



# I/O CARD QUICK START GUIDE

for **ISO-AD32H/AD32L**

Language	English
Version	V1.0
Update	Nov.2008

## 1

### What's on your package?

- One ISO-AD32H/AD32L series card
- One companion ISA CD (V2.1 or later)
- One Quick Start Guide(This document)

## 2

### Installing Windows Driver

#### Follow those steps:

1. Setup the Windows driver. You can get the driver from:




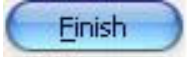
CD:\NAPDOS\ISA\ISO-AD32\

<http://ftp.icpdas.com/pub/cd/iocard/isa/napdos/isa/iso-ad32/>

(The Windows NT driver have support the Windows 2K and windows XP/2003/Vista 32bit version.)



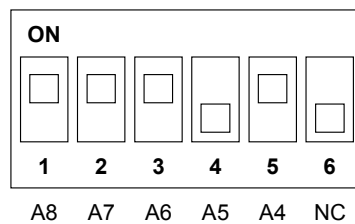
Windows driver only support windows 98/NT/2000 and XP/2003/vista 32-bit versions.

2. Click  button to start installation.
3. Click  button to install driver into the default folder.
4. Click  button to continue installation.
5. Select “**NO, I will restart my computer later**” and then click  button.

# 3

## I/O Base Address & IRQ Setting

- The base address is set from SW1 DIP switch on board:

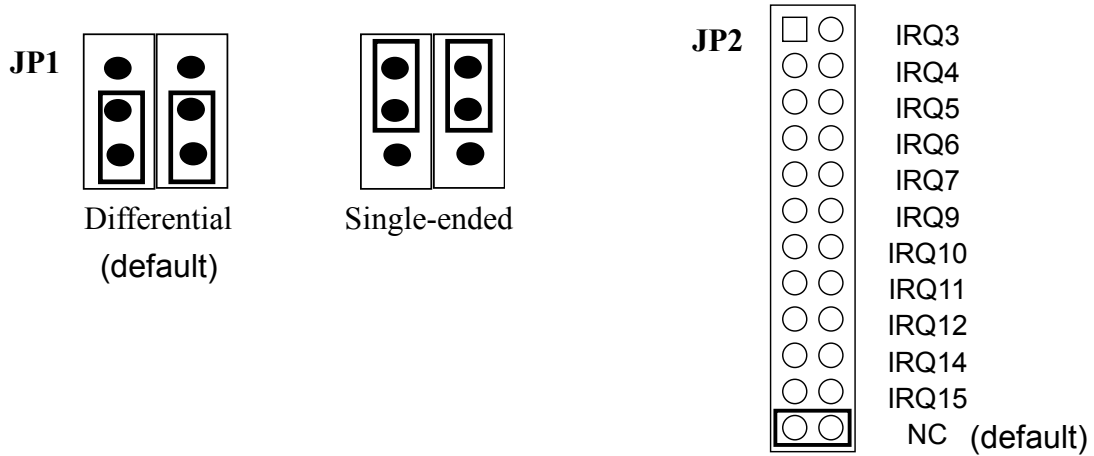


SW1 : BASE ADDRESS

Base Addr	A8	A7	A6	A5	A4
200	on	on	on	on	on
210	on	on	on	on	off
<b>220(☑)</b>	<b>on</b>	<b>on</b>	<b>on</b>	<b>off</b>	<b>on</b>
230	on	on	on	off	off
250	on	on	off	on	off
:	:	:	:	:	:
300	off	on	on	on	on
:	:	:	:	:	:
3F0	off	off	off	off	off

(☑) : default base address is 0x220

➤ **JP1: Analog Input Type Select / JP2: IRQ Channel Selection.**



# 4

## Installing Hardware on PC

**Follow those steps:**

1. Shut down and power off your computer
2. Remove all covers from the computer
3. Select an empty ISA slot
4. Carefully insert your I/O card into the ISA slot
5. Replace the PC covers
6. Power on the computer

After powering-on the computer, continue next process.

# 5

## Pin Assignments

- CN1:Single-Ended Analog Input / Differential Analog Input Connectors.

