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How do I write a com port communicate program of XPAC

Applies to:

Platform	OS version	XPAC utility version
XPAC series	All versions (WinCE6)	All versions

The XPAC SDKs provides a complete solution to integrate with XPAC and compatible with Visual C#, Visual Basic .net and C++.

This example using MFC
C# and VB.Net demonstrates how to control COM port to communicate with the other device. please perform the following steps to build program.

Using MFC to control COM port communicate

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

Toolbox	→ ╄ ×	
Dialog Editor	<u> </u>	
Revinter Revinter		
🗖 Button		
🔀 Check Box		Ma
ab Edit Control		
📑 Combo Box		SendCOM
🖽 List Box		Benacom
📺 Group Box		
Radio Button		
Aa Static Text		Button 1
🕦 Picture Control		
I Horizontal Scroll Bar		
🖶 Vertical Scroll Bar		
0 Cliffor Control	×	5

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

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Author	Weił	Cut Cut Copy Paste Delete Add Ev Insert A Add Cla Add Va Size to 0 Align L Align T Check 1	Version Version Version	1.0.0	Date	2011/4/14	Page	2/10
		Properti	ies					

Step 3: In the Properties window, type "Send data", and press ENTER to set the Caption property..

Properties	→ ₽	×
IDC_BUITON1 (Butto	n Control) ICeButtonEditor	
🤮 🏄 🗐 🥖 🖂		
□ Appearance		
Caption	Send data	
Client Edge	False	=
Horizontal Alignment	Default	-
Modal Frame	False	
Multiline	False	
Notify	False	
Static Edge	False	
Vertical Alignment	Default	-
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Step 4: Add "#ir #include "stdaf: #include "Watchl #include "Watchl #include "XPacSI	nclude "XPacS x.h" DogTest.h" DogTestDlg.h" DK_CE.h"	DK_CE.ł	ı" in main fil	e.			0,10	
Step 5: Double-	Click "Send da	ta" buttor	n on the forr	n.				
Step 6: Inserting Insert following	g the following code in "Send ::OnBnClickedButt	code data" but	ton click eve	ent.				
<pre>i // TODO: Add HANDLE hPort char data[20] BOOL iret = u printf("reciv uart_Close(hF }</pre>	your control not = uart_Open("COM]={0}; uart_SendCmd(hPor we data %s\n",dat Port);	ification h 3:,115200,N t,"\$01M",da a);	andler code he ,8,1"); ta);	are	2			
Using "uart_Ope "COMx:,baudrat baudrate is 1152 "COM1:,115200	en" open com te, parity bits,d 200,parity bit is),N,8,1".	<mark>port, 1st</mark> p lata bits,s s None, d	barameter o top bits". Fo lata bit is 8,	f this func or example stop bit is	ction is a strin e if you open s 1, so the pa	ng, format i com port rameter is	is 1, set to	
HANDLE uart	ntax t_Open(LPCS ⁻	TR Conne	ectionString);				
Using "uart_Ser 2nd parameter i "uart_ SendCmo	ndCmd" send o s command st d" Syntax	data, 1st ⊧ ring, 3rd⊣	parameter o parameter is	f the func s buffer of	tion is HAND f receives the	LE to the eata.	open COM,	
HANDLE uart	_ SendCmd (HA	NDLE hF	Port, LPCST	R cmd, L	PSTR szRes	sult);		
		ICP DAS	Co., Ltd. Te	chnical do	cument			

