

PCI Enhanced IDE

(IDE-2 or ATA-2)

DC-290N

USER'S

MANUAL

- Accessory: (for full package version)
1. Two 40-pin data/control cables for IDE HDD or ATAPI CD-ROM
 2. One paddleboard with cable for connecting to PCI Legacy Header
 3. Two floppy diskettes for Drivers & Utility software
 4. One Audio cable for connecting to internal ATAPI CD-ROM (optional)

Description

The DC-290N, a PCI Enhanced IDE (**IDE-2** or **ATA-2**) controller, is designed to interface the Enhanced IDE drive directly onto the PCI Local bus. It provides write posting and read pre-fetches allowing the CPU to run concurrently with IDE cycles. It supports fast ATA devices using modes 1, 2 and 3 through PIO access. It also supports **dual** IDE channels for up to 4 devices.

To support **ATAPI CD-ROM**, it equips Audio Jacks and also handy Windows utility for **Audio+Photo** application software.

A full suite of software drivers included with this controller are fully tested under the following operating system environments:

DOS 5.0-6.x	Windows 3.x
Windows NT	OS/2 2.x
Novell NetWare 3.1x,4.x	SCO UNIX 3.x (optional)

Key Features

- Fully compatible with PCI specifications rev 2.0 (April, 1993)
- Interfaces the 32 bits PCI local bus to IDE drives
- Support IDE PIO timing mode 0, 1, 2 of ANSI ATA spec
- Support Mode 3 (11MB/s) timing proposal on enhanced IDE (IDE-2 or ATA-2) specifications
- Two IDE-2 channels supported with 2 devices for each channel (primary IDE: 1F_xh; secondary IDE:17_xh)
- Supports Track-Remapping feature to overcome 528 MB constraint under DOS, Windows, Windows NT & OS/2. Max. HDD capacity supported: 8GB.
- 4-level Posted Write and Read ahead buffers for concurrent system operation
- Programmable command and recovery timing for reads and writes per channel

Jumper Setting

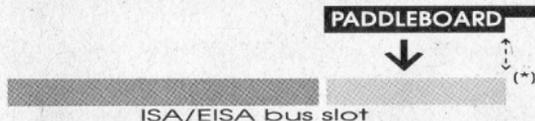
- . **JP1** *IDE drive LED Indicator.*
- . **JP3** *AUDIO IN.* Use the supplied cable to connect to internal ATAPI CD-ROM's AUDIO OUT. **L:** Left channel of audio signal, **R:** Right channel & **G:** Ground.
- . **J1** *AUDIO JACKS.* One for **L** Left channel and the other for **R** Right channel of the audio signal.
- . **CN1** *PRIMARY IDE PORT (1F_{xh}).* This port supports 2 IDE drives, such as ATAPI CD-ROM or HDD.
- . **CN2** *SECONDARY IDE PORT (17_{xh}).* This port supports 2 IDE drives, such as ATAPI CD-ROM or HDD.
- . **CN3** *LEGACY HEADER.* Must connect to another 5x2 header on the paddleboard with supplied cable.
- . **Paddleboard** It is specified by **PCI Special Interest Group (SIG)** to re-route IRQ-14/15 to (E)ISA bus slot for properly working with IDE card.

Installation

The DC-290N is implemented as **Jumper-Less** design. After cabling IDE devices, LED and audio, you'll be able to complete the desired installation by going thru the following guidelines:

1. Install the paddleboard onto an (E)ISA bus slot with provided cable to connect CN3/DC-290N to legacy header on

the paddleboard.



***: For an EISA slot => beware the paddleboard should be all the way towards the FRONT of the system, with no space between it and the very front of the slot, to prevent loosely contact.**

2. Power on the machine, select a correct Drive_Type or parameter for the HDD in CMOS setup, and insert the driver diskette to run easy Installation Utility by keying **INSTALL**. This utility would display drive information, such as PIO mode, model #, parameter & capacity, and also allow you set the “multiple sector # per interrupt”, “Track Remapping”, “Drive Speed” and some others. For more detailed operation on these options, please check with on-screen help menu and README file in the driver diskette.

Device Driver Installation

Please refer to README file, which are stored in the driver diskette, for detailed installation guides about each operating system.

Install ATAPI CD-ROM (Photo+Audio Utility supported)

Please refer to README file for detailed instructions.

Support “Dual Channels” to handle up to 4 drives

Need driver support. Please refer to README file for detailed instructions.

Support “Track-Remapping” to handle >528MB HDD

Need driver support, except NetWare. Please refer to README file for detailed instructions.

README file in the driver diskette

This file would cover most of the detailed description about DC-290N's functionality and some other latest updated information, such as software utility or driver support.