# 新增 ISA 板卡硬體裝置

[適用於 Windows 2003 作業系統]

#### 介紹

這本手冊將描述如何在 MS Windows 2003 作業系統手動新增與設定 ISA 板卡。Windows 2003 支援 PCI 卡 PnP(自動分發資源),但是對使用 ISA 插槽的板卡並沒有支援 PnP。因此 Windows 2003 無法偵測出 ISA 插槽板卡, 也不會自動分配相對資源給 ISA 板卡。本手冊將以 P8R8-DIO 系列的板卡 作為安裝的範例示範如何安裝 ISA 板卡。其他系列的 ISA 卡可仿照相同的 步驟安裝到 MS Windows 2003 作業系統。

為了能夠正確地取得系統資源,我們為每個 ISA 板卡提供一個對應的 PnP訊息檔案(\*.INF)。讓這些ISA卡片能透過這個 INF 檔案對 Windows 2003 請求提供系統資源。

#### 新增 MS Windows 2003 的 P8R8-DIO 板卡

首先將 P8R8-DIO 卡片安裝在 ISA 插槽上並鎖緊, 接著安裝 INF 檔案, 透過 INF 檔案所提供的訊息讓系統正確的分配資源。請按照以下的步驟進 行板卡安裝。 請至<u>http://www.icpdas.com/download/isa/index.htm</u> 處下載P8R8-DIO的

安裝檔案。雙擊 "dio\_win2k\_v301.exe" 的檔案,開始安裝程序。

STEP 1: 點擊 <mark>"<u>N</u>ext>"</mark> 按鈕。



### STEP 2:選擇安裝路徑,完成後點擊 <mark>"<u>N</u>ext>"</mark> 按鈕。

DIO_WIN2K	Setup			×
Choose D Select fo	Destination Location older where setup will install files.		1	N-A
	Install DIO_WIN2K to: C:\DAQPro\DIO_WIN2K			<u>C</u> hange
InstallShield -		< <u>B</u> ack	<u>N</u> ext>	Cancel

STEP 3:選擇 "No, I will restart my computer later.", , 然後點擊"Finish"按鈕。



#### STEP 4:選擇"Start → Control Panel → Add Hardware."



STEP 5:點擊 <mark>"<u>N</u>ext>"</mark> 按鈕。



STEP 6: 詢問P8R8-DIO是否已裝上電腦。若已裝上電腦,請選 "Yes, I have

already connected the hardware." 然後點擊 "<u>N</u>ext>" 按鈕。

d Hardware Wizard Is the hardware connected?		E Com
Have you already connected this hardv	are to your computer?	
Yes, I have already connected the second	e hardware	
$\bigcirc$ No, I have not added the hardwa	ire yet	