Pin	Name	Pin	Name
1	AI0	20	AI16
2	AI1	21	AI17
3	AI2	22	AI18
4	AI3	23	AI19
5	AI4	24	AI20
6	AI5	25	AI21
7	AI6	26	AI22
8	AI7	27	AI23
9	AI8	28	AI24
10	AI9	29	AI25
11	AI10	30	AI26
12	AI11	31	AI27
13	AI12	32	AI28
14	AI13	33	AI29
15	AI14	34	AI30
16	AI15	35	AI31
17	Analog Common	36	Analog GND
18	Digital +5V output	37	Digital GND
19	External Trigger Input		

(Single-ended analog input)

Pin	Name	Pin	Name
1	AI0+	20	AI0-
2	AI1+	21	AI1-
3	AI2+	22	AI2-
4	AI3+	23	AI3-
5	AI4+	24	AI4-
6	AI5+	25	AI5-
7	AI6+	26	AI6-
8	AI7+	27	AI7-
9	AI8+	28	AI8-
10	AI9+	29	AI9-
11	AI10+	30	AI10-
12	AI11+	31	AI11-
13	AI12+	32	AI12-
14	AI13+	33	AI13-
15	AI14+	34	AI14-
16	AI15+	35	AI15-
17	Analog Common	36	Analog GND
18	Digital +5V output	37	Digital GND
19	External Trigger Input		

(Differential analog input)

The detail pin assignments information. Please refer to :

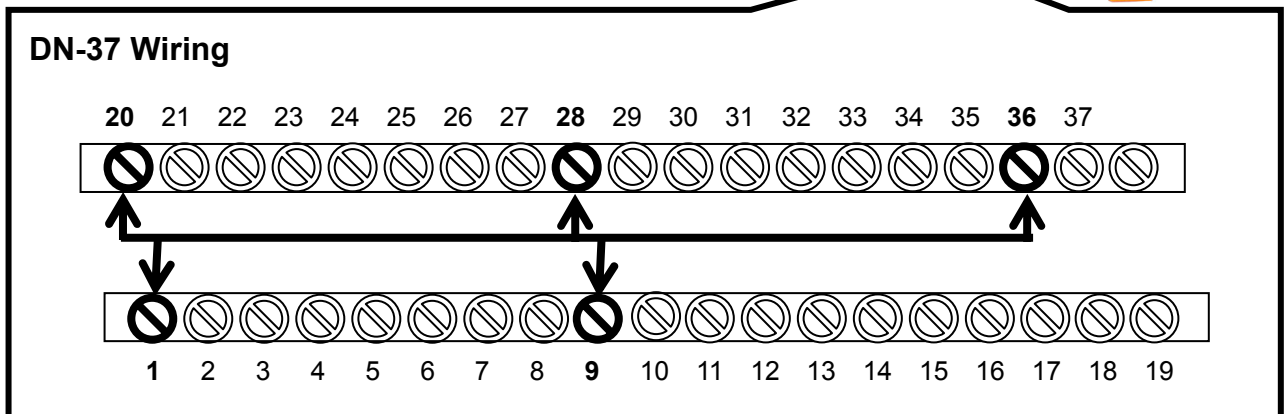
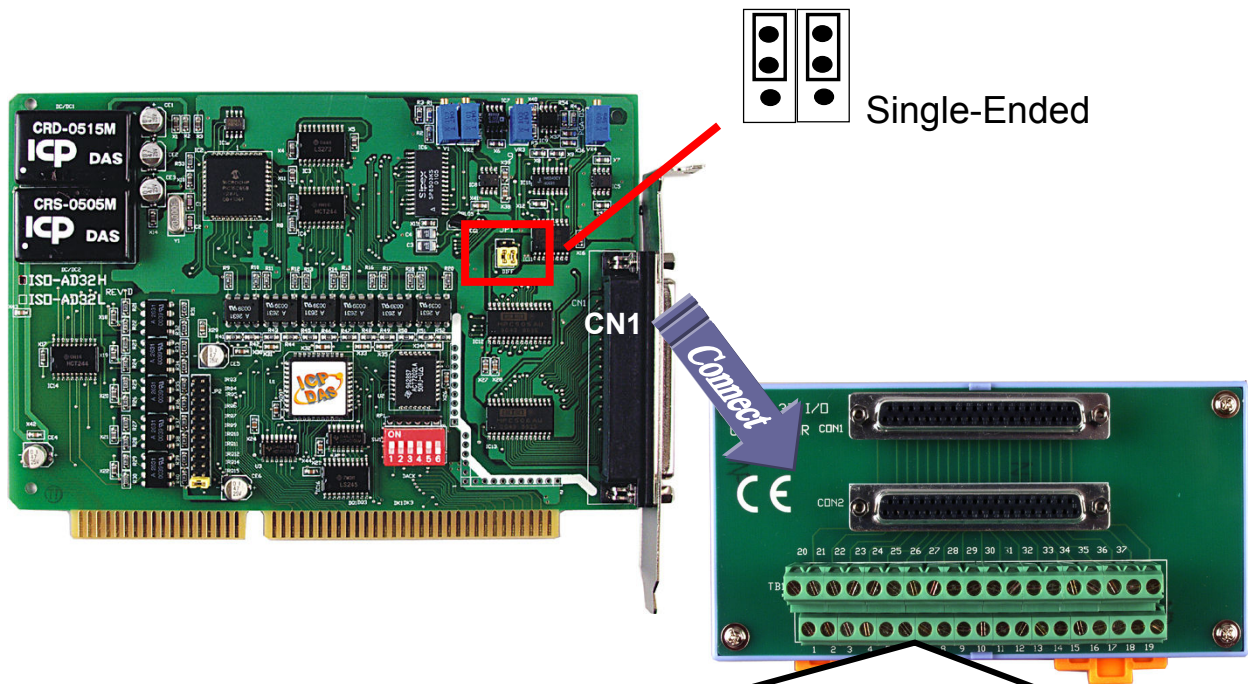
CD:\NAPDOSISA\ISO-AD32\Manual\ISO-AD32.pdf

