



Bus Mastering

PCI Fast SCSI-2 & 3 Adapter

Introduction

The DC-390 Series consists of 4 new Bus Mastering PCI SCSI adapters for the PCI local bus, which comply to PCI specification 2.1 for full Plug & Play readiness.

Most SCSI Adapters require device drivers to support more than 2 hard drives under DOS. The DC-390, however, provides special support to handle up to eight devices, including fixed



By using the *Disconnect/Reconnect* technique, performance degradation during multitasking operations is prevented. Other enhanced SCSI-2 features such as scatter-gather and command-tag queuing are supported.

disks and removable media under MS-DOS 5.0/6.x, without the need for device drivers (*More than 2 drives support*).

The DC-390 Series adapters support ASPI Managers for DOS, Windows, OS/2 and NetWare and assure operation with popular third party applications. Device drivers are also supported for the following major operating systems for compatibility with a full range of SCSI peripherals including CD-ROMs, Photo CDs, tape backups, scanners, removable media and SCSI hard drives:

Model #	SCSI-2 or 3	SCSI Width	Max Xfers (MXfer/S)	Max Xfer Rate (MB/S)	Max Devices
DC-390	SCSI-2	8-bit	10	10	7
DC-390W	SCSI-2	16-bit	10	20	15*
DC-390U	SCSI-3	8-bit	20	20	7
DC-390F	SCSI-3	16-bit	20	40	15*

*: up to fifteen 16-bit and/or 8-bit single-ended SCSI devices & up to seven of these can be 8-bit devices

The on-board menu-driven setup program and jumperless design of the DC-390 allow you to configure the host adapter, SCSI devices, and BIOS-related parameters without opening your computer.

The DC-390 also provides a utility program that supports low-level formatting. And with the help of the DC-390's installation software, the drivers are easily installed and update the CONFIG.SYS and AUTOEXEC.BAT files automatically.

The fully intelligent solution provided is ideal for multitasking environments such as OS/2, NetWare, Unix and Windows NT, as well as next generation operating systems such as Microsoft Windows 95.

- MS-DOS
- Windows NT
- OS/2 2.0/WARP 3.0
- Windows 95
- Windows 3.x(&WFWG)
- SCO Unix 3.2v4.x/5.0
- NetWare 3.x/4.x
- UnixWare 1.1

Bus Mastering

PCI Fast SCSI-2 & 3 Adapter

Plug & Play
Bus
Master
Plug & Play

DC-390 Series

Enhanced Features

- PCI 2.1 compliant with full Plug & Play readiness
- High speed 32-bit PCI bus master DMA transfers of up to 133MB/sec in burst mode
- Models DC-390 and DC-390W support Fast SCSI-2 protocol. Fast SCSI-3 protocol is supported by models DC-390F and DC-390U
- Level triggering allows interrupt sharing between multiple adapters
- Coexists with other SCSI, ESDI, or IDE adapters
- Support is provided for up to 8 drives (DC-390/390U) or 15 drives (DC-390W/390F under DOS 5.0/6.x without the need for device drivers
- User friendly PCI Configuration Utility for quick and easy adapter installation and system configuration

Technical

SCSI Engine: AMD Am53C974A (DC-390)
SYMBIOS 53C825A (DC-390W)
SYMBIOS 53C875 (DC-390F/U)

Max SCSI Adapters Installable: 4

Functional

- Enhanced SCSI I/O protocol: Multi-threaded and Multi-tasking support, and Scatter/Gather data transfer support
- Controller BIOS supported menu-driven setup utility for easy SCSI installation without opening your cabinet:

Set Adapter Options

Adapter SCSI ID	SCSI ID 7	-- Default
Greater than 16 support	Enabled	-- Default
More than 2 drives support	Enabled	-- Default
Removable media as BIOS device	Disabled	-- Default
Immediate return on SEEK command ..	Disabled	-- Default
Scan all LUN for devices	Disabled	-- Default
Active Negation	Enabled	-- Default
Power on RESET SCSI Bus	Enabled	-- Default
Delay before BIOS scans device	3 sec	-- Default
Max number of tagged commands	32	-- Default
SCSI Terminator	Auto	-- Default

- Further advanced options on each device can be set by choosing the line "Select Devices Options":

SCSI ID	#0	#1	#2	#3	#4	#5	#6	#7
Parity Checking	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Allow Disconnection	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Send START UNIT Command	NO	NO	NO	NO	NO	NO	NO	NO
Tagged Command Queuing	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Synchronous Negotiation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Max Sync Xfer Rate	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

SCSI ID	Model	Device Type	Capacity
0	DEC DSP3187LS	Fixed disk	1821 M
1	MAXTOR LMT-200S	Fixed disk	191 M
2	RICOH RD-3010E	Optical disk	121 M
3	NEC CD-ROM DRIVE:04	CD-ROM	
4	ARCHIVE VIPER 150 21531	Tape drive	
5			
6	WANGTEK 5525ES SCSI M74H	Tape drive	
7			

- Easy installation software updates the CONFIG.SYS & AUTOEXEC.BAT files automatically

Device Drivers

- **ASPI driver for DOS:**
ASPI manager and supporting drivers included
- **NetWare V3.11/3.12/SFT-III/4.0x/4.1:**
ASPI manager and supporting drivers included
- **MS-Windows and Windows for WorkGroups 3.x:**
ASPI manager & 32-Bit Disk Access supported
- **OS/2 2.x/WARP 3.0:**
ASPI manager and supporting drivers included
- **Windows NT 3.x**
- **Windows 95**
- **SCO Unix 3.2v4.x & SCO Open Server 5.0**
- **UnixWare v1.1**

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