How to make the programmable LED Indicator blinking

Applies to:		
Platform	OS version	XPAC utility version
XP-8000-CE6	N/A	N/A
XP-8000-Atom-CE6	V1.0.0.0	Note1

N/A: *Not applicable to this platform and OS.*
Note1: *It doesn't matter with the utility.*

The XPAC SDKs provides a complete solution to integrate with XPAC and compatible with Visual C#, Visual Basic .net and C++.
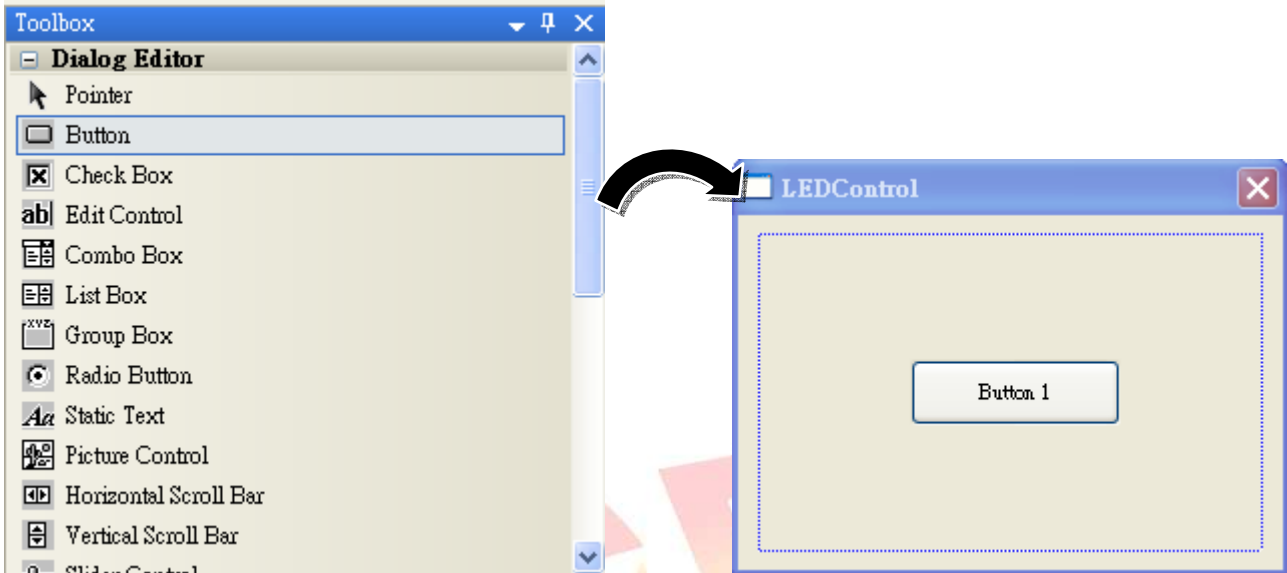
The type of LED is shown as following figure, and only L1 and L2 LED are allowed to control by the user. This example using MFC、C# and VB.Net demonstrates how to enable and disable LED, please perform the following steps build program.
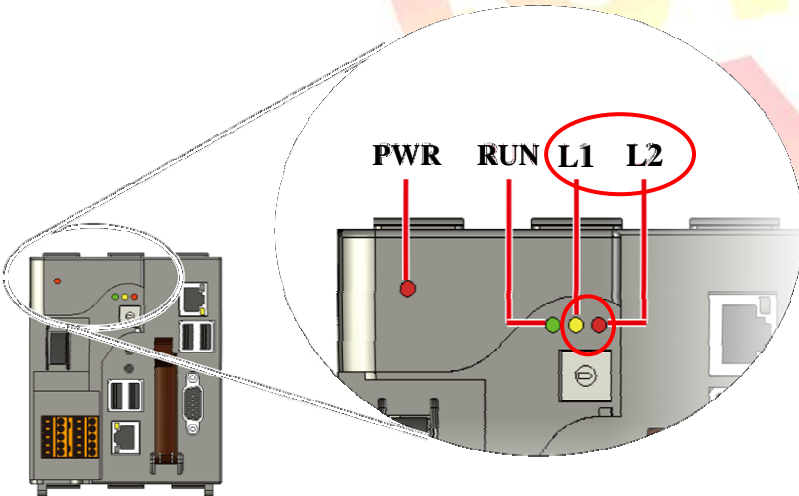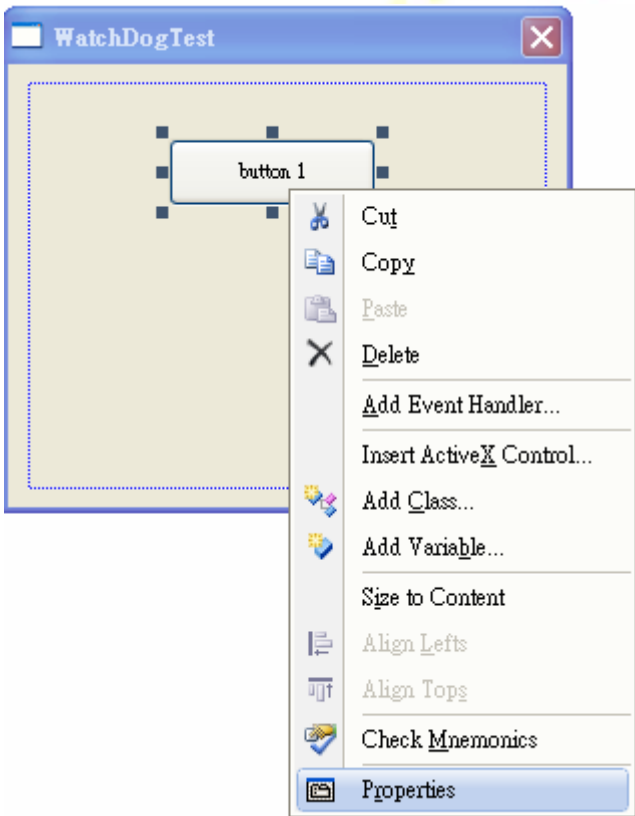
Using MFC enable and disable LED