STEP 7:選擇<mark>"Add a new hardware device."</mark>然後點擊 "<u>N</u>ext>" 按鈕。

From the list below, select an installed hardware device, then click Next to check properties or troubleshoot a problem you might be having. To add hardware not shown in the list, click "Add a new hardware device." Installed hardware: Installed hardware: Intel(r) 82801DB/DBM USB 2.0 Enhanced Host Controller - 24CD USB Root Hub USB Root Hub USB Root Hub USB Root Hub Add a new hardware device	he fo	llowing hardware is	already insta	illed on your co	omputer	
To add hardware not shown in the list, click "Add a new hardware device." Installed hardware: Installed hardware: USB Root Hub USB Root Hub USB Root Hub USB Root Hub Add a new hardware device	Fro	m the list below, select a perties or troubleshoot a	an installed hard a problem you m	dware device, the ight be having.	n click Next to cł	neck
Installed hardware: Intel(r) 82801DB/DBM USB 2.0 Enhanced Host Controller - 24CD USB Root Hub USB Root Hub USB Root Hub USB Root Hub Add a new hardware device	To	add hardware not show	in in the list, clic	k "Add a new ha	dware device."	
Installed hardware: Intel(r) 82801DB/DBM USB 2.0 Enhanced Host Controller - 24CD USB Root Hub USB Root Hub USB Root Hub Add a new hardware device						
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USB Root Hub USB Root Hub USB Root Hub USB Root Hub Add a new hardware device	l <u>n</u> s	talled hardware:				
CUSB Root Hub CUSB Root Hub CUSB Root Hub CUSB Root Hub Add a new hardware device	l <u>n</u> s E	talled hardware: Intel(r) 82801DB/DBM	1 USB 2.0 Enha	anced Host Contro	oller - 24CD	<u> </u>
Add a new hardware device	Ins We we	talled hardware: ✿ Intel(r) 82801DB/DBM ✿ USB Root Hub	1 USB 2.0 Enha	anced Host Contro	oller - 24CD	•
Add a new hardware device	NALAN II	talled hardware: Intel(r) 82801DB/DBM SB Root Hub SUSB Root Hub	1 USB 2.0 Enha	anced Host Contro	oller - 24CD	•
	A A A A A	talled hardware: Intel(r) 82801DB/DBM USB Root Hub USB Root Hub USB Root Hub	1 USB 2.0 Enha	anced Host Contro	oller - 24CD	*
	5 8 8 8 8 8 8 8	talled hardware: Intel(r) 82801DB/DBM USB Root Hub USB Root Hub USB Root Hub	1 USB 2.0 Enha	anced Host Contro	oller - 24CD	
	S. A. A. A. A.	talled hardware: Intel(r) 82801DB/DBM USB Root Hub USB Root Hub USB Root Hub USB Root Hub	1 USB 2.0 Enha device	anced Host Contro	oller - 24CD	<b>•</b>
	5 8 8 8 8 8 8	talled hardware: Intel(r) 82801DB/DBM USB Root Hub USB Root Hub USB Root Hub USB Root Hub Add a new hardware	1 USB 2.0 Enha device	anced Host Contro	oller - 24CD	•



The wiz	zard can help you install other hardware
The know	wizard can search for other hardware and automatically install it for you. Or, if you w exactly which hardware model you want to install, you can select it from a list.
Wha	at do you want the wizard to do?
0	Search for and install the hardware automatically (Recommended)
(	Install the hardware that I manually select from a list (Advanced)

STEP 9:選擇<mark>"Show all Devices."</mark>然後點擊 "<u>N</u>ext>" 按鈕。



### STEP 10<sup>:</sup>點擊 "<u>H</u>ave Disk..." 按鈕。

		Ē
Select the manufacturer a have a disk that contains	nd model of your hardware device and then click Next. If y the driver you want to install, click Have Disk.	ou
Manufacturer 🔺	Model	
(Standard Modern Types) —	Communications cable between two computers	
(Standard port types) (Standard system devices)	Parallel cable between two computers	
Agfa	Standard 300 bps Modem	
ί ι.	Standard 1200 bps Modem	
	I FF Standard 2400 box Madam	-
This driver is digitally signed.	<u>H</u> ave Dis	k
Lell me why driver signing is in	portant	
	< Back Next > Can	cel
		CT-014

鈕。



STEP 12:	點擊 Look in:	📋 My Documents	• 中的 • 選擇路徑	0

Look in:	My Documents	<u> </u>	BB	*
File <u>n</u> ame:	*.inf		-	<u>O</u> pen

STEP 13: 若在 STEP 2 中沒有更改安裝路徑,INF 檔通常位於 "C:\DAQPro\DIO\_WIN2K\Inf"。

ocate File			? >
Look in: 🔀	Inf	- 0 1 🛤	
DIO24 DIO48 DIO64 DIO96 DIO14 P8R80 P16R1	My Recent Documents Desktop My Documents My Computer Local Disk (C:) DAQPro DAQPro DIO_WIN2K Local Disk (D:) BOOT (E:) My Network Places		
File <u>n</u> ame:	DI0144.INF		<u>O</u> pen
Files of type:	Setup Information (*.inf)	Ŧ	Cancel

