

# How to batch read barcodes to CSV in ASP.NET MVC C# and ByteScout BarCode Reader SDK

## Tutorial on how to batch read barcodes to CSV in ASP.NET MVC C#

On this page you will learn from code samples for programming in ASP.NET MVC C#. Writing of the code to batch read barcodes to CSV in ASP.NET MVC C# can be done by developers of any level using ByteScout BarCode Reader SDK. ByteScout BarCode Reader SDK: the SDK for barcode decoding. Can read all popular types from Code 128, GS1, UPC and Code 39 to QR Code, Datamatrix, PDF417. Images, pdf, TIF images and live web camera are supported as input. Designed to handle documents with noise and defects. Includes optional splitter and merger for pdf and tiff based on barcodes. Batch mode is optimized for high performance with multiple threads. Decoded values can be exported to XML, JSON, CSV or into custom data format. It can batch read barcodes to CSV in ASP.NET MVC C#.

ASP.NET MVC C# code samples for ASP.NET MVC C# developers help to speed up coding of your application when using ByteScout BarCode Reader SDK. In order to implement the functionality, you should copy and paste this code for ASP.NET MVC C# below into your code editor with your app, compile and run your application. Use of ByteScout BarCode Reader SDK in ASP.NET MVC C# is also explained in the documentation included along with the product.

Trial version of ByteScout BarCode Reader SDK can be downloaded for free from our website. It also includes source code samples for ASP.NET MVC C# and other programming languages.

Default.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Default.aspx.cs" Inherits="I
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title>Scan Image/PDF files for barcode and generate CSV</title>
</head>
<body>
  <form id="form1" runat="server">

    <label>
      This project demonstrates scanning of folder, and processing each image/PDF
      It'll then generates CSV file containing barcodes and downloads it.
    </label>
  <br />
  <br />
</div>
```

```

        <asp:Button ID="btnImagePDFBarcodeToCSV" Text="Scan for Barcode and Generat
        <br />
        <br />
        <asp:Label ID="lblInfo" runat="server" Text=""></asp:Label>
    </div>
</form>
</body>
</html>

```

Default.aspx.cs

```

using Bytescout.BarCodeReader;
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace ImagePDFBarcodeToCSV
{
    public partial class Default : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void btnImagePDFBarcodeToCSV_Click(object sender, EventArgs e)
        {
            //Read Barcode Process
            Reader reader = new Reader();
            reader.RegistrationKey = "demo";
            reader.RegistrationName = "demo";

            // Set Barcode type to find
            reader.BarcodeTypesToFind.All = true;

            // Output list
            List<CSVOutputFormat> lstCSVOutput = new List<CSVOutputFormat>();

            // Get all files in folder, and iterate through each file
            var files = System.IO.Directory.GetFiles(Request.MapPath("~/BarcodeFiles"));
            foreach (var fileName in files)
            {
                // Read barcodes
                FoundBarcode[] barcodes = reader.ReadFrom(fileName);

                foreach (FoundBarcode code in barcodes)
                {

```

```

        lstCSVOutput.Add(new CSVOutputFormat { barcodeValue = code.Value, barcodeType = code.Type, scanDateTime = code.ScanDateTime, fileName = code.FileName });
    }

    // Set info text
    lblInfo.Text = string.Format("Total {0} barcode found in {1} file.", lstCSVOutput.Count, lstCSVOutput[0].fileName);

    // Export to CSV
    ExportToCsv(lstCSVOutput, Response);
}

/// <summary>
/// Exports to CSV
/// </summary>
/// <param name="lstCSVOutput"></param>
private static void ExportToCsv(List<CSVOutputFormat> lstCSVOutput, HttpResponse response)
{
    System.Text.StringBuilder csvOutputContent = new System.Text.StringBuilder();

    csvOutputContent.Append("Barcode Value,Barcode Type,Scan DateTime,File Name");

    foreach (var item in lstCSVOutput)
    {
        csvOutputContent.AppendFormat("\r\n{0},{1},{2},{3}", item.barcodeValue, item.barcodeType, item.scanDateTime, item.fileName);
    }

    // Perform download of file
    response.Clear();
    response.ClearHeaders();

    response.AppendHeader("Content-Length", csvOutputContent.Length.ToString());
    response.ContentType = "text/csv";
    response.AppendHeader("Content-Disposition", "attachment;filename=\"output.csv\"");

    response.Write(csvOutputContent.ToString());
    response.End();
}
}

class CSVOutputFormat
{
    public string barcodeValue { get; set; }
    public string barcodeType { get; set; }
    public string scanDateTime { get; set; }
    public string fileName { get; set; }
}
}
}

```

