Classification		SDł	<pre>< FAQ on ;</pre>	XPAC		No.	6-002-00				
Author	WeiKai	Version	1.0.1	Date	2012/12/26	Page	1/11				
How do I read data from or write data to EEPROM of XPAC											
Applies to:											
	Platform		OS versio	on	XPAC ut	tility vers	ion				
XF	PAC series		ersions (W	/inCE6)	All v	rersions					
The XPAC SDK /isual C#, Visua The example us	s provides a 6 al Basic .net a sing MFC √ C≉ the following s	tomplete s and C++. # and VB.I steps to b	Net demo uild a proc	nstrates ho gram.	with XPAC an	d compa d write d	atible with ata in EEPRO				
Using MFC to read and write data in EEPROM											
Step 1: From th	e Toolbox, dr	ag a Butto	n control	o <mark>nto th</mark> e fo	orm						
Toolbox		– 4	×								
Dialog Editor			^								
Revinter											
Button						<u> </u>					
K Check Box					dEEPRAM						
BUI East Control											
ER List Box						_					
[^{XV2}] Group Box					button 1						
 Radio Button 						_					
Aa Static Text											
Picture Control											
Horizontal Scroll	Bər										
😫 Vertical Scroll Ba	u										
0 01:2-0 Control			×								
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uthor WeiKai Version			sion	1.0.1	Date	2012/12/26	Page	2/11
itep 2: Right-clic	k the I	Button contr	rol, a	nd then cl	ck Propert	ies		
ReadEEPRAM		×						
button	1							
• •	- ×	Cu <u>t</u>						
		Сору						
		<u>P</u> aste						
	×	<u>D</u> elete						
		<u>A</u> dd Event Hand	dler					
		Insert Active <u>X</u> (Control					
	**	Add <u>C</u> lass						
	۷	Add Varia <u>b</u> le						
		S <u>i</u> ze to Content						
	l₽.	Align <u>L</u> efts						
	<u>n</u> O4	Align Tops						
	🥪	Check <u>M</u> nemon	uics					
	m	Properties		/				

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

Pro	perties	🚽 🎝	×
ID	C_BUTTON2 (Butto	a Control) ICeButtonEditor	•
•	2↓ 🔲 🖋 🖾		
	Appearance		^
	Caption	Write EEPRAM	
(Client Edge	False	
]	Horizontal Alignment	Default	_
]	Modal Frame	False	
]	Multiline	False	
]	Notify	False	
	Static Ed.ge	False	v
Ca Spe	ption ecifies the text displayed 1	by the control.	
		ICP DAS	Co

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Author	WeiKai	Version	1.0.1	Date	2012/12/26	Page	3/11
Step 4: Repea EEPROM". Step 5: Add "#ir // ReadSRAMDlg. // #include "stdaf #include "ReadS #include "ReadS #include "XPacS	at the Step 1~ nclude "XPac cpp : implements "x.h" "RAM_h" "RAMDlg.h" DK_CE.h"	3 to add tv SDK_CE.h	wo button ı" in main	named as file.	"Read EEPR	OM" and	"Turn on
Step 6: Double-	click the butto	ons on the	form				
Step 7: Inserting Insert following	EEPROM EEPROM EEPROM g the following code in the cl (Dlg::OnBnClicked l your control no SPROM(true);	g code. ick event o lButton3() otification	of "Turn or handler code	n EEPROM	a" button.		
Using "pac_Ena EEPROM	ableEEPROM	" to turn or	N EEPROM	M, this func	tion paramet	er is turn	on/off
"pac_EnableEE	PROM" Synta	ax					
void pac_Ena	bleEEPROM((bool);					
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Insert following code in the click event of "Write EEPROM" button. <pre>ivoid CReadSRAMDlg::OnBmClickedButton2() { // TODD: Add your control motification handler code here BYTE data='a';</pre>										
<pre>pac_WriteMemory(0,&data,1,1);</pre>										
<pre>printf("write data: %c\n",data); }</pre>										
Using "pac_WriteMemory" to write data to EEPROM, 1 st parameter of this function is memory address, 2 nd parameter is write data, 3 rd parameter is data length and 4 th parameter is memory type (0: SRAM, 1:EEPROM).										
"pac_WriteMem	ory" Syntax									
bool pac_WriteMemory(DWORD address, LPBYTE lpBuffer, DWORD dwLength, int mem_type);										
				20)				
Insert following	code in the clic	ck event	of "Read EEP	<mark>RO</mark> M" b	outton.					
<pre>void CReadSRAMDlg: {</pre>	:OnBnClickedButto	n1()								
// TODO: Add y BYTE data=0;	our control notif	ication ham	ndler code here							
pac_ReadMemory	(0,&data,1,1);									
printf("read d }	ata: ‰c\n",data);									
Using "pac_Rea address, 2 nd pa memory type (0	adMemory" to r ramete <mark>r is reac</mark>): SRAM, 1:EE	read data d data bu <mark>PROM).</mark>	from EEPRC ffer, 3 rd param	0M, 1 st p neter is o	arameter of t data length a	this functi Ind 4 th pai	on is memor ameter is			
"pac_ReadMem	ory" Syntax									
bool pac_Rea mem_type);	adMemory(DW	ORD add	lress, LPBYTI	∃ lpBuff	er, DWORD	dwLength	i, int			
							'			

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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. Image: Contract Wind Deploy Solution Image: Contract Wind Deploy ReadSRAM De								
Refer to ti ×5- 02_H sh ×5-27 ×5-30	he FAQ docum ow_to_debug_XF 7_How to write a 0_How to write a	ents below to upload AC_programs_in_Visu VFC application with X VFC application with X	d the execu ial_Studio_20 PAC SDK in v PAC SDK in v	te file to XPA 005(2008)_onlin visual studio 200 visual studio 200	C. e_through_th 05 08	ie_TCPIP_eng		
		ICP DAS Co. I td 7	echnical do	rument				

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Using C# to read and write data in EEPROM

Step 1: From the Toolbox, drag three buttons control onto the form. Three buttons text properties are "Read EEPROM", "Write EEPROM" and "Turn on EEPROM". (The steps are the same with the Step 1~3 of Using MFC to read and write data in EEPROM).

