with Canvas (pixels)
	const DHeight:Integer	Height of barcode (pixels)

GetBarWidth		Get current barcode width
Return	Integer	Barcode width (pixels)

GetBarHeight		Get current barcode height
Return	Integer	Barcode height (pixels)

GetCanvasHeight		Get canvas height of current barcode (with rotate angle)
Parameters	const DHeight:Integer	Height of barcode (pixels)
	const DAngle:Double	Angle of left rotate (degree)
	Integer	Canvas height of current barcode with rotate angle (pixels)

GetCanvasHeight		Get canvas height of current barcode (current orientation)
Parameters	const DHeight:Integer	Height of barcode (pixels)
Return	Integer	Canvas height of current barcode

GetCanvasWidth		Get canvas width of current barcode (with rotate angle)
Parameters	const DHeight:Integer	Height of barcode (pixels)
	const DAngle:Double	Angle of left rotate (degree)
Return	Integer	Canvas width of current barcode with rotate angle (pixels)

GetCanvasWidth		Get canvas width of current barcode (current orientation)
Parameters	const DHeight:Integer	Height of barcode (pixels)
Return	Integer	Canvas width of current barcode (pixels)

Print *		Print current barcode (with rotate angle)
Parameters	const DUnit:TUnits	Unit of length and width(utMillimeter,utInch)
	const DLeft:Double	Left margin with paper (mm/inch)
	const DTop:Double	Top margin with paper (mm/inch)
	const DHeight:Double	Barcode height (mm/inch)
	const DModul:Double	Width of thin bar (mm/inch)
	const DAngle:Double	Angle of left rotate (degree)

Print *		Print current barcode (current orientation)
Parameters	const DUnit:TUnits	Unit of length and width(utMillimeter,utInch)
	const DLeft:Double	Left margin with paper (mm/inch)
	const DTop:Double	Top margin with paper (mm/inch)
	const DHeight:Double	Barcode height (mm/inch)
	const DModul:Double	Width of thin bar (mm/inch)

GetPrnBarWidth		Get barcode width to print
Parameters	const DUnit:TUnits	Unit of length and width(utMillimeter,utInch)
	const DModul:Double	Width of thin bar (mm/inch)
Return	Double	Print barcode width (mm/inch)

GetPrnCanvasHeight		Get canvas height of current barcode (with rotate angle)
Parameters	const DUnit:TUnits	Unit of length and width(utMillimeter,utInch)
	const DHeight:Double	Barcode height (mm/inch)
	const DModul:Double	Width of thin bar (mm/inch)
	const DAngle:Double	Angle of left rotate (degree)
Return	Double	Canvas height of current barcode to print (mm/inch)

GetPrnCanvasWidth		Get canvas width of current barcode (with rotate angle)
Parameters	const DUnit:TUnits	Unit of length and width(utMillimeter,utInch)
	const DHeight:Double	Barcode height (mm/inch)
	const DModul:Double	Width of thin bar (mm/inch)
	const DAngle:Double	Angle of left rotate (degree)
Return	Double	Canvas width of current barcode to print (mm/inch)

GetPrnCanvasHeight		Get canvas height of current barcode (current orientation)
Parameters	const DUnit:TUnits	Unit of length and width(utMillimeter,utInch)
	const DHeight:Double	Barcode height (mm/inch)
	const DModul:Double	Width of thin bar (mm/inch)
Return	Double	Canvas height of current barcode to print (mm/inch)

GetPrnCanvasWidth		Get canvas width of current barcode (current orientation)
Parameters	const DUnit:TUnits	Unit of length and width(utMillimeter,utInch)
	const DHeight:Double	Barcode height (mm/inch)
	const DModul:Double	Width of thin bar (mm/inch)
Return	Double	Canvas width of current barcode to print (mm/inch)

H_DrawBar		Draw a barcode on canvas
Parameters	H_Canvas:TCanvas	Canvas
	const H_BarType:TBarType	Barcode type(bcCode39, bcCode39Extended, bcCode128A, bcCode128B,etc, See also the Type Define)
	const H_BarCode:string	Barcode value
	const H_Modul:Integer	Width of thin bar (pixels)
	const H_Ratio:Double	Ratio of thick and thin bar
	const H_CheckSum:TCheckSum	Algorithms of checksum(csNone, csModulo10)
	const H_Left:Integer	Left margin with form (pixels)
	const H_Top:Integer	Top margin with form (pixels)
	const H_Height:Integer	Barcode height (pixels)
	const H_TextFont:TFont	Font of barcode text to display
	const H_TextShow:TTextShow	Content of barcode text to display(tsNone, tsBarCode, tsBarType, tsBoth)
	const H_TextPosition:TTextPosition	Position of barcode text(tpTopLeft, tpTopRight, tpTopCenter, tpBottomLeft, tpBottomRight, tpBottomCenter)
	const H_BarColor:TColor;	Color of bar
	const H_SpcColor:TColor;	Background Color of barcode
	const H_BackColor:TColor;	Background Color of barcode text
	const H_Angle:Double	Angle of left rotate (degree)

H_GetBarWidth		Get barcode width to display (pixels)
Parameters	const BW_BarType:TBarType	Barcode type(bcCode39, bcCode39Extended, bcCode128A, bcCode128B,etc, See also the Type Define)
	const BW_BarCode:string	Barcode value
	const BW_Modul:Integer	Width of thin bar (pixels)
	const BW_Ratio:Double	Ratio of thick and thin bar
	const BW_CheckSum:TCheckSum	Algorithms of checksum(csNone, csModulo10)
Return	Integer	Barcode width (pixels)