```

//-----
// <auto-generated>
//     This code was generated by a tool.
//
//     Changes to this file may cause incorrect behavior and will be lost if
//     the code is regenerated.
// </auto-generated>
//-----

namespace ImagePDFBarcodeToCSV {

    public partial class Default {

        /// <summary>
        /// form1 control.
        /// </summary>
        /// <remarks>
        /// Auto-generated field.
        /// To modify move field declaration from designer file to code-behind file.
        /// </remarks>
        protected global::System.Web.UI.HtmlControls.HtmlForm form1;

        /// <summary>
        /// btnImagePDFBarcodeToCSV control.
        /// </summary>
        /// <remarks>
        /// Auto-generated field.
        /// To modify move field declaration from designer file to code-behind file.
        /// </remarks>
        protected global::System.Web.UI.WebControls.Button btnImagePDFBarcodeToCSV;

        /// <summary>
        /// lblInfo control.
        /// </summary>
        /// <remarks>
        /// Auto-generated field.
        /// To modify move field declaration from designer file to code-behind file.
        /// </remarks>
        protected global::System.Web.UI.WebControls.Label lblInfo;
    }
}

```

ImagePDFBarcodeToCSV.csproj

```

<Project ToolsVersion="15.0" DefaultTargets="Build" xmlns="http://schemas.microsoft.com
  <Import Project="$(MSBuildExtensionsPath)\$(MSBuildToolsVersion)\Microsoft.Common.pro
  <PropertyGroup>
    <Configuration Condition="'$(Configuration)' == '' ">Debug</Configuration>

```

```

<Platform Condition=" '$(Platform)' == '' ">AnyCPU</Platform>
<ProductVersion>
</ProductVersion>
<SchemaVersion>2.0</SchemaVersion>
<ProjectGuid>{2284DD7C-8475-49DF-B6C9-57F726573AA8}</ProjectGuid>
<ProjectTypeGuids>{349c5851-65df-11da-9384-00065b846f21};{fae04ec0-301f-11d3-bf4b-0
<OutputType>Library</OutputType>
<RootNamespace>ImagePDFBarcodeToCSV</RootNamespace>
<AssemblyName>ImagePDFBarcodeToCSV</AssemblyName>
<TargetFrameworkVersion>v4.0</TargetFrameworkVersion>
<UseIISExpress>>true</UseIISExpress>
<Use64BitIISExpress />
<IISExpressSSLPort />
<IISExpressAnonymousAuthentication />
<IISExpressWindowsAuthentication />
<IISExpressUseClassicPipelineMode />
<UseGlobalApplicationHostFile />
</PropertyGroup>
<PropertyGroup Condition=" '$(Configuration)|$(Platform)' == 'Debug|AnyCPU' ">
  <DebugSymbols>>true</DebugSymbols>
  <DebugType>full</DebugType>
  <Optimize>>false</Optimize>
  <OutputPath>bin\<</OutputPath>
  <DefineConstants>DEBUG;TRACE</DefineConstants>
  <ErrorReport>prompt</ErrorReport>
  <WarningLevel>4</WarningLevel>
</PropertyGroup>
<PropertyGroup Condition=" '$(Configuration)|$(Platform)' == 'Release|AnyCPU' ">
  <DebugType>pdbonly</DebugType>
  <Optimize>>true</Optimize>
  <OutputPath>bin\<</OutputPath>
  <DefineConstants>TRACE</DefineConstants>
  <ErrorReport>prompt</ErrorReport>
  <WarningLevel>4</WarningLevel>
</PropertyGroup>
<ItemGroup>
  <Reference Include="Bytescout.BarCodeReader, Version=10.2.0.1799, Culture=neutral,
    <SpecificVersion>False</SpecificVersion>
    <HintPath>c:\Program Files\Bytescout BarCode Reader SDK\net2.00\Bytescout.BarCode
  </Reference>
  <Reference Include="Microsoft.CSharp" />
  <Reference Include="System.Web.DynamicData" />
  <Reference Include="System.Web.Entity" />
  <Reference Include="System.Web.ApplicationServices" />
  <Reference Include="System.ComponentModel.DataAnnotations" />
  <Reference Include="System" />
  <Reference Include="System.Data" />
  <Reference Include="System.Core" />
  <Reference Include="System.Data.DataSetExtensions" />
  <Reference Include="System.Web.Extensions" />
  <Reference Include="System.Xml.Linq" />
  <Reference Include="System.Drawing" />
  <Reference Include="System.Web" />
  <Reference Include="System.Xml" />
  <Reference Include="System.Configuration" />
  <Reference Include="System.Web.Services" />
  <Reference Include="System.EnterpriseServices" />
</ItemGroup>
<ItemGroup>
  <Content Include="BarcodeFiles\sample3.pdf" />

```