Step 1: From the Toolbox, drag a Button control onto the form

Step 2: Right-click the Button control, and then click Properties

Step 3: In the Properties window, type" Enable L1 LED", and press ENTER to set the Caption property.
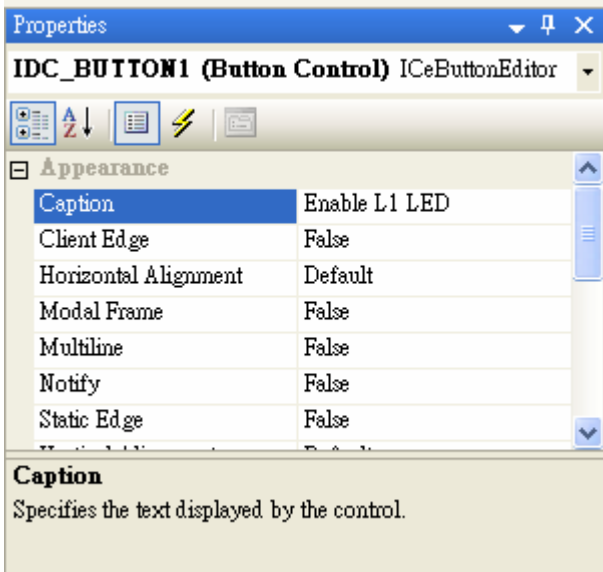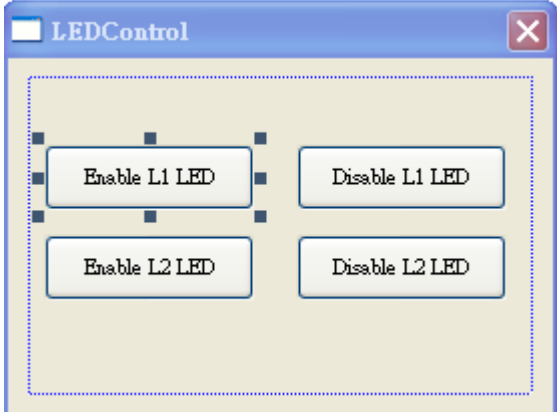

Step 4:   Repeat the Step 1~3 to add the buttons named as "Disable L1 LED"、"Enable L2 LED" and "Disable L2 LED".

