PCI-AD64 Series Quick Start

v1.0, Dec. 2022

Packing List

In addition to this guide, the package includes the following items:

PCI-AD64 Series

Technical Support

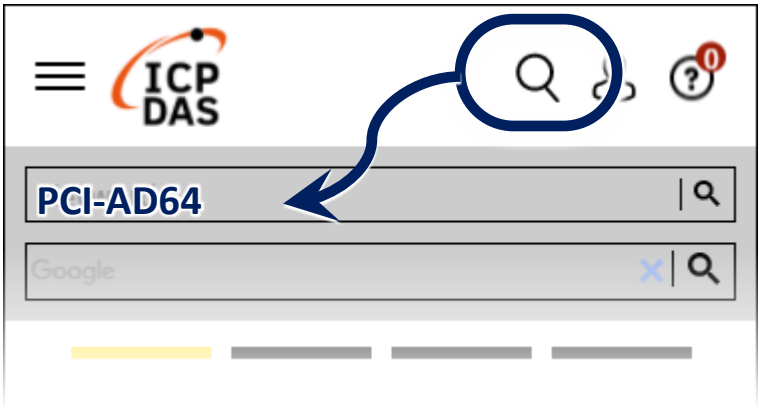
service@icpdas.com

www.icpdas.com

Resources

How to search for drivers, manuals and spec information on ICP DAS website.

- For Mobile Web



- For Desktop Web

Related Information

For more detailed information related to the software manual, hardware manual, PCI-AD64 series Driver & SDK and sample program:

http://www.icpdas.com/en/download/index.php?model=PCI-AD64SU

1 Installing Windows Driver

1) Download or locate the Windows driver.

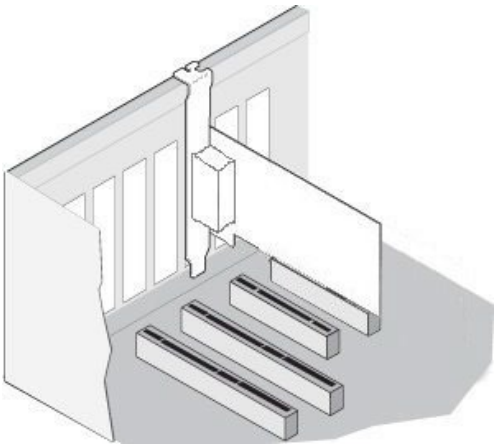
☑ The UniDAQ **driver** supports 32-/64-bit Windows 10/11, which can be found in the
https://www.icpdas.com/en/download/index.php?kw=UniDAQ

2) Click the **"Next>"** button to start the installation.
3) Check your DAQ Card is or not on supported list, then click the **"Next>"** button.
4) Select the installed folder, the default path is **C:\ICPDAS\UniDAQ**, confirm and click the **"Next>"** button.
5) Check your DAQ Card on list, then click the **"Next>"** button.
6) Click the **"Next>"** button on the Select Additional Tasks window.
7) Click the **"Next>"** button on the Download Information window.
8) Select **"No, I will restart my computer later"** and then click the **"Finish"** button.

NOTE:

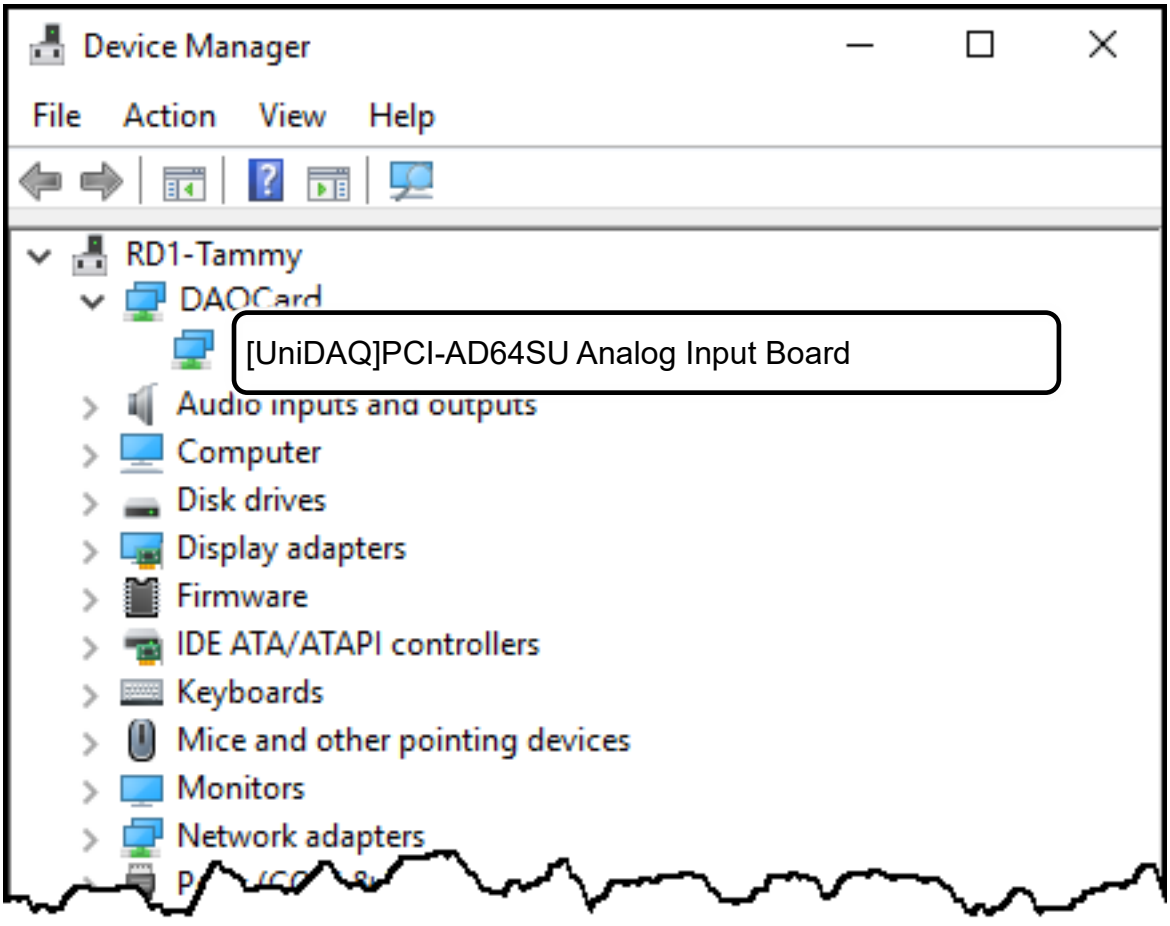
For more detailed information related to driver installation, refer to Chapter 4 "Starting" in the PCI-AD64 series user manual.

2 Installing Hardware on PC



1) Power off the Computer.
2) Remove all covers from the Computer.
3) Select an unused PCI /PCI Express slot.
4) Carefully insert the Card into PCI/PCI Express slot.
5) Replace the Computer Covers.
6) Power on the Computer.
7) The operating system will automatically detect the new hardware and install the necessary drivers after reboot the PC.

8) Open the **"Device Manager"** to verify that the PCI-AD64 Card has been correctly installed and is in the Device Manager, as illustrated on below.