H_GetCanvasWidth		Get canvas width to display (pixels)
Parameters	const CW_BarType:TBarType	Barcode type(bcCode39, bcCode39Extended, bcCode128A, bcCode128B,etc, See also the Type Define)
	const CW_BarCode:string	Barcode value
	const CW_Modul:Integer	Width of thin bar (pixels)
	const CW_Ratio:Double	Ratio of thick and thin bar
	const CW_CheckSum:TCheckSum	Algorithms of checksum(csNone, csModulo10)
	const CW_Height:Integer	Barcode height (pixels)
	const CW_Angle:Double	Angle of left rotate (degree)
Return	Integer	Canvas width to display (pixels)

H_GetCanvasHeight		Get canvas width to display (pixels)
Parameters	const CH_BarType:TBarType	Barcode type(bcCode39, bcCode39Extended, bcCode128A, bcCode128B,etc, See also the Type Define)
	const CH_BarCode:string	Barcode value
	const CH_Modul:Integer	Width of thin bar (pixels)
	const CH_Ratio:Double	Ratio of thick and thin bar
	const CH_CheckSum:TCheckSum	Algorithms of checksum(csNone, csModulo10)
	const CH_Height:Integer	Barcode height (pixels)
	const CH_Angle:Double	Angle of left rotate (degree)
Return	Integer	Canvas width to display (pixels)

H_PrintBar *		Print barcode
Parameters	const H_Unit:TUnits	Unit of width and Height (utMillimeter,utInch)
	const H_BarType:TBarType	Barcode type(bcCode39, bcCode39Extended, bcCode128A, bcCode128B,etc, See also the Type Define)
	const H_BarCode:string	Barcode value
	const H_Modul:Double	Width of thin bar (mm/inch)
	const H_Ratio:Double	Ratio of thick and thin bar
	const H_CheckSum:TCheckSum	Algorithms of checksum(csNone, csModulo10)
	const H_Left:Double	Left margin with form (mm/inch)
	const H_Top:Double	Top margin with form (mm/inch)
	const H_Height:Double	Barcode height (mm/inch)
	const H_TextFont:TFont	Font of barcode text to display
	const H_TextShow:TTextShow	Content of barcode text to display(tsNone, tsBarCode, tsBarType, tsBoth)
	const H_TextPosition:TTextPosition	Position of barcode text(tpTopLeft, tpTopRight, tpTopCenter, tpBottomLeft, tpBottomRight, tpBottomCenter)
	const H_BarColor:TColor;	Color of bar
	const H_SpcColor:TColor;	Background Color of barcode
	const H_BackColor:TColor;	Background Color of barcode text
	const H_Angle:Double	Angle of left rotate (degree)

H_GetPrnBarWidth		Get barcode width to print (mm/inch)
Parameters	const BW_Unit:TUnits	Unit of width and Height(utMillimeter,utInch)
	const BW_BarType:TBarType	Barcode type(bcCode39, bcCode39Extended, bcCode128A, bcCode128B,etc, See also the Type Define)
	const BW_BarCode:string	Barcode value
	const BW_Modul:Double	Width of thin bar (mm/inch)
	const BW_Ratio:Double	Ratio of thick and thin bar
	const BW_CheckSum:TCheckSum	Algorithms of checksum(csNone, csModulo10)
Return	Double	barcode width (mm/inch)

H_PrnCanvasWidth		Get canvas width to print (mm/inch)
Parameters	const CW_Unit:TUnits	Unit of width and Height(utMillimeter,utInch)
	const CW_BarType:TBarType	Barcode type(bcCode39, bcCode39Extended, bcCode128A, bcCode128B,etc, See also the Type Define)
	const CW_BarCode:string	Barcode value
	const CW_Modul:Double	Width of thin bar (mm/inch)
	const CW_Ratio:Double	Ratio of thick and thin bar
	Const CW_CheckSum: TCheckSum	Algorithms of checksum(csNone, csModulo10)
	const CW_Height:Double	Barcode height (mm/inch)
	const CW_Angle:Double	Angle of left rotate (degree)
Return	Double	canvas width (mm/inch)

H_PrnCanvasHeight		Get canvas height to print (mm/inch)
Parameters	const CH_Unit:TUnits	Unit of width and Height(utMillimeter,utInch)
	const CH_BarType: TBarType	Barcode type(bcCode39, bcCode39Extended, bcCode128A, bcCode128B,etc, See also the Type Define)
	const CH_BarCode:string	Barcode value
	const CH_Modul:Double	Width of thin bar (mm/inch)
	const CH_Ratio:Double	Ratio of thick and thin bar
	const CH_CheckSum: TCheckSum	Algorithms of checksum(csNone, csModulo10)
	const CH_Height:Double	Barcode height (mm/inch)
	const CH_Angle:Double	Angle of left rotate (degree)
Return	Double	canvas height (mm/inch)

H_GetBarTypeName		Get barcode type name
Parameters	BN_BarType:TBarType	Barcode type e
Return	string	Barcode type name

* **Note:** Please use the **H_PrintBar** and **Print** methods between printer.BeginDoc and printer.EndDoc.

Events

Events	Descriptions
OnChange	Occurs when the barcode, bartype, etc. for the BarCode control may have changed.
Other Events	See also the help of TPanel in Delphi/C++Builder Help.