### STEP 14:在"C:\DAQPro\DIO\_WIN2K\Inf"中,選取 <mark>"P8R8DIO.INF。"</mark> 然

後點擊 "<u>Open</u>" 按鈕。

ocate File			? ×
Look jn: 🔀	) Inf	- 3 🕫 🖻	<del>.</del>
DIO24.IN DIO48.IN DIO64.IN DIO64.IN DIO96.IN DIO144.II P8R8DIO	= = = VF INF O.INF		
File <u>n</u> ame:	P8R8DIO.INF	•	<u>O</u> pen
Files of type:	Setup Information (".inf)	<u> </u>	Cancel

<mark>STEP 15</mark>:點擊 <mark>"OK"</mark> 按鈕。

nstall Fr	om Disk	
H	Insert the manufacturer's installation disk, and then make sure that the correct drive is selected below.	OK Cancel
	Copy manufacturer's files from:	
	C:\DAQPro\DI0_WIN2K\Inf	Browse

STEP 16<sup>:</sup>選擇 "ICPDAS P8R8-DIO Digital I/O Card"。 並點擊 "<u>N</u>ext>" 按

鈕。

d Hardware Wizard			
Select the device driver you want to in	nstall for this hard	dware.	EU .
Select the manufacturer and model of y have a disk that contains the driver you	your hardware devic u want to install, clicl	e and then c k Have Disk.	lick Next. If you
Model			
ICPDAS DIO-64 Digital I/O Card			
ICPDAS DIU-36 Digital I/U Card			
ICPDAS P8R8-DIO Digital I/O Card			
This driver is not digitally signed!		ļ	<u>H</u> ave Disk
Tell me why driver signing is important			

STEP 17:點擊 <mark>"<u>N</u>ext>"</mark> 按鈕。





Security	Alert - Driver Installation
1	The driver software you are installing for: ICPDAS P8R8-DIO Digital I/O Card
	has not been properly signed with Authenticode(TM) technology. Therefore, Windows cannot tell if the software has been modified since it was published. The publisher's identity cannot be verified because of a problem:
	The third-party INF does not contain digital signature information. Do you still want to install this driver software?           Yes         No         More Info



Add Hardware Wizard	
	Completing the Add Hardware Wizard The following hardware was installed: ICPDAS P8R8-DIO Digital 1/0 Card Windows has finished installing the software for this device.
	To close this wizard, click Finish.



點選滑鼠右鍵,選取 "Properties" 選項。



STEP 21:請	選 <mark>"Hardware</mark> "	:請選	。點擊	"Device Manager"	中的	" <u>D</u> evice Manager'
	· -		•	U		—

按鈕。





🖳 Device Manager	
Eile Action View Help	
$\leftrightarrow \rightarrow   \blacksquare   \square$	
E ISER-88CLITSNIEN	
E Computer	
DAQCard	
主 🥪 Disk drives	
🕀 😼 Display adapters	
DVD/CD-ROM drives	
E - Floppy disk controllers	
IDE ATA/ATAPI controllers	
Keyboards	
Holicols     Holicols     Holicols     Holicols     Holicols	
Ports (COM & LPT)	
🕀 🗰 Processors	
🗄 🧐 Sound, video and game controllers	
🗄 🚽 System devices	
표 🕰 Universal Serial Bus controllers	

STEP 23<sup>:</sup>:點取DAQCard左方的 🗄 符號,選取 <mark>"ICPDAS P8R8-DIO Digital I/O</mark>

Card"點擊滑鼠右鍵,選取 "P<u>r</u>operties" 選項。



STEP 24: 進入到 ICPDAS P8R8-DIO Digital I/O Card Properties 中,選取 "I/O

Range" •

ICPDAS	P8R8-D10 Digital I/O Card	
<u>R</u> esource settings	5.	
Resource type	Setting	
🚯 I/O Range	0200 - 020F	
Setting based on:	Current configuration	
	<b>F u</b>	Change Setting
	I Use automatic settings	