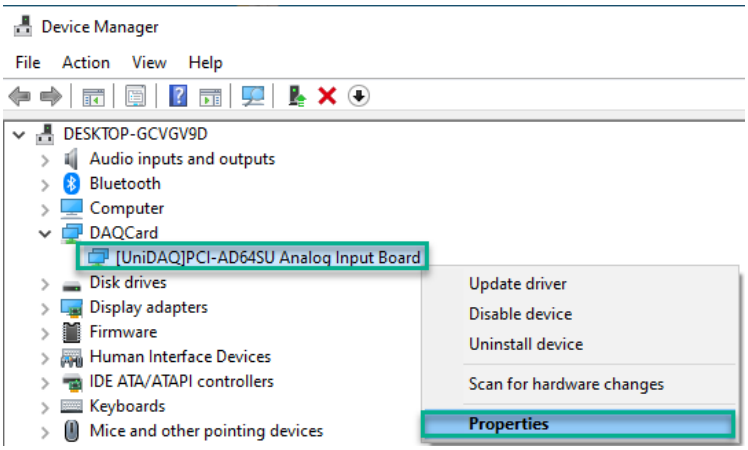
3 Pin Assignments

Pin Assignment		Terminal		No.	Pin Assignment	
S.E.	Diff.				Diff.	S.E.
AI00	AI00+	68		34	AI00-	AI01
AI02	AI01+	67		33	AI01-	AI03
AI04	AI02+	66		32	AI02-	AI05
AI06	AI03+	65		31	AI03-	AI07
AI08	AI04+	64		30	AI04-	AI09
AI10	AI05+	63		29	AI05-	AI11
AI12	AI06+	62		28	AI06-	AI13
AI14	AI07+	61		27	AI07-	AI15
AGND		60		26	AGND	
AI16	AI08+	59		25	AI08-	AI17
AI18	AI09+	58		24	AI09-	AI19
AI20	AI10+	57		23	AI10-	AI21
AI22	AI11+	56		22	AI11-	AI23
AI24	AI12+	55		21	AI12-	AI25
AI26	AI13+	54		20	AI13-	AI27
AI28	AI14+	53		19	AI14-	AI29
AI30	AI15+	52		18	AI15-	AI31
AI32	AI16+	51		17	AI16-	AI33
AI34	AI17+	50		16	AI17-	AI35
AI36	AI18+	49		15	AI18-	AI37
AI38	AI19+	48		14	AI19-	AI39
AI40	AI20+	47		13	AI20-	AI41
AI42	AI21+	46		12	AI21-	AI43
AI44	AI22+	45		11	AI22-	AI45
AI46	AI23+	44		10	AI23-	AI47
AGND		43		9	AGND	
AI48	AI24+	42		8	AI24-	AI49
AI50	AI25+	41		7	AI25-	AI51
AI52	AI26+	40		6	AI26-	AI53
AI54	AI27+	39		5	AI27-	AI55
AI56	AI28+	38		4	AI28-	AI57
AI58	AI29+	37		3	AI29-	AI59
AI60	AI30+	36		2	AI30-	AI61
AI62	AI31+	35		1	AI31-	AI63
					SCSI 68-pin/DB-68-pin	

4 Advanced Configuration

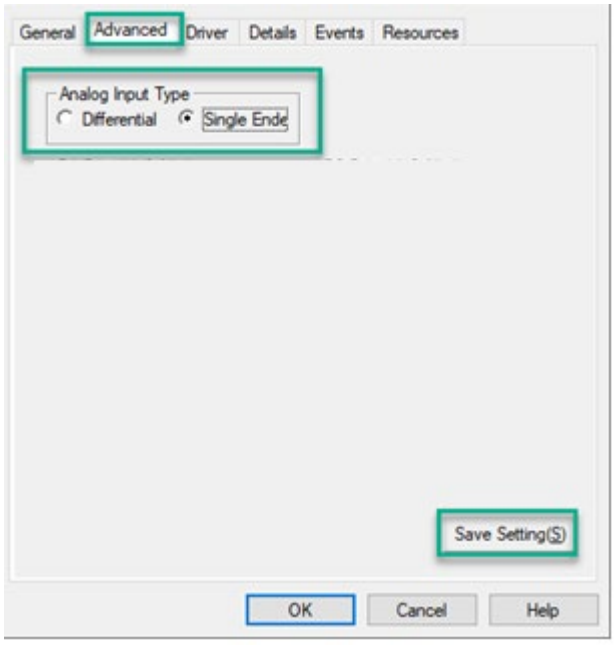
Before beginning the “Self-test”, use the advanced configuration tool in the Windows Device Manager to settings the Analog Input type, the detail configuration is illustrated in the figure below.

1) Open the Windows Device Manager, Right-click PCI-AD64 and select the Properties on popup menu.



2) Click the **Advanced** tab to open the advanced configuration tool. In the Analog Input Type section, select the Single Ended options for execute a self- test.

3) Click the Save Setting(S) button and OK button to complete the configuration.