```

</ItemGroup>
<ItemGroup>
  <Content Include="BarcodeFiles\sample1.jpg" />
  <Content Include="BarcodeFiles\sample2.png" />
  <Content Include="Default.aspx" />
  <Content Include="Web.config" />
</ItemGroup>
<ItemGroup>
  <Compile Include="Default.aspx.cs">
    <DependentUpon>Default.aspx</DependentUpon>
    <SubType>ASPXCodeBehind</SubType>
  </Compile>
  <Compile Include="Default.aspx.designer.cs">
    <DependentUpon>Default.aspx</DependentUpon>
  </Compile>
</ItemGroup>
<ItemGroup>
  <Folder Include="Properties\" />
</ItemGroup>
<PropertyGroup>
  <VisualStudioVersion Condition="'$(VisualStudioVersion)' == ''>10.0</VisualStudioVersion>
  <VSToolsPath Condition="'$(VSToolsPath)' == ''>$(MSBuildExtensionsPath32)\Microsoft
</PropertyGroup>
<Import Project="$(MSBuildBinPath)\Microsoft.CSharp.targets" />
<Import Project="$(VSToolsPath)\WebApplications\Microsoft.WebApplication.targets" Condition="Exists('$(VSToolsPath)\WebApplications\Microsoft.WebApplication.targets')" />
<Import Project="$(MSBuildExtensionsPath32)\Microsoft\VisualStudio\v10.0\WebApplications\Microsoft.WebApplication.targets" />
</ProjectExtensions>
<VisualStudio>
  <FlavorProperties GUID="{349c5851-65df-11da-9384-00065b846f21}">
    <WebProjectProperties>
      <UseIIS>True</UseIIS>
      <AutoAssignPort>True</AutoAssignPort>
      <DevelopmentServerPort>64238</DevelopmentServerPort>
      <DevelopmentServerVPath>/</DevelopmentServerVPath>
      <IISUrl>http://localhost:64238/</IISUrl>
      <NTLMAuthentication>False</NTLMAuthentication>
      <UseCustomServer>False</UseCustomServer>
      <CustomServerUrl>
      </CustomServerUrl>
      <SaveServerSettingsInUserFile>False</SaveServerSettingsInUserFile>
    </WebProjectProperties>
  </FlavorProperties>
</VisualStudio>
</ProjectExtensions>
<!-- To modify your build process, add your task inside one of the targets below and
      Other similar extension points exist, see Microsoft.Common.targets.
<Target Name="BeforeBuild">
</Target>
<Target Name="AfterBuild">
</Target>
-->
</Project>

```

```

Microsoft Visual Studio Solution File, Format Version 12.00
# Visual Studio 15
VisualStudioVersion = 15.0.27703.2026
MinimumVisualStudioVersion = 10.0.40219.1
Project("{FAE04EC0-301F-11D3-BF4B-00C04F79EFBC}") = "ImagePDFBarcodeToCSV", "ImagePDFBarcodeToCSV.csproj", "{2284DD7C-8475-49DF-B6C9-57F726573AA8}"
EndProject
Global
    GlobalSection(SolutionConfigurationPlatforms) = preSolution
        Debug|Any CPU = Debug|Any CPU
        Release|Any CPU = Release|Any CPU
    EndGlobalSection
    GlobalSection(ProjectConfigurationPlatforms) = postSolution
        {2284DD7C-8475-49DF-B6C9-57F726573AA8}.Debug|Any CPU.ActiveCfg = Debug|Any CPU
        {2284DD7C-8475-49DF-B6C9-57F726573AA8}.Debug|Any CPU.Build.0 = Debug|Any CPU
        {2284DD7C-8475-49DF-B6C9-57F726573AA8}.Release|Any CPU.ActiveCfg = Release|Any CPU
        {2284DD7C-8475-49DF-B6C9-57F726573AA8}.Release|Any CPU.Build.0 = Release|Any CPU
    EndGlobalSection
    GlobalSection(SolutionProperties) = preSolution
        HideSolutionNode = FALSE
    EndGlobalSection
    GlobalSection(ExtensibilityGlobals) = postSolution
        SolutionGuid = {27B3CAC5-CEAC-4F05-85BE-10B502086D8C}
    EndGlobalSection
EndGlobal

```

## Web.config

```

<?xml version="1.0" encoding="utf-8"?>
<!--
  For more information on how to configure your ASP.NET application, please visit
  https://go.microsoft.com/fwlink/?LinkId=169433
-->
<configuration>
  <system.web>
    <compilation debug="true" targetFramework="4.0" />
  </system.web>
</configuration>

```

---

FOR MORE INFORMATION AND FREE TRIAL:

[Download Free Trial SDK \(on-premise version\)](#)

[Read more about ByteScout BarCode Reader SDK](#)

[Explore documentation](#)

[Visit \[www.ByteScout.com\]\(http://www.ByteScout.com\)](#)

or

[Get Your Free API Key for \[www.PDF.co\]\(http://www.PDF.co\) Web API](#)

[www.bytescout.com](http://www.bytescout.com)