Step 5: Add "#include "XPacSDK_CE.h" in main file.

```
#include "stdafx.h"
#include "WatchDogTest.h"
#include "WatchDogTestDlg.h"
#include "XPacSDK_CE.h"
```

Step 6: Double-click the buttons on the form.

Step 7: Inserting the following code

Insert following code in the click event of "Enable L1 LED" button.

```
void CLEDControlDlg::OnBnClickedButton1()
{
    // TODO: Add your control notification handler code here
    pac_EnableLED(0,true);
}
```

Insert following code in click event "Disable L1 LED" button.

```
void CLEDControlDlg::OnBnClickedButton3()
{
    // TODO: Add your control notification handler code here
    pac_EnableLED(0,false);
}
```

Insert following code in click event "Enable L2 LED" button.

```
void CLEDControlDlg::OnBnClickedButton2()
{
    // TODO: Add your control notification handler code here
    pac_EnableLED(1,true);
}
```

Insert following code in click event "Disable L2 LED" button.

```
void CLEDControlDlg::OnBnClickedButton4()
{
    // TODO: Add your control notification handler code here
    pac_EnableLED(1,false);
}
```

Using "pac_EnableLED" to enable LED, 1st parameter of this function is the type of LED (0:L1 LED, 1:L2 LED), 2nd parameter is used to enable or disable LED (true: enable, false: disable).
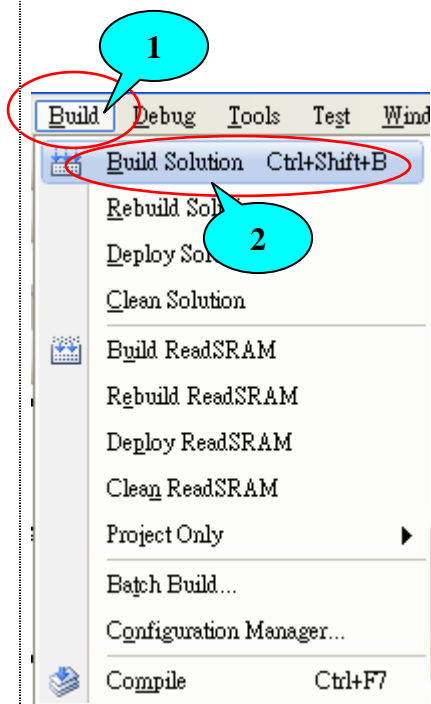
"pac_EnableLED" Syntax

```
void pac_EnableLED(int pin,BOOL bFlag);
```

Step 8: Build and execute

Click "Build"->"Build Solution" to build the project, and a execute file will be obtained in the project folder. Put this execute file in your XPAC and execute it.

Tips & Warnings

⚠️ Refer to the FAQ documents below to upload the execute file to XPAC.
- X5-02_How_to_debug_XPAC_programs_in_Visual_Studio_2005(2008)_online_through_the_TCPIP_english
- X5-27_How to write a MFC application with XPAC SDK in visual studio 2005
- X5-30_How to write a MFC application with XPAC SDK in visual studio 2008

Using C# to enable and disable LED

Step 1: From the Toolbox, drag four buttons control onto the form. The properties of four buttons text are " Enable L1 LED"、 "Disable L1 LED"、"Enable L2 LED" and "Disable L2 LED"

Step 2: Get the XPacNet.dll and copy it to the project folder. The XPacNet.dll can be obtained from any C# demo program that has been provided on the CD or by downloading the latest version from ICP DAS web site.

