BizCode Barcode Generator for WinForms

User Manual

Version 3.0.1.0

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Contents

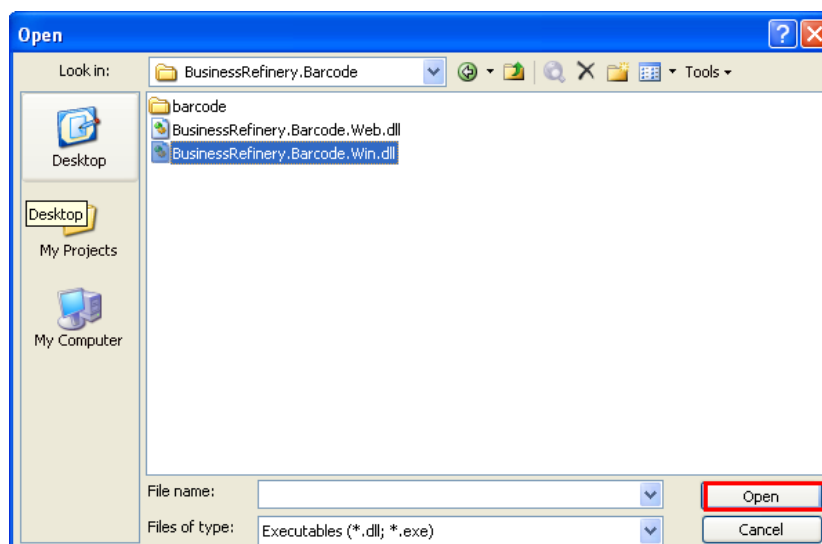**BizCode Barcode Generator for .NET WinForms User Manual**

BizCode Barcode Generator provides **two methods** to create barcodes in .NET Windows Forms application:

Method 1: Drag-and-Drop: You can drag the barcode generator control from VS toolbox and drop to the Form to create a barcode, and customize barcode properties through code-behind window or the property window;

Method 2: WinForms Class: You can add the barcode generator control to VS reference, and create barcodes in Visual C#/ VB.NET class libraries;

Method 1: How to Generate Barcodes in .NET WinForms through Control Drag and Drop

1. Open your Microsoft Visual Studio and create an empty C# .NET WinForms;

2. Extract the package of BizCode Generator for Winforms;

3. Add the **BusinessRefinery.Barcode.Win.dll** to your Toolbox:

   - Right click Visual Studio Toolbox, select "Choose Items...";
   - In "Choose Toolbox Items" form, click button "Browse...", and select "**BusinessRefinery.Barcode.Win.dll**";

- After selection, you will find six items under "Components" section: WinDataMatrix, WinLinear, WinMicroPDF417, WinPDF417, WinMicroQRCode and WinQRCode;

- Click "OK" and the six components are added to your Visual Studio Toolbox;
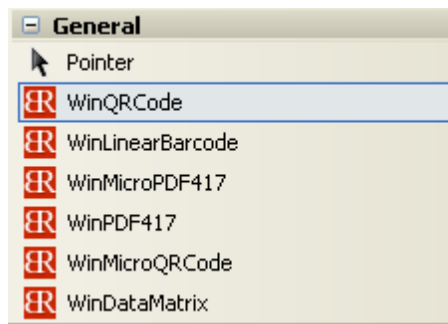
4. Now drag the WinLinearBarcode to the "Form1"window. You will find the default Code128 barcode is shown.

