

PCI-M512/M512U

User Manual

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1. Linux Software Installation

The PCI-M512/M512U can be used in linux kernel 2.4.X and 2.6.X. For Linux O.S, the recommended installation and uninstall steps are given in Sec 1.1 ~ 1.2

1.1 Linux Driver Installing Procedure

Step 1: Copy the linux driver "ixpci.tar.gz"(version 0.7.4 or later version) in directory "NAPDOS\Linux" of the CD or from our company website <http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/linux/ixpci.tar.gz> to the linux host that you want to install driver.

Step 2: Decompress the tarball "ixpci.tar.gz".

Step 3: Type `cd' to the directory containing the package's source code and type `./configure` to configure the package for your system.

Step 4: Type `make` to compile the package.

Step 5: Type `./ixpci.inst` to install the PCI driver module and build the device file "ixpciX" in the device directory "/dev" automatically.

1.2 Linux Driver Uninstalling Procedure

Step 1: Type `cd` to the directory containing the package's source code.

Step 2: Type `./ixpci.remove` to remove the PCI driver module.

2. PCI-M512/M512U Demo Programs For Linux

All of demo programs will not work normally if PCI linux driver would not be installed correctly. During the installation process of PCI linux driver, the install-scripts “ixpci.inst” will setup the correct kernel driver. After driver(version 0.7.4 or the later driver version) compiled and installation, the related demo programs, declaration header files for different development environments are presented as follows.

Table 3.1

Driver Name	Directory Path	File Name	Description
Ixpci-0.7.4	examples/pcim512	dio.c	DO from CN1, DI from CN2
		battery_status.c	Show Battery 1, 2 status
		read_sram.c	Read data from 512KB SRAM
		write_sram.c	Write data into 512KB SRAM
		read_write_sram.c	Read/Write 512KB SRAM

2.1 Demo code “dio.c”

This demo program is used to output data from CN1 and read data from CN2.

2.2 Demo code “battery_status.c”

This demo program is used to show PCI-M512 battery1, 2 status.

2.3 Demo code “read_sram.c”

This demo program show PCI-M512 512KB SRAM data.

2.4 Demo code “write_sram.c”

This demo program write data into PCI-M512 512KB SRAM.

2.5 Demo code “read_write_sram.c”

This program write data into PCI-M512 512KB SRAM and read SRAM data at the same time.