1. CD:\SDK\XPacNET
2. ftp://ftp.icpdas.com/pub/cd/xp-8000-ce6/sdk/xpacnet/
3. ftp://ftp.icpdas.com/pub/cd/xpac-atom-ce6/sdk/xpacnet/

Tips & Warnings

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⚠️ Refer to the FAQ documents below to add XPacNet.dll to the project.
● X5-28_How to write a C#.net application with XPAC SDK in visual studio 2005
● X5-31_How to write a C#.net application with XPAC SDK in visual studio 2008

Step 3: Double-click the buttons on the form.

Form1

Enable L1 LED   Disable L1 LED

Enable L2 LED   Disable L2 LED
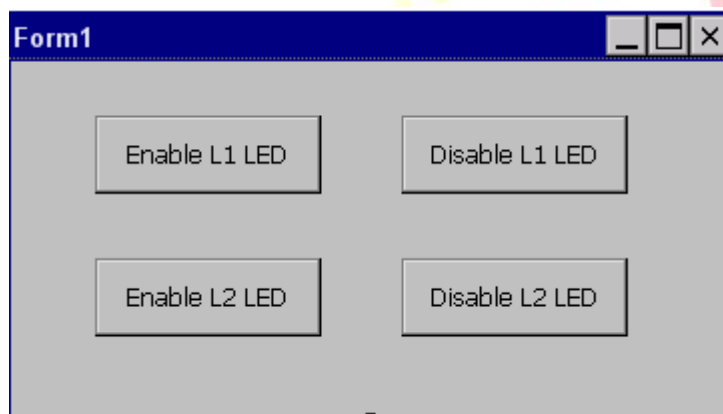
Step 4: Inserting the following code

Using "pac_EnableLED" enable LED, the 1st parameter of this function is the type of LED (0:L1 LED, 1:L2 LED), 2nd parameter is used to enable or disable LED (true: enable, false: disable).

"pac_EnableLED" Syntax

```
void pac_EnableLED(int pin, bool bFlag);
```

Insert following code in the click event of "Enable L1 LED" button.

```csharp
private void button1_Click(object sender, EventArgs e)
{
    XPacNET.XPac.pac_EnableLED(0, true);
}
```

Insert following code in the click event of "Disable L1 LED" button.

```csharp
private void button2_Click(object sender, EventArgs e)
{
    XPacNET.XPac.pac_EnableLED(0, false);
}
```

Insert following code in the click event of "Enable L2 LED" button.

```csharp
private void button3_Click(object sender, EventArgs e)
{
    XPacNET.XPac.pac_EnableLED(1, true);
}
```
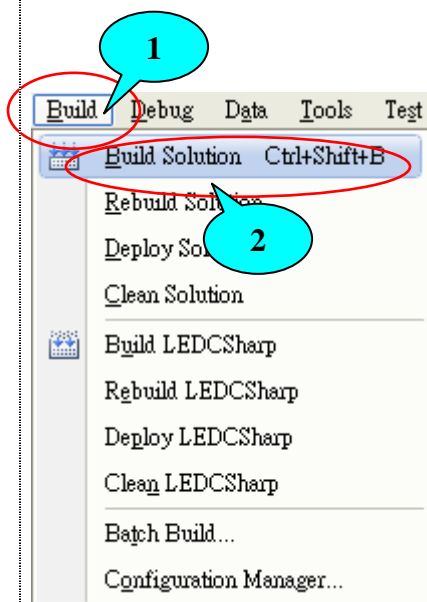
Insert following code in the click event of "Disable L2 LED" button.

```csharp
private void button4_Click(object sender, EventArgs e)
{
    XPacNET.XPac.pac_EnableLED(1, false);
}
```

Step 5: Build and execute

Click "Build"->"Build Solution" to build the project, and a execute file will be obtained in the project folder. Put this execute file in your XPAC and execute it.

Tips & Warnings

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⚠ Refer to the FAQ documents below to upload the execute file to XPAC.
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- X5-28_How to write a C#.net application with XPAC SDK in visual studio 2005
- X5-31_How to write a C#.net application with XPAC SDK in visual studio 2008

Using VB.Net to enable and disable LED

Step 1: From the Toolbox, drag four buttons control onto the form. The properties of four buttons text are " Enable L1 LED"、 "Disable L1 LED"、"Enable L2 LED" and "Disable L2 LED"

Step 2: Get the XPacNet.dll and copy it to the project folder. The XPacNet.dll can be obtained from any C# demo program that has been provided on the CD or by downloading the latest version from ICP DAS web site.

