Resource Checking

PCI/ISA DAQ card

[For Windows 95/98/NT/2000]

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Table of contents

1	PCI DAQ card with Win 95/98	3
2	ISA DAO card with Win 95/98	6
3	PCI/ISA DAQ card with Win NT	11
4	PCI/ISA DAQ card with Win 2000	17

1 PCI DAQ card with Win 95/98

Please follow the following figures to check the resource if it has no conflicts?



Figure 1-1. The menu "Start".

- Click the button "Start".
- Select the menu items "Settings".
- Select the menu items "Control Panel".



Figure 1-2. The window "Control Panel". Double click the item "System" in the folder "Control Panel".

System Properties ?X
General Device Manager Hardware Profiles Performance
C View devices by type C View devices by connection
B B CDROM
CPDAS, PCI-TMC12 Card Disk drives
Book Controllers Book Controllers
E - 2 Keyboard E - D Monitors
B- Ports (COM & LPT)
E G Universal serial bus controller
Properties Retresh Remove Print
OK Cancel

Figure 1-3. The window "System properties".

- Select the page "Device Manager".
- Select the device "ICPDAS, PCI-TMC12 Card" under the item "DAQCard".
- Click button "Properties" to see the detailed information.

Some PCI cards may be under item "Other Devices".

PDAS, PCFTMC12 C	ard Properties	? ×
General Driver Res	ources	
	>FTMC12 Card	
I⊽ Use automatic settin	igs	
Setting based on:	Basic configuration 0000	7
Resource type	Setting	-
Memory Range Input/Output Range	10 F4000000 - F400007F e E800 - E87F	
Conflicting device list		
No conflicts.		*
		<u>_</u>
	OK	Cancel

Figure 1-4. The detailed information of PCI DAQ card.

- Select the page "Resources".
- Please ensure that this device has no conflicts with other devices.
- Refer to the list box "Conflicting device list:" if it is "No conflicts"?

If the IRQ number has conflicts with other devices, the user must not use the function INTERRUPT and DMA with the DAQ card.

If the DMA number has conflicts with other devices, the user must not use the function DMA with the DAQ card.

If the "Input/Output Range" has conflicts with other devices, this DAQ card will not works.

The user may need to free some resource for the PCI DAQ card by unplug some other devices to prevent the conflicts.

2 ISA DAQ card with Win 95/98

Please follow the following figures to check the resource if it has no conflicts?



Figure 2-1. The menu "Start".

- Click the button "Start".
- Select the menu items "Settings".
- Select the menu items "Control Panel".



Figure 2-2. The window "Control Panel". Double click the item "System" in the folder "Control Panel".

System Properties ? 🗙
General Device Manager Hardware Profiles Performance
C View devices by type C View devices by connection
Display adapters Section 2015 Section 2015
Hard disk controllers
Monitors Mouse
Ports (COM & LPT) SCSI controllers
System devices General serial bus controller
Properties Refresh Remove Print
OK Cancel

Figure 2-3. "Device Manager".

- Select the page "Device Manager".
- Select the item "Computer".
- Click the button "Properties".

Computer P	Properties	? ×
View Reso	urces Reserve Resources	
C Interru	pt_request (IRO) C Direct memory access gutput (I/O) C Memory	(DMA)
Setting	Hardware using the setting	▲
	Systemtimer	
23 01	Standard 101/102-Key or Microsoft Natural Keyt	board
E 02	Programmable interrupt controller	
J 03	Communications Port (COM2)	
J 04	Communications Port (COM1)	
6 05	Intel 82371AB/EB PCI to USB Universal Host Co	ontroller
E 05	IRQ Holder for PCI Steering	
606	Standard Floppy Disk Controller	
1 Silon		
	0	K. Cancel

Figure 2-4. "View Resources".

The user must check the resource IRQ if the ISA DAQ card has no conflicts with other devices?

