

# PCI-TMC12AU/PEX-TMC12A **Quick Start**

v1.0, May 2019

#### What's in the box?



PCI-TMC12AU

PEX-TMC12A







PCI-TMC12AU/PEX-TMC12A

or

**x**1

Quick Start x 1 (This Document) CA-4002 D-Sub Connector x 1

### **Related Information**

For more detailed information related to the user manual and software for UniDAQ Driver & SDK:

http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/unidag/

For more detailed information related to the hardware settings for PCI-TMC12A Series Card:

http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/pci-tmc12a/manual/

CA-2002 Product Page (optional):

http://www.icpdas.com/products/Accessories/cable/cable\_selection.htm

## Installing Windows Driver

1) Download or locate the Windows driver.

☑ The **UniDAQ driver** supports 32-/64-bit Windows XP/2003/2008/7/8/10. It is recommended that new users install this driver, which can be found in the <a href="http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/unidaq/dll/driver/">http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/unidaq/dll/driver/</a>

□ PCI-TMC12 Series Classic Driver supports Windows 98/NT/2K and 32-bit Windows XP/2003/2008/7. it is recommended this driver is installed by customers who have previously installed a PCI-TMC12 series card and are regular users. For more details, refer to: <a href="http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/pci-tmc12a/manual/quickstart/classic/">http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/pci-tmc12a/manual/quickstart/classic/</a>

- 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.

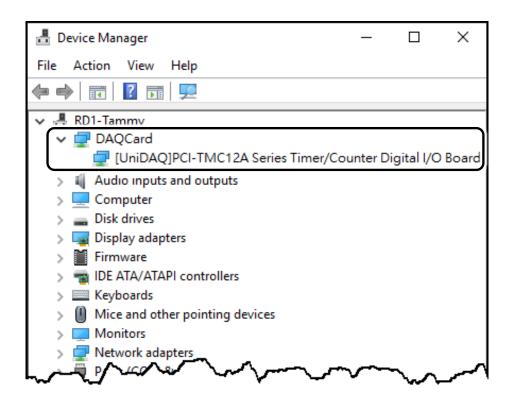
#### **NOTE:**

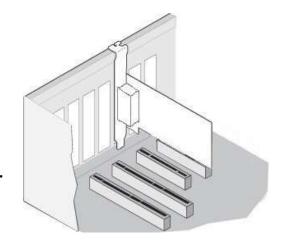
For more detailed information related to driver installation, refer to Chapter 2 "Starting" in the UniDAQ SDK user manual.

# 2

### **Installing Hardware on PC**

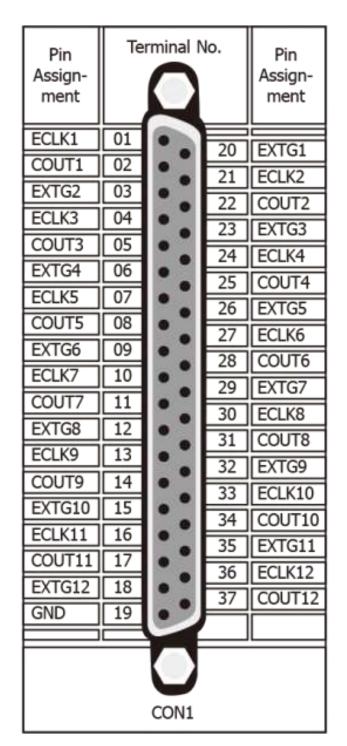
- 1) Power off the Computer.
- 2) Remove all covers from the Computer.
- 3) Select an unused PCI /PCI Express slot.
- 4) Carefully insert the PCI-TMC12AU/ PEX-TMC12A Card into PCI/PCI Express slot.
- 5) Replace the Computer Covers.
- 6) Power on the Computer.
- 7) The operating system will automatically detect the new hardware and install the necessary drivers after reboot the PC.
- 8) Open the "**Device Manager**" to verify that the PCI-TMC12A Series Card has been correctly installed and is in the Device Manager, as illustrated on below.





