

Model PM2144/W



SmartCache IV SCSI RAID Kits

DESCRIPTION

The SmartCache IV Product Family

SmartCache IV SCSI adapters from DPT are 4th generation designs that offer the ultimate in performance and flexibility. Communications Week Magazine recently said of SmartCache IV, "If you want performance, this is where to find it." Performance results like this come from DPT's experience in bringing the best in high performance SCSI design to the product line. All SmartCache IV PCI adapters incorporate an on-board processor for bus mastering and improved I/O performance.

DPT offers the only cache and RAID upgradable SCSI adapters on the market. This means that you can start with a solid, high performance SCSI adapter, then add extra capabilities when and if you need them. Simply add a single, add-on module and you get hardware cache support, and support for hardware RAID 0, 1 and 5. Nothing could be easier. You can choose between the RC4040 RAID/Caching Module that snaps onto the end of the SmartCache IV adapter to form a full size card with support for up to 64MB of cache, or the RC4041 module. The RC4041 attaches to the end of the SmartCache IV adapter and "piggy-backs" over the adapter providing RAID and caching support in a single half-slot. Up to 32MB of cache may be added via standard DIMMs or using the Model SM4041/x SmartCorrect ECC DIMMs.

FEATURES

- **Upgradable Half-Slot Design**
- **On-Board Processor for Reduced SCSI and CPU Overhead**
- **Connectors for Both Wide and 8-Bit Devices Allow You to Easily Attach and Run Both Types of Devices Simultaneously**
- **SCSI, SCSI-2, SCSI-3 and Ultra Wide SCSI Support With Active Termination**
- **Supports up to 40MB/s Ultra Wide Synchronous SCSI Transfers**
- **Overlapped I/O and Tagged Command Queuing for Increased SCSI Performance**
- **Hardware Cache and RAID Upgradable via a Single Add-on Module**
- **Optional Error Correcting Memory and Data Path Protection**
- **ASPI Protocol Support for Universal Connectivity with Third-Party Applications**
- **Includes Storage Manager Software for Easy Installation, RAID Setup and Maintenance, Advanced Storage Diagnostics and Performance Tuning**

DESCRIPTION CONT.

SmartCache products accept either industry standard 72-pin SIMMs for caching, or you may choose to use DPT's SmartCorrect ECC-protected memory. Available in 4MB or 16MB sizes, the SM4000 SIMMs and the SM4041 DIMMs provide complete error correction for data stored in DPT cache. When used with supported drives, SmartCorrect ECC protection is written across the SCSI cable down to the drive level to assure complete protection for mission critical data.

All DPT products come with Storage Manager, award-winning storage management software utility. Storage Manager automatically installs all your SCSI peripherals, and handles more complex tasks such as RAID setup with point-and-click simplicity.

Benefits

On-board processors for ultimate performance

DPT has always built its adapters with powerful on-board processors for the best in SCSI performance. DPT then works with the various operating systems developers to ensure that our high-performance drivers get the most out of your system. The result is a track record of proven performance, especially in demanding I/O environments.

Cache and RAID Upgradable

Only SmartCache offers the ability to upgrade to additional performance and security enhancing features after your initial purchase. Simply attach a single, add-on module and get support for hardware cache and hardware RAID. When testing the SmartCache IV adapter with its optional RAID and Caching module installed, Communications Week said this: "If you want sheer throughput, there's no question that the DPT wins hands down. SmartCache IV is one of the fastest controllers we've ever tested." In fact, SCO World Magazine commented that DPT's SmartCache adapter provided "...3 to 4 times more throughput" than a non-cached adapter.

Upgrade your SmartCache IV SCSI adapter with either:

RC4040 RAID/Caching Module. The RC4040 attaches end-to-end and provides four SIMM sockets for up to 64MB of cache via standard 72-pin SIMMs or the SmartCorrect ECC-protected memory.

RC4041 RAID/Caching Module. The RC4041 attaches to the end of the SmartCache IV adapter and overlays the card. The RC4041 provides two DIMM sockets for up to 32MB of cache via standard DIMMs or the SmartCorrect ECC-protected DIMMs.

The Best Operating System Support

Sure, DPT has drivers for NT and NetWare like everyone else. But DPT high-performance drivers are rolled into more OS's than any other SCSI adapter. So you'll find support for DPT in SCO Unix, UnixWare, Banyan Vines, Sunsoft Solaris, PICK, MUMPS, NEXTSTEP, and many more. No one has broader OS support than DPT.

Installation is a Snap

All DPT products come with Storage Manager, award-winning storage management software utility. If all you want to do is quickly install your drives and CD-ROM, then installation is two keystrokes away. Want to install more complicated setups like RAID? No problem. Setting up disk arrays with Storage Manager is a simple process of point-and-click. Computer Reseller News Comdex Test Center results indicate that "SmartCache IV offers both a performance advantage as well as ease of installation. Installation time was cut by one-third!"

SPECIFICATIONS

Host interface

16-bit ISA, 32-bit EISA, 32-bit PCI

On-board CPU

68000/20MHz or 68020/20MHz

Max Host Transfer Rate

10MB/s (ISA), 33MB/s (EISA), 132MB/s (PCI)

SCSI Interface

SCSI, SCSI-2, SCSI-3, Fast, Fast Wide, Fast-20 Wide Scatter/Gather, Command Queuing, Disconnect/Reconnect

Max SCSI Transfer Rate

Up to 40MB/second Fast-20 Wide Synchronous

SCSI Bus

16-bit single ended, active termination

Internal Port

68-pin high density, 50-pin low density

External Port

68-pin high density

Maximum Cache*

Up to 64MB (RC4040) or 32MB (RC4041)

RAID Support*

0, 1 and 5

*with optional RC4040 or RC4041 RAID/Caching Module

PHYSICAL

DC Power Requirements

+5VDC $\pm 5\%$ @ 0.30A typ.

Operating Temperature

0° to 50° C

Humidity

10% to 90% RHNC

Altitude

10,000 feet (3,000 meters)

ORDERING GUIDE

SMARTCACHE IV SCSI ADAPTERS

Model PM2041/W

ISA to Fast/Wide

Model PM2044/W

PCI to Fast/Wide

Model PM2044/UW

PCI to Ultra Wide

Model PM2144/W

PCI to High performance, Fast/Wide

Model PM2144/UW

PCI to High performance, Ultra Wide

SMARTCACHE IV MODULES

Model RC4040

RAID/Caching Module for all SmartCache IV adapters (SIMM not included)

Model RC4041

Half-size RAID/Caching Module for all SmartCache IV adapters (DIMM not included)

SMARTCORRECT ECC MEMORY

Model SM4000/4

4MB SmartCorrect ECC-protected SIMM memory

Model SM4000/16

16MB SmartCorrect ECC-protected SIMM memory

Model SM4041/4

4MB SmartCorrect ECC-protected DIMM memory

Model SM4041/16

16MB SmartCorrect ECC-protected DIMM memory