The IRQ of ISA DAQ card will not shown in the above window. And the user must select the IRQ number of ISA DAQ card by setting the jumper. And the IRQ number must not listed in the above window to prevent the conflicts.

If the Windows 95/98 has no additional IRQ to be used by the ISA DAQ card, the user may need to unplug some other devices to free the IRQ resource. Or, the user must not uses the function INTERRUPT and DMA.

Computer Propertie	8\$? ×
View Resources	Reserve Resources	
C Interrupt reque	st (IRO) C Direct memory access (DMA)	
Setting	Hardware using the setting	
📃 0000 - 000F	Direct memory access controller	
📃 0010 - 001F	In use by unknown device.	
9020 - 0021	Programmable interrupt controller	
📃 0022 - 003F	In use by unknown device.	
📃 0040 - 0043	System timer	
📃 0044 - 005F	In use by unknown device.	
20060 - 0060	Standard 101/102-Key or Microsoft Natural Keyboard	
0061 - 0061	System speaker	-1 U
0000 0000		<u> </u>
	OK Can	cel

Figure 2-5. "View Resources".

• Click the item "Input/Output (I/O)" to see the resource.

The user must check the resource "Input/Output (I/O)" address if the ISA DAQ card has no conflicts with other devices?

The "Input/Output (I/O)" address of ISA DAQ card will not shown in the above window. And the user must select the "Input/Output (I/O)" address of ISA DAQ card by setting the switch. And the "Input/Output (I/O)" address must not listed in the above window to prevent the conflicts.

If the Windows NT has no additional "Input/Output (I/O)" address to be used by the ISA DAQ card, the user MUST to unplug some other devices to free the "Input/Output (I/O)" address resource.

Computer Properties		? ×
View Resources Reserve Reso	ources	
C Interrupt (IRO) C Input/output (I/O)	<u>Direct memory access (DMA)</u> <u>Memory</u>	
Setting Hardware using the s	setting	
02 Standard Floppy Dis	k Controller	
. 04 Direct memory acces	ss controller	
		- 11
	OK Ce	ncel

Figure 2-6. "View Resources".

• Click the item "Direct memory access (DMA)" to see the resource DMA.

The user must check the resource "Direct memory access (DMA)" if the ISA DAQ card has no conflicts with other devices?

The "Direct memory access (DMA)" of ISA DAQ card will not shown in the above window. And the user must select the "Direct memory access (DMA)" number of ISA DAQ card by setting the jumper. And the "Direct memory access (DMA)" number must not listed in the above window to prevent the conflicts.

If the Windows NT has no additional "Direct memory access (DMA)" to be used by the ISA DAQ card, the user may need to unplug some other devices to free the "Direct memory access (DMA)" resource. Or, the user must not uses the function DMA.

3 PCI/ISA DAQ card with Win NT

Please follow these figures to check the resource on Windows NT. The user may need to free the resource by unplug some other devices If the DAQ card have been conflicted.



Figure 3-1. Click the button "Start".

- Select the menu items "Programs".
- Select the menu items "Administrative Tools (Common)".
- Select the menu items "Windows NT Diagnostics".

Vers	ion	System	Displ	ey	Drives		Memory	/	Services
	Resource	ces		Envir	onment			Netv	vark.
							Include	HAL re	sources F
RQ	Device							Bus	Type
01	i8042pr	t						0	Isa
13	Serial							0	lsa
04	Serial							0	lsa
15	TMC12							0	Pci
36	Floppy							0	Isa
10	DM031	94						0	Pci
12	i8042pr	t						0	lsa
14	atapi							0	lsa
15	atapi							0	lsa
	IDO	UOP	and 1	D	ua I	M	emoni	1	Devices

Figure 3-2. Click the page "Resources".

The user must check the resource IRQ if the PCI/ISA DAQ card has no conflicts with other devices?

The IRQ of ISA DAQ card will not shown in the above window. And the user must select the IRQ number of ISA DAQ card by setting the jumper. And the IRQ number must not listed in the above window to prevent the conflicts.