5. Select the barcode and right-click the properties to customize it.
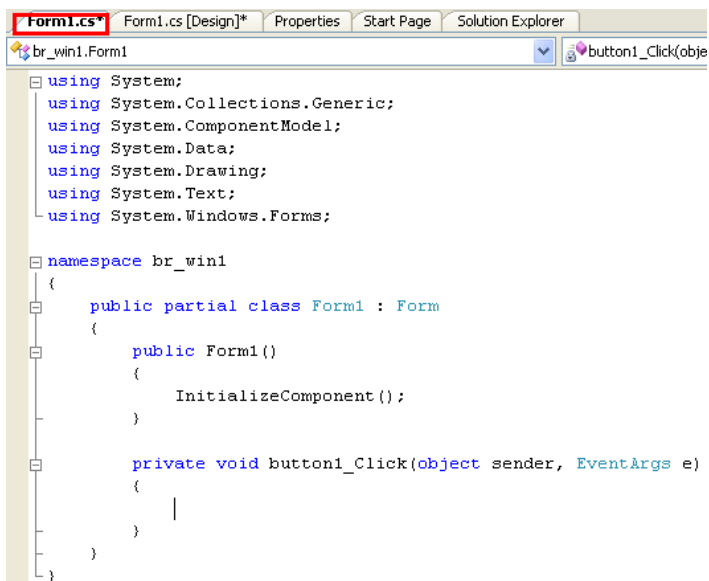
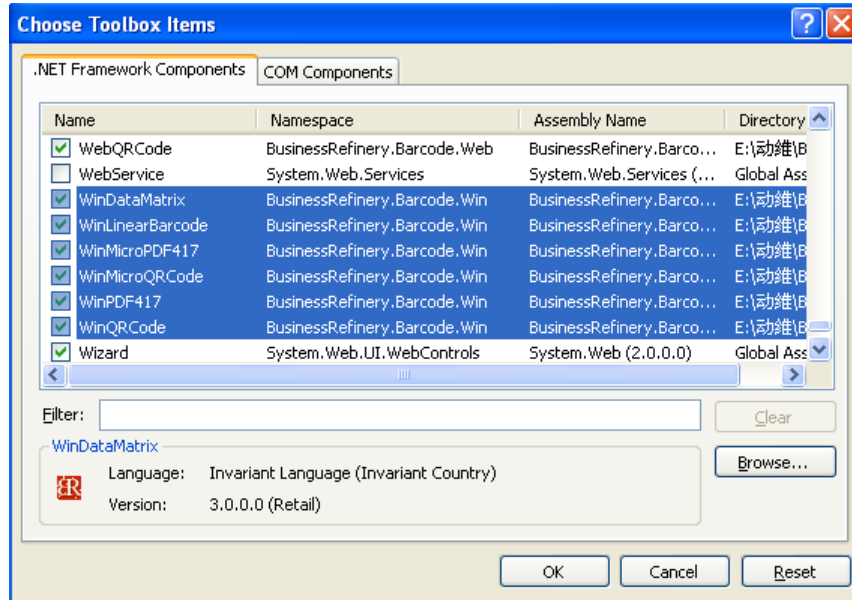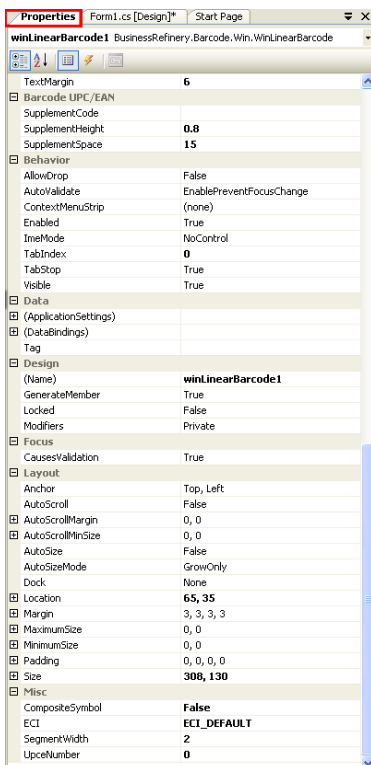**Method 2: How to Generate Barcodes in .NET WinForms Class**