1. CD:\SDK\XPacNET
2. ftp://ftp.icpdas.com/pub/cd/xp-8000-ce6/sdk/xpacnet/
3. ftp://ftp.icpdas.com/pub/cd/xpac-atom-ce6/sdk/xpacnet/

Tips & Warnings

⚠ Refer to the FAQ documents below to add XPacNet.dll to the project.
● X5-29_ How to write a VB.net application with XPAC SDK in visual studio 2005
● X5-32_How to write a VB.net application with XPAC SDK in visual studio 2008

Step 3: Double-click the buttons on the form.
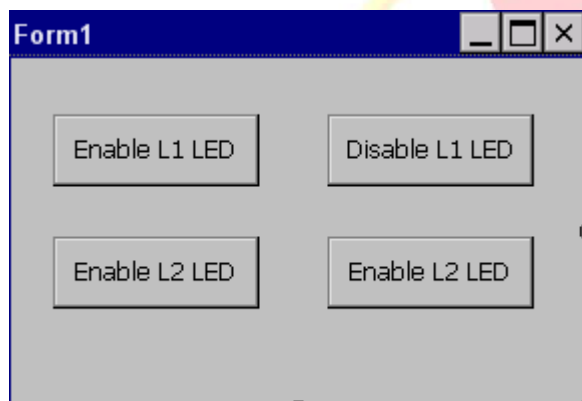
Step 4: Inserting the following code

Insert following code in the click event of "Enable L1 LED" button.

```
Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button1.Click
    XPacNET.XPac.pac_EnableLED(0, True)
End Sub
```

Insert following code in he click event of "Disable L1 LED" button.

```
Private Sub Button2_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button2.Click
    XPacNET.XPac.pac_EnableLED(0, False)
End Sub
```

Insert following code in he click event of "Enable L2 LED" button.

```
Private Sub Button3_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button3.Click
    XPacNET.XPac.pac_EnableLED(1, True)
End Sub
```

Insert following code in he click event of "Disable L2 LED" button.

```
Private Sub Button4_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button4.Click
    XPacNET.XPac.pac_EnableLED(1, False)
End Sub
```

Using "pac_EnableLED" to enable LED, 1st parameter of this function is the type of LED (0:L1 LED, 1:L2 LED), 2nd parameter is used to enable or disable LED (true: enable, false:disable).
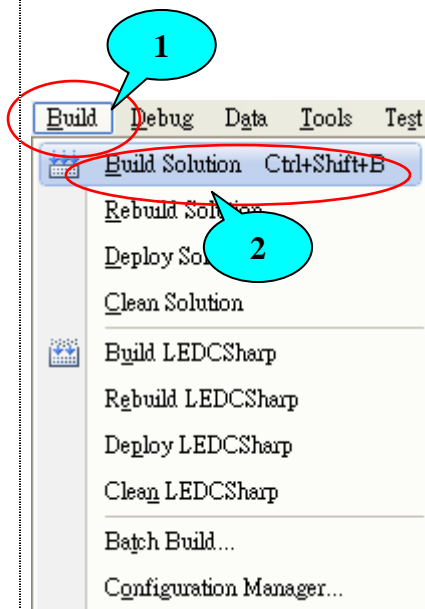
"pac_EnableLED" Syntax

```
void pac_EnableLED(pin AS Integer, bFlag AS Boolean);
```

Step 5: Build and execute

Click "Build"->"Build Solution" to build the project, and a execute file will be obtained in the project folder. Put this execute file in your XPAC and execute it.

Tips & Warnings

⚠ Refer to the FAQ documents below to upload the execute file to XPAC.
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- X5-29_ How to write a VB.net application with XPAC SDK in visual studio 2005
- X5-32_How to write a VB.net application with XPAC SDK in visual studio 2008