If the Windows NT has no additional IRQ to be used by the PCI/ISA DAQ card, the user may need to unplug some other devices to free the IRQ resource. Or, the user must not uses the function INTERRUPT and DMA.

Version	System [Display	Drives	Memory	Services
Resou	irces	Envi	ronment	1	letwork.
				Include HA	L resources
Address	Device			Bus	Type 🔺
0060 - 0060	i8042prt			0	lsa.
0064-0064	i8042prt			0	lsa.
0170-0177	atapi			0	lsa.
01CE - 01CF	VgaSave			0	Pci
01F0-01F7	atapi			0	Isa.
02F8-02FE	Serial			0	lsa.
0376 - 0376	atapi			0	lsa.
0378-037A	Parport			0	lsa.
03B0 - 03BB	VgaSave			0	Pci
03C0-03CF	S3Inc			1	Pci
03C0 - 03DF	VgaSave			0	Pci
03D4-03DB	S3Inc			1	Pci
03F0-03F5	Floppy			0	lsa.
03F6 - 03F6	atapi			0	Iso.
03F7 - 03F7	Floppy			0	lsa.
03F8 - 03FE	Serial			0	Isa.
D800 - D8FF	DMX3194			0	Pci
DCM-DC	TMC12			n	Poi 💻
IRQ	I/O Port		MA	Memory	De⊻ices

Figure 3-3. Click the button "I/O Port".

The user must check the resource I/O Port address if the PCI/ISA DAQ card has no conflicts with other devices?

The I/O Port address of ISA DAQ card will not shown in the above window. And the user must select the I/O Port address of ISA DAQ card by setting the switch. And the I/O Port address must not listed in the above window to prevent the conflicts.

If the Windows NT has no additional I/O Port address to be used by the PCI/ISA DAQ card, the user MUST to unplug some other devices to free the I/O Port address resource.

jile	indows N ∐elp	T Dia	ignostics -	11GARY					
	Version Re	source	Bystem es	Disploy	n Driv Environmen	nes	Memory	Netw HAL re	Services vark
1	Chann	Port	Device					Bus	Туре
	02	D	Floppy					0	Ise
	IRO		I/O Po	d E	DMA	_	Memory		Devices
			Properties	E	Betresh	1	Print		OK

Figure 3-4. Click the button "DMA".

The user must check the resource DMA if the PCI/ISA DAQ card has no conflicts with other devices?

The DMA of ISA DAQ card will not shown in the above window. And the user must select the DMA number of ISA DAQ card by setting the jumper. And the DMA number must not listed in the above window to prevent the conflicts.

If the Windows NT has no additional DMA to be used by the PCI/ISA DAQ card, the user may need to unplug some other devices to free the DMA resource. Or, the user must not uses the function DMA.



Figure 3-5. The window of "Service Control Manager" pops up when some service or driver failed.

In this case, the user must check the "Event Viewer" of Windows NT to find out the problems. Please follows the following figures to see the detailed informations.



Figure 3-6. Click the button "Start".

- Select the menu item "Programs".
- Select the menu item "Administrative Tools (Common)".
- Select the menu item "Event Viewer".