1. Open your Microsoft Visual Studio and create an empty C# .NET WinForms;

2. Extract the package of BizCode Generator for Winforms;

3. Drag and drop the "button" in Common Controls of toolbox to the "Form1" window;

4. Double-click the "button" to generate barcodes in "Form1.cs".

5. Add BusinessRefinery.Barcode.Win.dll to reference;

- Right click in Solution Explorer, click "Add Reference..."
- "Browse" to select "BusinessRefinery.Barcode.Win.dll"
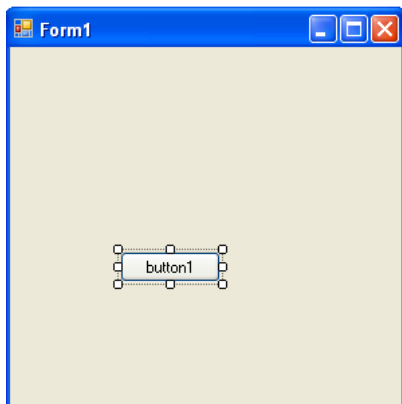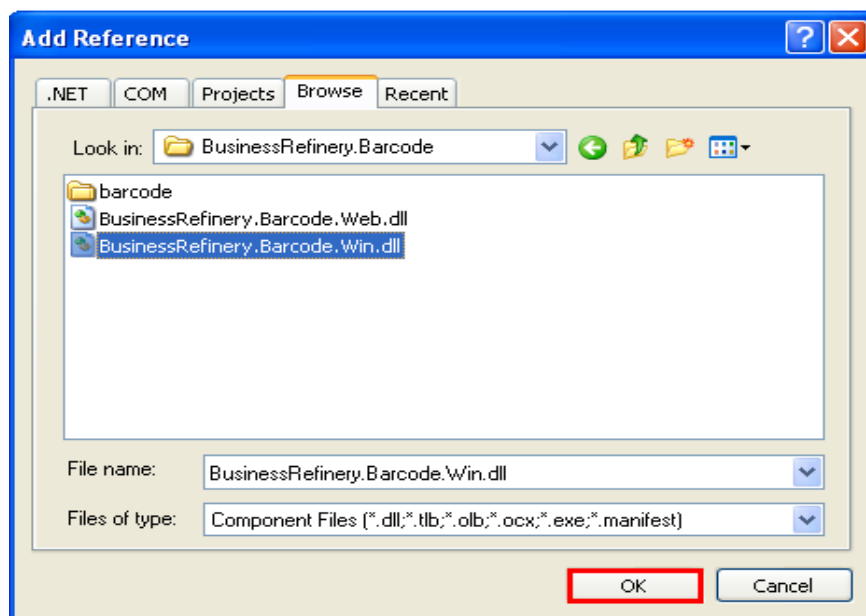

6. Now you can start generating barcodes and adjusting properties with the sample codes below:

```csharp
using System;

using System.Collections.Generic;

using System.ComponentModel;

using System.Data;

using System.Drawing;

using System.Text;

using System.Windows.Forms;

using System.Drawing.Imaging;

using BusinessRefinery.Barcode;


namespace br_win1

{

    public partial class Form1 : Form

    {
```

```csharp
public Form1()
{
    InitializeComponent();
}

private void button1_Click(object sender, EventArgs e)
{
    Linear barcode = new Linear();
    barcode.Symbology = Symbology.CODE39;
    barcode.Code = "1234567";
    barcode.DisplayStartStopChar = true;
    barcode.Resolution = 104;
    barcode.Rotate = Rotate.Rotate0;
    barcode.Format = ImageFormat.Gif;
    barcode.drawBarcode2ImageFile("c:/code-39-csharp.gif")
}
}
}
```

Debug and click the "button1" and here is the generated barcode image in the hard drive C with adjusted value from the sample code above!