<http://ftp.icpdas.com/pub/cd/iocard/isa/napdos/isa/iso-ad32/manual/iso-ad32.pdf>

# 6

## Self-Test

1. Use DN-37(Optional) to connect the board CN1.
2. This example for Single-Ended Analog Input.  
AI0 connect to Analog GND (pin1 connect to pin36)  
AI8 connect to Analog GND (pin9 connect to pin36)  
AI16 connect to Analog GND (pin20 connect to pin36)  
AI24 connect to Analog GND (pin24 connect to pin36)



3. Run the ISO-AD32 sample program.

Get the file from(Default):

C:\DAQPro\ISO-AD32\DEMO

4. Check hardware, configuration setting and test Diag function.

1. Check SW1 (Depend on I/O Base Address) and JP1 (Depend on JP1)

2. Click this button to do Diag test.

	Value	Value	Value
Ch: 0,8,16,24			
Ch: 1,9,17,25			
Ch: 2,10,18,26			
Ch: 3,11,19,27			
Ch: 4,12,20,28			
Ch: 5,13,21,29			

Hardware Setting  
sw1: Base (Hex) 220  
JP1 Setting 0: Single-End  
Card Type ISO-AD32L

Configuration Setting  
Uni/Bipolar Bipolar  
Input Range 00: +/- 5.0 v  
Value Style Float

Active Exit

5. Get Diag function test result.

3. Check channel 0, 8, 16, 24 for fixed value. (Take the approximate value for 0.)

4. The other channels value for floating number.

	Value	Value	Value
Ch: 0,8,16,24	-0.002	-0.002	-0.002
Ch: 1,9,17,25	-0.249	-0.161	-0.278
Ch: 2,10,18,26	-0.283	-0.261	-0.413
Ch: 3,11,19,27	-0.508	-0.427	-0.522
Ch: 4,12,20,28	-0.527	-0.396	-0.586
Ch: 5,13,21,29	-0.632	-0.483	-0.701

Hardware Setting  
sw1: Base (Hex) 220  
JP1 Setting 0: Single-End  
Card Type ISO-AD32L

Configuration Setting  
Uni/Bipolar Bipolar  
Input Range 00: +/- 5.0 v  
Value Style Float

Stop Exit

**Complete**

# 7

## Additional Information

✓ **ISO-AD32 Series Card Product page:**

[http://www.icpdas.com/products/DAQ/pc\\_based/iso\\_ad32.htm](http://www.icpdas.com/products/DAQ/pc_based/iso_ad32.htm)

✓ **DN-37(Optional) page:**

[http://www.icpdas.com/products/DAQ/screw\\_terminal/dn\\_37.htm](http://www.icpdas.com/products/DAQ/screw_terminal/dn_37.htm)

✓ **Documents:**

CD:\NAPDOS\ISA\ISO-AD32\manual

<http://ftp.icpdas.com/pub/cd/iocard/isa/napdos/isa/iso-ad32/manual/>

✓ **Software:**

CD:\NAPDOS\ISA\ISO-AD32

<http://ftp.icpdas.com/pub/cd/iocard/isa/napdos/isa/iso-ad32/>

### The ICP DAS Web Site

<http://www.icpdas.com>



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