📲 Event Vie	wer-System I	Log on \\GARY				_ 🗆 🗙
Log ⊻iew	Options Help	1				
Date	Time	Source	Category	Event	User	C
① 5/13/99	4:39:44 PM	Srv	None	2013	N/A	
5/13/99	4:34:42 PM	Service Contro	Mar None	7000	N/A	
5/13/99	4:34:39 PM	NPort	None	4	N/A	
5/13/99	4:34:39 PM	NPort	None	4	N/A	
5/13/99	4:34:39 PM	NPort	None	4	N/A	
13/13/99	4:34:39 PM	NPort	None	4	N/A	
5/13/99	4:34:39 PM	NPort	None	4	N/A	
5/13/99	4:34:39 PM	NPort	None	4	N/A	
5/13/99	4:34:39 PM	NPort	None	4	N/A	
5/13/99	4:34:39 PM	NPort	None	4	N/A	
13/13/99	4:34:39 PM	NPort	None	4	N/A	
1 5/13/99	4:34:39 PM	NPort	None	4	N/A	
13/13/99	4:34:39 PM	NPort	None	4	N/A	
5/13/99	4:34:39 PM	NPort	None	4	N/A	
5/13/99	4:34:39 PM	NPort	None	4	N/A	
5/13/99	4:34:39 PM	NPort	None	4	N/A	
5/13/99	4:34:39 PM	NPort	None	4	N/A	
5/13/99	4:34:39 PM	NPort	None	4	N/A	
5/13/99	4:34:39 PM	NPort	None	3	N/A	_
5/13/99	4:34:39 PM	NPort	None	2	N/A	
5/13/99	4:34:39 PM	Service Contro	Mor None	7000	N/A	*

Figure 3-7. The window "Event Viewer".

The user can double-click on the item to see the detailed informations.

Event Detai			×
Date: Time: User: Computer: Description	5/13/99 4:34:42 PM N/A GARY 1: 2 service failed to start due to	Event ID: Source: Type: Category: the following	7000 Service Control Manager Error None
The syste	m cannot find the device spec	ified.	-
	Bytes C Words	Next	⊭ F Help

Figure 3-8. The window "Event Detail". The user can refer to the message of the field Description to find out the (other) problems.

4 PCI/ISA DAQ card with Win 2000

Please follow these figures to check the resource on Windows 2000. The user may need to free the resource by unplug some other devices If the DAQ card have been conflicted.



Figure 4-1. Open the "Computer Management".

- Right-Click the icon "My Computer".
- Select the menu item "Manage".
- The "Computer Management" will popup, refer to figure 4-2.

🖳 Computer Management				
] Action View Tools] ← → 🔂	• 🗇 🗗) 🖫 😰 🗍 🖬 📽 🔊 🔌		
Tree	IRQ Num	Device		
Computer Management (Local) System Tools System Tools System Event Viewer System Summary System Summary System Summary System Summary System Summary System Summary System Conflicts/Sharing DMA Software Resources Software Internet Explorer 5 Software Environment Software Internet Explorer 5 Software Environment Software Environment	14 15 10 11 0 1 4 3 6 8 13 12	Primary IDE Channel Secondary IDE Channel Intel 82371AB/EB PCI to US. ICPDAS PIO Series Card Realtek RTL8029(AS) PCI Et. System timer PC/AT Enhanced PS/2 Keyb. Communications Port (COMI Communications Port (COMI Standard floppy disk controli System CMOS/real time dook Numeric data processor Logitech PS/2 Port Mouse		

Figure 4-2. The "IRQs" resources under "Computer Management".

Select the "IRQs" resources under "<u>Computer Management (Local)</u> / <u>System Tools</u> / <u>System Information</u> / <u>Hardware Resources</u> / <u>IRQs</u>".

The user must check the resource IRQ if the PCI/ISA DAQ card has no conflicts with other devices?

The IRQ of ISA DAQ card will not shown in the above window. And the user must select the IRQ number of ISA DAQ card by setting the jumper. And the IRQ number must not listed in the above window to prevent the conflicts.

If the Windows 2000 has no additional IRQ to be used by the PCI/ISA DAQ card, the user may need to unplug some other devices to free the IRQ resource. Or, the user must not uses the function INTERRUPT and DMA.