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Using "uart_Clos "uart_Close" Syr	se" close com ntax	n port, this	function pa	rameter i	s com port H	ANDLE.	
HANDLE uart_	Close(HAND	LE hPort)	;				
Step 7: Build an	d execute						
Click "Build"->"B	uild Solution'	' build exe	cute file afte	er perforn	n above step	. This exe	cute file is
building in your p	project folder	. Put this e	execute file	in your X	PAC.		
Puild Dabug Too	le Test Wind						
Build Solution	Ctrl+Shift+B						
Rebuild Sol							
Deploy Sol							
<u>C</u> lean Solution							
Build ReadSRAM	M						
R <u>e</u> build ReadSR	AM						
Deploy ReadSR	AM						
Clean ReadSRAI	м						
Batch Build							
Configuration M	anager						
		44D and 4			- 445000 4		
the following pict	nnect to 1-70 ture.	44D and t	ne module i	baud rate	is 115200, ti	nen this pi	rogram result
File Edit Help	7						
recive data !017	 D44D						
lips & warni	ngs						
Refer to th	e FAQ docur	nents belo	w to upload	the execu	ute file to XPA	C.	
02_Hc	w_to_debug_X	PAC_progra	ams_in_Visua	I_Studio_2	005(2008)_onlii	ne_through_	_the_TCPIP_er
sh • X5-27	_How to write a	MFC applic	ation with XP	AC SDK in	visual studio 20	005	
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Using C# to control COM port communicate

Step 1: From the Toolbox, drag a button control onto the form. The properties of this buttons text is "Send data".

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/XP-8000-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 "Send data" button on the form.

Form1	h
Send data	

Step 4: Inserting the following code

Insert following code in the click event of "Send data" button.



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Build Debug Dat	a <u>T</u> ools Te <u>s</u> t					
Build Solution	Ctrl+Shift+B					
Rebuild Sol						
Deploy Sol						
<u>C</u> lean Solution						
🔛 B <u>u</u> ild LEDCSha	φ					
Rebuild LEDCSI	harp					
De <u>p</u> loy LEDCSh	arp					
Clea <u>n</u> LEDCSha	rp 🛛					
Batch Build						
Configuration M	anager					
If your COM2 on	nnoct to 1.70	12D and the module	haud rate	ic 115200 th	on this n	ogram roculto
the following nic		12D and the module	Dauu Tale	15 1152 <mark>00,</mark> li		ogramiesuits
ок	×					
marine data y 10170	10					
recive data : 10170	12					
Tipe & Warni	nac 🦯					
nps & wann	ngs					
	1					
\Lambda Refer to th	ne FA <mark>Q</mark> docur	ments be <mark>low</mark> to upload	d t <mark>he e</mark> xecu	te file to XPA	C.	
● X5- 02 Ho	ow to debug X	PAC programs in Visu	al Studio 20)05(2008) onlir	ne through	the TCPIP end
sh						
 X5-28 X5-31 	How to write a	C#.net application with	XPAC SDK ii XPAC SDK ii	n visual studio : n visual studio :	2005 2008	
					2000	
		ICP DAS Co., Ltd. T	echnical do	cument		

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Using VB.Net to control COM port communicate

Step 1: From the Toolbox, drag a button control onto the form. The properties of this buttons text is "Send data".

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/XP-8000-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 "Send data" button on the form.

Form1		
	Send data	{

Step 4: Inserting the following code

Insert following code in "Send data" button click event.

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<pre>Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button1.Click Dim hPort As IntPtr = XPacNET.XPac.uart_Open("COM3:,115200,N,8,1") Dim command(20) As Byte Dim recive(20) As Byte Dim strRec As String Dim encoding As New System.Text.UTF8Encoding() command = encoding.GetBytes("\$01M") XPacNET.XPac.uart_SendCmd(hPort, command, recive) strRec = encoding.GetString(recive, 0, 20) XPacNET.XPac.uart_Close(hPort) MsgBox("read data:" + strRec) End Sub</pre>							
Using "uart_Open" open com port, 1st parameter of this function is a string, format is "COMx: baudrate, parity bits, data bits, stop bits". For example if you open com port 1, set to baud rate is 115200,parity bit is None, data bit is 8, stop bit is 1, so the parameter is "COM1:,115200,N,8,1".							
"uart_Open" Syntax							
IntPtr uart_Open(string ConnectionString);							
Using "uart_SendCmd" send data, 1st parameter of this function is IntPtr to the open COM, 2nd parameter is command string, 3rd parameter is buffer of receives the data. "uart_ SendCmd" Syntax							
HANDLE uart_SendCmd (IntPtr hPort, byte[] cmd, byte[] szResult);							
Using "uart_Close" close com port, this function parameter is com port IntPtr. "uart_Close" Syntax							
HANDLE uart	_Close(IntPtr h	Port);					
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