# 3

## **Pin Assignments**



Pin Assign- ment	Te	ermir	Pin Assign- ment					
DI 0	01	0	0	02	DI 1			
DI 2	03	0	0	04	DI 3			
DI 4	05	0	0	06	DI 5			
DI 6	07	_0	0	08	DI 7			
DI 8	09	0	0	10	DI 9			
DI 10	11	0	0	12	DI 11			
DI 12	13	0	0	14	DI 13			
DI 14	15	0	0	16	DI 15			
GND	17	0	0	18	GND			
+5 V	19	0	0	20	+12 V			
CON2								

Pin Assign- ment	Te	rmir	Pin Assign- ment					
DO 0	01	0	0	02	DO 1			
DO 2	03	0	0	04	DO 3			
DO 4	05	0	0	06	DO 5			
DO 6	07	0	0	08	DO 7			
DO 8	09	0	0	10	DO 9			
DO 10	10	0	0	12	DO 11			
DO 12	12	0	0	14	DO 13			
DO 14	14	0	0	16	DO 15			
GND	16	0	0	18	GND			
+5 V	18	0	0	20	+12 V			
CON3								

### NOTES:

1. ECLKn: External clock source for Counter n

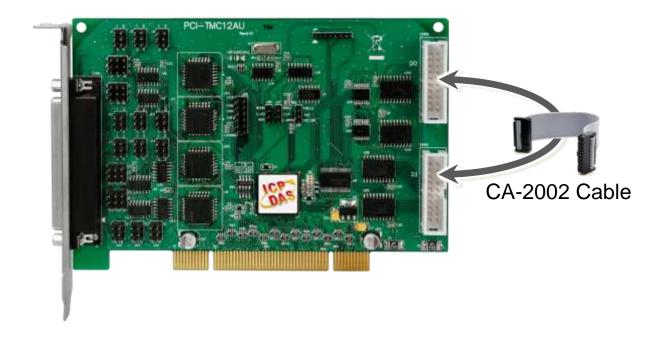
2. EXTGn: External gate control signal for Counter n

3. COUTn: Output of Timer/Counter n

4. All signals are TTL compatible

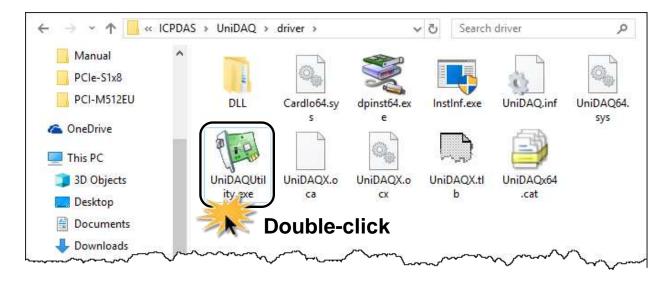
# 4 Testing Board

- Prepare for device
- ☑ CA-2002 (optional) cable
- 1) Connect the CON2 to CON3 on board using the CA-2002 cable.



2) Launch the **UniDAQ Utility** software.

If the UniDAQ Utility was installed in the default folder, it will be located at "C:\ICPDAS\UniDAQ\Driver".



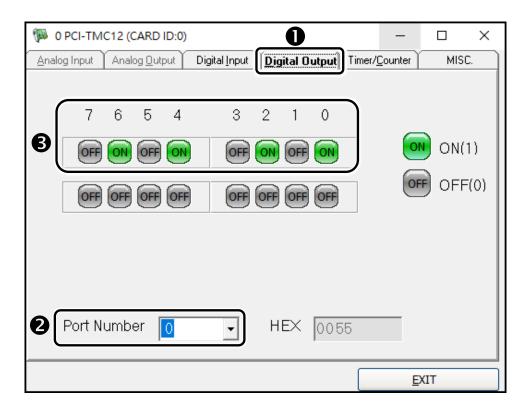
3) Confirm that the PCI-TMC12 Series Card has been successfully installed in the Host system.

**NOTE:** The device numbers start from 0.

4) Click the "**TEST**" button to start the test.



- 5) Check the results of the **Digital Input and Digital Output** functions test.
- Click the "Digital Output" tab.
- 2 Select "Port0" from the "Port Number" drop-down options.
- **❸** Click the **DO channels 0, 2, 4 and 6 buttons**.



- Olick the "Digital Input" tab.
- Select "Port0" from the "Port Number" drop-down options.
- The DI indicators will turn black when the corresponding DO channels 0, 2, 4 and 6 are ON.