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. http://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.

- X5-28_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		
	Read EEPROM	
	Write EEPROM	
	Turn on EEPRO	

Step 4: Inserting the following code

Insert following code in the click event of "Turn on EEPROM" button.

private void button3_Click(object sender, EventArgs e)

XPacNET.XPac.pac_EnableEEPROM(true);
}

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Addition	Weittai	VE131011	1.0.1	Dale	2012/12/20	i age	7711		
Using "pac_EnableEEPROM" to turn on EEPROM, this function parameter is used to turn on/off EEPROM.									
Syntax									
void pac_EnableEEPROM(bool);									
nrivate void butto	m2 Click(object s		ntArgs e)	v eveni.					
<pre>private void outton2_Click(object sender, EventArgs e) { byte[] data = new byte[20]; data[0] = Convert.ToByte('a'); XPacNET.XPac.pac_WriteMemory(0, data, 20, 0); </pre>									
}	toNomon" to v	urita data		the 1 st	noromotor io	the memory	n (oddrooo		
Using "pac_WriteMemory" to write data to EEPROM, the 1 st parameter is the memory address, 2 nd parameter is write data, 3 rd parameter is data length and 4 th parameter is memory type (0: SRAM, 1:EEPROM).									
pac_WriteMemory" Syntax									
bool pac_Wri	bool pac_WriteMemory(uint index, byte[] Buffer, uint Length, int mem_type);								
L									
			_						
Insert following	code in the clic	ck event o	of "Read EEF	ROM" b	outton.				
<pre>private void butto {</pre>	ml_Click(object s	ender, Even	ntArgs e)						
byte[] data = XPacNET.XPac.r string str = F MessageBox.Sho	new byte[20]; pac_ReadMemory(0, Incoding.ASCII.Get pw("Read memory: "	data, 1, 0) String(data + str);); a, 0, 20);						
Using "pac_Rea 2 nd parameter is (0: SRAM, 1:EE	adMemory" to r s read data buf EPROM).	eading d fer, 3 rd pa	ata from EEF arameter is da	ROM, th ata lengt	ne 1 st parame th and 4 th par	eter is mem ameter is n	ory address, nemory type		
pac_ReadMem	ory" Syntax								
bool pac_Re	adMemory(uint	index, b	yte[] Buffer, ι	iint Leng	oth, int mem_	type);			
L							'		
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Using VB.Net to read and write data in EEPROM

Step 1: From the Toolbox, drag three buttons control onto the form. Three buttons text properties are "Turn on EEPROM" < "Read EEPROM" and "Write EEPROM". (The steps are the same with the Step 1~3 of Using MFC to read and write data in EEPROM).

Step 2: Get the XPacNet.dll and copy it to the project folder. The XPacNet.dll can be obtained from any VB.Net 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. http://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
 X5-29_ How to write a VB net application with XPAC SDK in visual studio 2009
- 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

Form1		
	Read EEPROM	
	Write EEPROM	ļ
	Turn on EEPRO	

Step 4: Inserting the following code

Insert following code in the click event of "Turn on EEPROM" button.

Pri	vate Sub	Button3	_Click(ByVal	sender A	<mark>s</mark> System.Object	, ByVal	e As	System.EventArgs)	Handles	Button3.Click
	XPacNET	.XPac.pad	_EnableEEPR	DM(True)						
End	Sub	-	_							

Using "pac_EnableEEPROM" to turn on EEPROM, this function parameter is used to turn on/off EEPROM.

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"pac_EnableEEPROM" Syntax							
void pac_EnableEEPROM(bEnable AS Boolean);							
L							2
Insert following code in the click event of "Write EEPROM" button.							
<pre>Private Sub Button2_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button2.Click Dim data(20) As Byte Dim encoding As New System.Text.UTF8Encoding() data = encoding.GetBytes("a") XPacNET.XPac.pac_WriteMemory(0, data, 20, 0) End Sub</pre>							
Using "pac_WriteMemory" to write data to EEPROM, the 1 st parameter is memory address, 2 nd parameter is write data, 3 rd parameter is data length and 4 th parameter is memory type (0: SRAM, 1:EEPRAM).							
pac_WriteMemory" Syntax							
bool pac_WriteMemory(index AS UInteger, Buffer() AS byte, Length AS UInteger, mem_type AS Integer);							
Insert following code in the click event of "Read EEPROM" button.							
Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button1.Click Dim data(20) As Byte Dim str As String Dim enc As New System.Text.UTF8Encoding() XPacNET.XPac.pac_ReadMemory(0, data, 20, 0) str = enc.GetString(data, 0, 20) MsgBox("read data:" + str) End Sub							
Using "pac_ReadMemory" to read data from EEPROM, the 1 st parameter is memory address, 2 nd parameter is read data buffer, 3 rd parameter is data length and 4 th parameter is memory type.							
pac_ReadMemory" Syntax							
bool pac_ReadMemory(uint index, byte[] Buffer, uint Length, int mem_type);							
·							'
<u></u>							
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