💂 Computer Management		_ 🗆 ×
Action View Tools ← → 🔂	i 🗇 🖨 🗈 🖫 😰 🛛 🖬 📽 😭 🔍	
Tree	Address Range Device	Stat
Computer Management (Local) System Tools System Tools System Information System Summary Hardware Resources Conflicts/Sharing DMA Forced Hardware Manual Components Components	Address Range Device 0x0A79-0x0A ISAPNP Read Data Port 0x0279-0x02 ISAPNP Read Data Port 0x0274-0x02 ISAPNP Read Data Port 0x0274-0x02 ISAPNP Read Data Port 0x0170-0x01 IsaPNP Read Data Port 0x01F0-0x01 Primary IDE Channel 0x0170-0x01 Primary IDE Channel 0x0170-0x01 Secondary IDE Channel 0x0376-0x03 Secondary IDE Channel 0xE000-0xE0 Intel 82371AB/EB PCI to US 0xE400-0xE4 Realtek RTL8029(AS) PCI Et 0x0020-0x00 Programmable interrupt con 0x0040-0x00 Programmable interrupt con	Stat ОК ОК ОК ОК ОК ОК ОК ОК ОК ОК
Components Components Software Environment Fig. Software Environment Fig. Internet Explorer 5 Fig. Performance Logs and Alerts Fig. Shared Folders Fig. Shared Folders Fig. Device Manager	0x0000-0x00 Direct memory access contr 0x0081-0x00 Direct memory access contr 0x0087-0x00 Direct memory access contr 0x0089-0x00 Direct memory access contr 0x008F-0x00 Direct memory access contr 0x000F-0x00 Direct memory access contr 0x00C0-0x00 Direct memory access contr 0x0060-0x00 PC/AT Enhanced PS/2 Keyb 0x0064-0x00 PC/AT Enhanced PS/2 Keyb	ж ск ск ск ск ск ск ск ск

Figure 4-3. The "I/O" resources under "Computer Management".

Select the "I/O" resources under "<u>Computer Management (Local)</u> / <u>System Tools</u> / <u>System Information</u> / <u>Hardware Resources</u> / <u>I/O</u>".

The user must check the resource I/O Port address if the PCI/ISA DAQ card has no conflicts with other devices?

The I/O Port address of ISA DAQ card will not shown in the above window. And the user must select the I/O Port address of ISA DAQ card by setting the switch. And the I/O Port address must not listed in the above window to prevent the conflicts.

If the Windows 2000 has no additional I/O Port address to be used by the PCI/ISA DAQ card, the user MUST to unplug some other devices to free the I/O Port address resource.



Figure 4-4. The "DMA" resources under "Computer Management".

Select the "DMA" resources under "<u>Computer Management (Local)</u> / <u>System Tools</u> / <u>System Information</u> / <u>Hardware Resources</u> / <u>DMA</u>".

The user must check the resource DMA if the PCI/ISA DAQ card has no conflicts with other devices?

The DMA of ISA DAQ card will not shown in the above window. And the user must select the DMA number of ISA DAQ card by setting the jumper. And the DMA number must not listed in the above window to prevent the conflicts.

If the Windows 2000 has no additional DMA to be used by the PCI/ISA DAQ card, the user may need to unplug some other devices to free the DMA resource. Or, the user must not uses the function DMA.

The user might need to check the "Event Viewer" of Windows 2000 to find out the problem when some service or driver failed. Please follows the following figures to see the detailed informations.

🖳 Computer Management						
Action View ← → 🖻 🗊 😰 🖏 😫						
Tree	Туре	Date	Time	Source	Cate 🔺	
Computer Management (Local) Computer Management (Local) Composition Application Security System System System System Hardware Resources Components Components Doftware Environment Doftware Environment Doftware System	Warning Error Information Information Information Error Information Information Information Information Information Error Information Error Information Error Information Error Information Information Information Information	2/22/2000 2/22/2000 2/22/2000 2/22/2000 2/22/2000 2/22/2000 2/22/2000 2/22/2000 2/22/2000 2/21/2000 2/21/2000 2/21/2000 2/21/2000	1:34:3 1:23:4 1:23:1 1:23:1 1:23:2 1:21:5 1:13:1 1:10:1 1:10:1 1:10:2 6:49:0 6:33:4 6:31:2 6:31:2	Print NetBT eventlog eventlog Service Control Ma eventlog eventlog Service Control Ma eventlog NetBT eventlog eventlog eventlog	None None	
Performance Logs and Alerts	Serror	2/21/2000	6:31:4	Service Control Ma	None	
	↓Information	2/21/2000	6:29:5	eventlog	Non€▼	

Figure 4-5. The "Event Viewer" under "Computer Management".