1234567S

Some More Information Here:

- [Online Introduction for .NET WinForms Barcode Generator](#)

- [Online Guide for .NET WinForms Barcode Generator](#)

- Online **Visual C# Samples** for .NET WinForms Barcode Generation

- Online **VB.NET Samples** for .NET WinForms Barcode Generation

- Online **Purchase** .NET WinForms Barcode Generator

If you have any more questions, feel free to contact support@businessrefinery.com!

Annex 1 - Linear Barcode Parameters for .NET Window Forms

Parameters	Default	Description
Barcode Basic		
Symbology	Code128	The linear barcodes symbology type
Format	Png	Barcode image encoding type
Code	"1234"	Barcode value encoded
AddChecksum	True	Addchecksum is optional for Code39, Interleaved 2 of 5, MSI Plessey.
Barcode Size		
BarcodeUnit	PIXEL	Unit of measure for all size related settings in the library. Valid values: • UnitOfMeasure.PIXEL • UnitOfMeasure.CM • UnitOfMeasure.INCH
Height	0	Adjust generated barcode image height
Width	0	Adjust generated barcode image width
BarHeight	60	Set bar module height
BarWidth	3	Set bar module width
LeftMargin	0	Set left margin for the generated barcode image
RightMargin	0	Set right margin for the generated barcode image
TopMargin	0	Set top margin for the generated barcode image
BottomMargin	0	Set bottom margin for the generated barcode image
Rotate	Rotate0	Set barcode image angle. Valid Valules:

		• Rotate.Rotate0 • Rotate.Rotate90 • Rotate.Rotate180 • Rotate.Rotate270
Barcode Text		
DisplayChecksum-Digit	True	Display the last checksum digit in the barcode data text if true
DisplayText	True	Display human-readable text below the generated barcode image if true
TextFont	Arial,11pt	Customize the human-readable text below the barcode image
TextMargin	6	Adjust margin between barcode image and the data text below
Barcode Codabar		
CodabarStartChar	0	Select Codabar start character. Valid Value: A, B, C, D
CodabarStopChar	0	Select Codabar stop character. Valid Value: A, B, C, D
Barcode Code128		
FNC1Mode	FNC1_NONE	Encode GS1 compatible barcode if it is in the first position of FNC1 mode. Valid values: • FNC1_NONE; • FNC1_1ST_POS; • FNC1_2ND_POS;
ProcessTilde	False	Set the ProcessTilde property to true, if you want use the tilde character "~" to specify special characters in the input data. • 1-byte character: ~0dd/~1dd/~2dd (character value from 000 ~ 255); ASCII character '~' is presented by ~126 Strings from "~256" to "~299" are unused • 2-byte character (Unicode): ~6ddddd (character value from 00000 ~ 65535) Strings from "~665536" to "~699999" are

		unused
Barcode Code39		
BarRatio	2	Wide/narrow ratio, 2.0 - 3.0 inclusive, default is 2.
DisplayStartStopChar	True	If true, display a * at the beginning and end of barcode text.
I	1	The space between 2 symbol characters in code 39. This a multiple of X.
Barcode ITF14		
BearerBarStyle	Frame	Set ITF-14 bearer bar style: Frame or Horizontal
BearerBarWidth	2	Set ITF-14 bearer bar size (width).
Barcode EAN/UPC		
SupplementCode	"None"	Set supplement bar code data text
SupplementHeight	0.8	Set supplement bar module height
SupplementSpace	15	Set space between primary and supplement bar code