5 Testing Board

➢ **Prepare for device**

☑ CA-SCSI15-H3 (optional) cable

☑ DN-68A (optional) daughter board

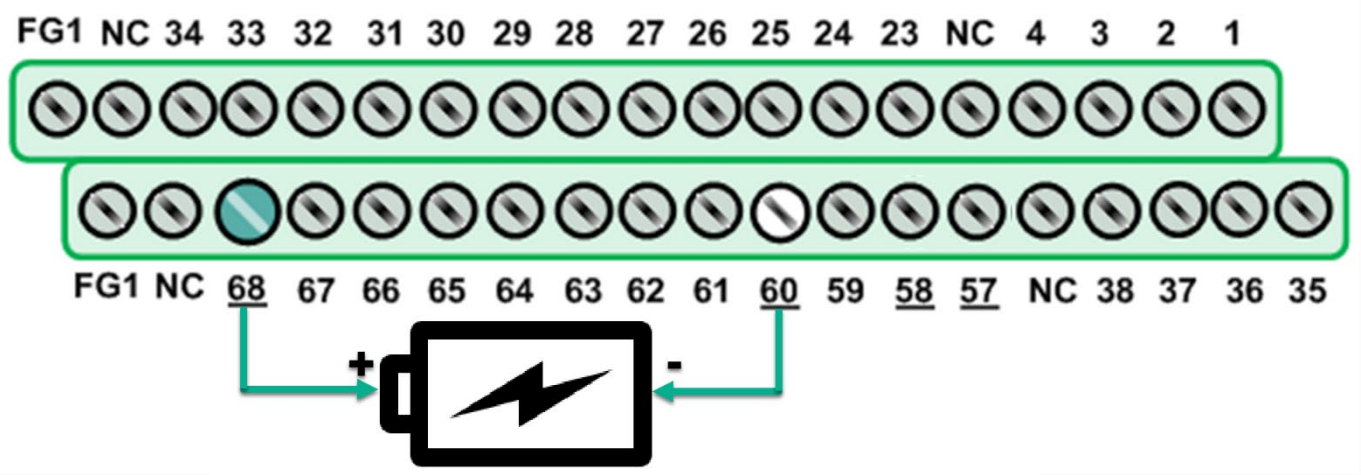
1) Connect the **CON1** to DN-68A board using the **CA-SCSI15-H3** cable.

2) AI functional test and wiring

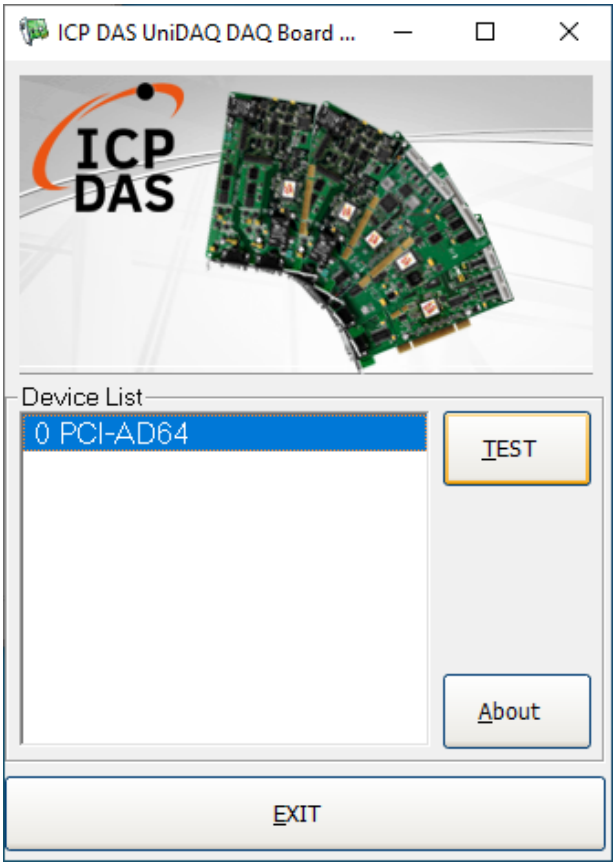
Connect the signal AO channel 0 to AI channel 0, and connect the signals as follows.

Connect the **AI_GND pin (Pin60)** to **battery(-)** on the terminal board

Connect the **AI0 pin (Pin68) to battery(+)** on the terminal board.



3) Launch the UniDAQ Utility program, it was installed in the default folder, it will be located at **“C:\ICPDAS\UniDAQ\Driver”**.



4) Click the **“TEST”** button to start the test.
❶ Click the ”Analog Input” item than click **“SINGLE”** button to get values. Check the voltage is or not equal battery.