STEP 25<sup>:</sup>取消 <mark>"Use automatic settings"</mark> 選取,然後點擊右方 "<u>C</u>hange

<mark>Setting..."</mark> 按鈕。

	i P8R8-DIO Digital I/O Card	
lesource setting:	5.	
Resource type	Setting	
🌐 I/O Range	0200 - 020F	
ietting <u>b</u> ased on:	Current configuration	
	$\sim$	ne Setting
	Use automatic settings	je betting

STEP 26:進入到Edit Input/Output Range中,<mark>"<u>V</u>alue"</mark>的值為 0200-020F。

dit Input/Output Range	<u>? &gt;</u>
Enter the input/output range you would like to s	et for this device.
You may either enter a specific range and the n will be automatically selected, or you may select up and down arrows.	earest valid range a range using the
This resource is assigned to the following child o	device(s):
Value: 0200 - 020F	
Warning: The setting you have chosen conflic following device(s):	cts with the
PCI bus	
	-

STEP 27: P8R8-DIO卡的Address其I/O Range Value的預設值為 300,因此我

們需將 "<u>V</u>alue" 值調至 0300-030F。然候點擊 "OK" 按扭。

詳細的 Address Setting 與 I/O Range Value 的對應關係,請參考 P8R8-DIO 手冊中的 Address Setting。

dit Input/Output Range	? ×
Enter the input/output range you would like to set fo	r this device.
You may either enter a specific range and the neare will be automatically selected, or you may select a ra up and down arrows.	st valid range nge using the
This resource is assigned to the following child devic	ce(s):
Value: 0300 - 030F	with the
following device(s):	
ОК	Cancel



arning	×
Warning: The setting you have chosen conflicts with anothe To select a different resource setting, click No. To continue, Yes No	er device. , click Yes.
	Warning: The setting you have chosen conflicts with anothe To select a different resource setting, click No. To continue,

STEP 29:此時 I/O Range 的 Setting 已經變為 0300-030F,點選 "OK" 按扭。

Resource type	Setting	
😫 I/O Range	0300 - 030F	
Setting <u>b</u> ased on:	Current configuration	<u>.</u>
	Use automatic settings	nge Setting
Conflicting device	list:	

STEP 30: Creating a Forced Configuration對話盒會跳出。如果繼續動作,這些設定將會分配到ISA卡上。點選 "Yes" 按鈕。

Creating	a Forced Configuration
<u>.</u>	You adjusted one or more resource settings manually. If you continue, these settings will be assigned to the device. Do you want to continue?
	<u>Y</u> es <u>N</u> o

STEP 31:選擇 "Start→Shut Down", 重新啟動您的電腦。





pyright ©	Windows Se Enterprise Edition	erver 2003	Mic
	What do you want the computer to do	5?	
9	Restart		
	Ends your session, shuts down Windo Windows again.	ws, and starts	
Shutdo	wn Event Tracker Select the option that best describes v shut down the computer	why you want to	
	Option:	Planned	
	Hardware: Maintenance (Planned)	-	
	A restart or shutdown to service hard system.	ware on the	

## 確認 ISA 板卡已取得正確的資源分配

STEP 1: 請至"Start→My Computer"點選滑鼠右鍵,選取"Properties"選

項。

	Administrator				
	Manage Your Server	💓 My Compute	Open		
	Conmand Prompt	Control Panel	Explore Search Manage		
	💢 Windows Explorer	Administrative	Map Network Drive Disconnect Network Drive		
	1 Paint	Help and Supr	Show on Desktop Rename		
	Notepad	Search	Properties		
	🥹 Windows Update	7 <u>R</u> un			
	All grograms 🔸				
	Petrant 103 @ DD	Log Off	Shyt Down		
STEP 2:選擇 <mark>"Ha</mark>	rdware" 。 然	後點擊	"Device	Manager"	中的 <mark>Device</mark>
Manager 按鈕。					