Annex 2 - Data Matrix Parameters for .NET Window Forms

Parameters	Default	Description
Barcode Basic		
Code	DataMatrix	Input the encoding data for Data Matrix
DataMode	ASCII	Data Matrix data encoding mode. Valid values : • **Auto**: Barcode library will decide the best data mode for you • **ASCII**: encode data that mainly contains ASCII characters (0-127). This is the default encoding format by this library. • **C40** : encode data that mainly contains numeric and upper case characters. • **Text**: encode data that mainly contains numeric and lower case characters. • **X12**: encode the standard ANSI X12 electronic data interchange characters. • **Edifact**: encode 63 ASCII values (values from 32 to 94) plus an Unlatch character (binary 011111). • **Base256**: encode 8 bit values.
FNC1Mode	FNC1_NONE	Encode GS1 compatible Data Matrix barcode if it is in the first position of FNC1 mode. Valid values: • FNC1_NONE; • FNC1_1ST_POS; • FNC1_2ND_POS;
Format	Png	Barcode image encoding type
FormatMode	Format_10*10	Specifies the Data Matrix Format to use on that symbology. Valid values: DataMatrixFormatMode.Format_*X*;
ProcessTilde	False	Encode special character for Data Matrix using "~" if set to true. * 1-byte character: ~0dd/~1dd/~2dd (character value from

		000 ~ 255); ASCII character '~' is presented by ~126. Strings from "~256" to "~299" are unused
		* 2-byte character (Unicode): ~6ddddd (character value from 00000 ~ 65535) Strings from "~665536" to "~699999" are unused
		* For GS1 AI Code: o ~ai2: AI with 2 digits ~ai3: AI with 3 digits o ~ai4: AI with 4 digits ~ai5: AI with 5 digits o ~ai6: AI with 6 digits ~ai7: AI with 7 digits
		* ECI: ~7dddddd (valid value of dddddd from 000000 to 999999)
		* ~rp: Reader Programming (for ASCII mode and Auto mode only) This should be located at the beginning of the encoding data, e.g. data = "~rpABCD1234".
		* ~m5: 05 Macro (for ASCII mode and Auto mode only) This should be located at the beginning of the encoding data, e.g. data = "~m5ABCD1234".
		* ~m6: 06 Macro (for ASCII mode and Auto mode only) This should be located at the beginning of the encoding data, e.g. data = "~m6ABCD1234".
StructureAppend	False	Set true to enable Data Matrix structure append
Barcode Size		
BarcodeUinit	PIXEL	Unit of meature for all size related settings in the library. Valid values: • UnitOfMeasure.PIXEL • UnitOfMeasure.CM • UnitOfMeasure.INCH
LeftMargin	0	Set left margin for the generated barcode image
RightMargin	0	Set right margin for the generated barcode image
TopMargin	0	Set top margin for the generated barcode image
BottomMargin	0	Set bottom margin for the generated barcode image
Rotate	Rotate0	Set barcode image angle. Valid Valules: • Rotate.Rotate0

		• Rotate.Rotate90 • Rotate.Rotate180 • Rotate.Rotate270
ModuleSize	3	Set bar module size
Resolution	72	Control generated barcode image resolution in DPI.

Annex 3 - QR Code Parameters for .NET Window Forms

Parameters	Default	Description
Barcode Basic		
Code	QRcode	Input the encoding data for QRcode
DataMode	Auto	QRcode data encoding mode. Valid values: Auto: It allows encoding all 256 possible 8-bit byte values. This includes all ASCII characters value from 0 to 127 inclusive and provides for international character set support; AlphaNumeric: It allows encoding alphanumeric data (digits 0 - 9; upper case letters A -Z; nine other characters: space, $ % * + - . / :). Byte: It allows encoding byte data (default: ISO/IEC 8859-1). Numeric: It allows encoding numeric data (digits 0 - 9). Kanji: It allows encoding Kanji characters.
FNC1Mode	FNC1_NONE	Encode GS1 compatible Data Matrix barcode if it is in the first position of FNC1 mode. Valid values: • FNC1_NONE; • FNC1_1ST_POS; • FNC1_2ND_POS;
Format	Png	Barcode image encoding type
ProcessTilde	True	Set the ProcessTilde property to true, if you want use the tilde character "~" to specify special characters in

		the input data. Default is true.