Select the "Event Viewer" under "<u>Computer Management (Local)</u> / <u>System Tools</u> / <u>Event Viewer</u> / <u>System</u>".

The user can double-click on the item to see the detailed informations. Please refer to figure 4-6.

Event Proper	ties				? ×
Event					
Date: Time: Type: <u>U</u> ser: <u>C</u> omputer: Description	2/22/2000 13:23 Error N/A GARY	Source: Category: E∨ent ID:	Service Control None 7000	Manager	↑
The PISO s The servic no enabled	service failed to e cannot be sta devices asso	o start due to arted, either t iciated with it	the following erro because it is disal	r: bled or becaus	se it has
Data: © j	<u>Bytes</u> C <u>W</u> or	ds			
					~
		0	IK Ca	ancel	Apply

Figure 4-6. The window "Event Properties".

The user can refer to the message of the field **Description** to find out the (other) problems.

🔜 Computer Management					_ 🗆 ×	
<u>A</u> ction <u>View</u> <u>T</u> ools ← → 1 🖬 🖅 🚭 🕜 🖳 😰 🖬 😅 🗊 🖏						
Tree	Name	Description	Туре	State	Status 🔺	
Computer Management (Local) System Tools Computer Viewer System Information System Summary Harchware Resources	nwinkfwd parallel parport partmgr parvdm pcl	IPX Traffic Forwarde Parallel class driver Parallel port driver PartMgr ParVdm PCI Bus Driver PCID us Driver	Kernel Driver Kernel Driver Kernel Driver Kernel Driver Kernel Driver Kernel Driver	Stopped Running Running Running Running Stopped	2 2 2 2 2 2	
Components Software Environment Orivers	polide pomcia	PCIIde Pomcia ICP PIO Driver	Kernel Driver Kernel Driver Kernel Driver	Stopped Stopped Running	OK OK	
Environment Variables Bobs Network Connections	piso pptpmi ptlink ql 1080	PISO WAN Miniport (PPTP) Direct Parallel Link D q(1080	Kernel Driver Kernel Driver Kernel Driver Kernel Driver	Stopped Running Running Stopped	ок ок ок	
Loaded Modules	d 10wnt d 1240 ◀	QI10wnt qI1240	Kernel Driver Kernel Driver	Stopped Stopped		

There has other informations can be used to check the resources.

Figure 4-7. Select the "Drivers" under "<u>Computer Management (Local)</u> / <u>System Tools</u> / <u>System Information</u> / <u>Software Environment</u> / <u>Drivers</u>".



Figure 4-8. Select the "Device Manager" under "<u>Computer Management</u> (Local) / <u>System Tools</u> / <u>Device Manager</u>".

Double click on the item to popup the detailed informations. Please refer to figure 4-9 to 4-10.

ICPDAS P	IO Series Card Pro	perties			? ×
General	Dri∨er Resources				
7	ICPDAS PIO Series	Card			
	Device type:	Other devices			
	Manufacturer:	ICPDAS Co. LTE)		
	Location:	Location 4 (PCI b	ous 0, device 15, fu	nction 0)	
Device status This device is working properly. If you are having problems with this device, click Troubleshooter to start the troubleshooter. Iroubleshooter					
Device usage:					
			ок	Canc	el

Figure 4-9. The detailed information.

ICPDAS PIO Series Card Properties	? ×
General Driver Resources	
ICPDAS PIO Series Card	
Resource type Setting Input/Output Range E800 - E8FF Memory Range EC000000 - EC000FFF Interrupt Request 10	
Setting <u>b</u> ased on: Current configuration	~
✓ Use automatic settings Change S	Setting
Conflicting device list:	
No conflicts.	*
ОК	Cancel