Advanced		Automatic	Updates	Hemote
General		Computer N	Computer Name	
.dd Har	dware Wizan	d		
R	The Add H	ardware Wizard he	lps you install h	ardware.
			Add <u>H</u> ar	dware Wizard
evice l	Manager			
	The Device Manager lists all the hardware devices installed on your computer. Use the Device Manager to change the properties of any device.			
	Driv	rer <u>S</u> igning	<u>D</u> evice	e Manager
lardwar	e Profiles			
I	Hardware p different ha	profiles provide a w irdware configuratio	ay for you to se ons.	t up and store
			Hardw	are <u>P</u> rofiles

STEP 3:點取DAQCard左方的由符號,選取 <mark>"ICPDAS P8R8-DIO Digital I/O</mark>

Card",點擊滑鼠右鍵選取 "Properties" 選項。



<u>STEP 4</u>:進入ICPDAS P8R8-DIO Digital I/O Card Properties中,查



<mark>Setting..."</mark> 按鈕。

ICPDAS P8R8-DIO	Digital I/O Card Properties	? ×
General Driver	Resources	
	P8R8-DIO Digital I/O Card	
<u>R</u> esource settings	ε	
Resource type	Setting	
I/O Range	0300 - 030F	
Setting based on:	Current configuration	<b>-</b>
coung gated on	Use automatic settings         Change Setting	
Conflicting device	list:	
No conflicts.		×
	OK Car	ncel



Edit Input/Output Range				
Enter the input/output range you would like to set for this device.				
You may either enter a specific range and the nearest valid range will be automatically selected, or you may select a range using the up and down arrows.				
This resource is assigned to the following child device(s):				
Value: 0350 - 035F Conflict information The setting you have chosen does not conflict with any other devices.				
No devices are conflicting.				
OK Cancel				

STEP 6:點擊 <mark>"OK"</mark> 按鈕。

ICPDAS P8R8-DIO I	Digital I/O Card Propert	ies	<u>? ×</u>
General Driver F	Resources		
	P8R8-DIO Digital I/O Card		
Resource settings:			
Resource type	Setting		
I/O Range	0350 - 035F		
Cotting based on:	Concept a surface setting		
setting <u>b</u> ased on.	Current configuration		
	Use automatic settings	<u>C</u> hang	e Setting
Conflicting device	list:		
No conflicts.			×
		ОК	Cancel

STEP 7: Creating a Forced Configuration對話盒將會跳出。如果繼續動作, 這些設定將會分配到ISA卡上。點選 "Yes" 按鈕。

Creating	a Forced Configuration 🔀			
	You adjusted one or more resource settings manually.			
•	If you continue, these settings will be assigned to the device.			
	Do you want to continue?			
	<u>Y</u> es <u>N</u> o			

STEP 8:點擊 <mark>"OK"</mark> 按鈕,

iystem Properties						
Advanced General	Automatic Upo Computer Nam	lates	Remote   Hardware			
Add Hardware	Add Hardware Wizard The Add Hardware Wizard helps you install hardware. Add <u>H</u> ardware Wizard					
Device Manag The on y prop	Device Manager         The Device Manager lists all the hardware devices installed on your computer. Use the Device Manager to change the properties of any device.         Driver Signing					
Hardware Profiles Hardware profiles provide a way for you to set up and store different hardware configurations. Hardware <u>P</u> rofiles						
	OK	Cancel	Apply			

STEP 9: 當在"Step 5"中調整了I/O address range請重新啟動電腦。I/O address range起始位址必須與板卡的位址dip-switch設定一致,否則無法正確驅動硬 體。請參考硬體手冊中"Address Setting"章節了解如何設定板卡位址。