		1-byte character: ~0dd/~1dd/~2dd (character value from 000 ~ 255); ASCII character '~' is presented by ~126
		Strings from "~256" to "~299" are unused 2-byte character (Unicode): ~6ddddd (character value from 00000 ~ 65535)
		Strings from "~665536" to "~699999" are unused - for GS1 AI Code:
		
		    ~ai2: AI with 2 digits
		    ~ai3: AI with 3 digits
		    ~ai4: AI with 4 digits
		    ~ai5: AI with 5 digits
		    ~ai6: AI with 6 digits
		    ~ai7: AI with 7 digits - ECI: ~7dddddd (valid value of dddddd from 000000 to 999999) - SJIS: from ~9ddddd (Shift JIS 0x8140 ~ 0x9FFC and 0xE040 ~ 0xEBBF)

StructureAppend	False	Set true to enable Data Matrix structure append
SymbolCount	0	Set the number of total symbols which make the QR Code sequence
SymbolIndex	0	Specify the position of current symbol in the QR Code sequence
Version	V1	There are 40 versions for QR Code with sizes from 21*21 to 177*177, increasing in steps of 4 modules each side per version. Valid values are from V1 to V40.
ECI	3	Set QR Code Extended Channel Interpretation Valid values: 000000 - 999999
ECL	L	QRCode Error Correction Level. Default is QRCodeECL.L. - QRCodeECL.L - QRCodeECL.M - QRCodeECL.Q - QRCodeECL.H

		Depending on the Error Correction Level, the decoded errors can not only be detected, but be corrected.
Parity	0	
Barcode Size		
BarcodeUnit	PIXEL	Unit of meature for all size related settings in the library. Valid values: • UnitOfMeasure.PIXEL • UnitOfMeasure.CM • UnitOfMeasure.INCH
LeftMargin	0	Set left margin for the generated barcode image
RightMargin	0	Set right margin for the generated barcode image
TopMargin	0	Set top margin for the generated barcode image
BottomMargin	0	Set bottom margin for the generated barcode image
Rotate	Rotate0	Set barcode image angle. Valid Valules: • Rotate.Rotate0 • Rotate.Rotate90 • Rotate.Rotate180 • Rotate.Rotate270
ModuleSize	3	Set bar module size
Resolution	72	Control generated barcode image resolution in DPI.

Annex 4 - PDF-417 Parameters for .NET Window Forms

Parameters	Default	Description
Barcode Basic		
Code	Pdf-417	Input the encoding data for PDF417
DataMode	Text	PDF417 data encoding mode. valid values: • PDF417DataMode.Auto • PDF417DataMode.Text • PDF417DataMode.Byte • PDF417DataMode.Numeric • PDF417DataMode.Customer
ColumnCount	4	Set number of columns in the PDF-417 barcode image. Valid from 1-30
RowCount	8	Set number of rows in the PDF-417 barcode image. Valid from 3-90
Format	Png	Barcode image encoding type
ECL	Level_2	PDF417 Error Correction Level. The error correction levels range from 0 to 8. This error correction allows the symbol to endure some damage without causing loss of data.
Truncated	False	If true, the rightmost side of PDF417 will be omitted or truncated. The truncated PDF417 is more area efficient than the normal one.
Barcode Size		
BarcodeUnit	PIXEL	Unit of measure for all size related settings in the library. Valid values: • UnitOfMeasure.PIXEL • UnitOfMeasure.CM

		• UnitOfMeasure.INCH
LeftMargin	0	Set left margin for the generated barcode image
RightMargin	0	Set right margin for the generated barcode image
TopMargin	0	Set top margin for the generated barcode image
BottomMargin	0	Set bottom margin for the generated barcode image

Rotate	Rotate0	Set barcode image angle.
		
		Valid Valules:
		
		   • Rotate.Rotate0
		   • Rotate.Rotate90
		   • Rotate.Rotate180
		   • Rotate.Rotate270

BarRatio	0.333333	ratio between bar width and bar height