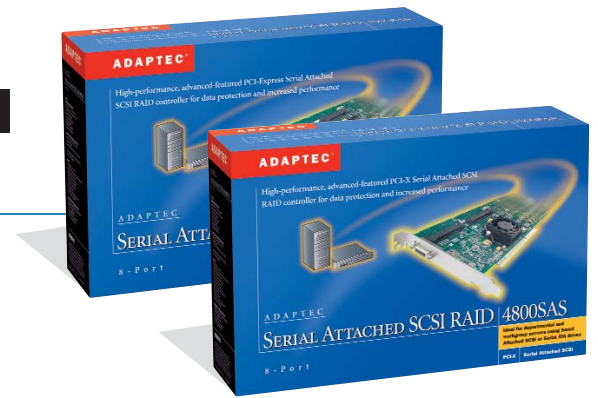




Adaptec® Serial Attached SCSI RAID 4800SAS/4805SAS

High-performance, 8-port PCI-X and PCI Express (PCIe) SAS controllers with the industry's most advanced RAID for servers and workstations



Serial Attached SCSI (SAS), the successor to parallel SCSI for data storage, is a point-to-point technology that delivers full throughput to each storage device by managing multiple ports with a single controller. Adaptec SAS connects to either SAS or SATA disk drives and transfers data at rates up to 3Gb/s per port.

Adaptec Serial Attached SCSI RAID 4800SAS/4805SAS

The Adaptec 4800SAS and 4805SAS are the newest generation of Adaptec SCSI RAID controllers. Building on industry-standard Adaptec RAID technology, they provide the industry's most advanced feature set and highest data protection with SAS drives.

Advanced hardware features

With a 64-bit/133 MHz PCI-X (Adaptec 4800SAS) or an 8-lane PCIe (Adaptec 4805SAS) host interface each controller can connect up to eight SAS or SATA drives via two x4 internal connectors. A configurable external x4 SAS connector provides expansion up to 128 devices through one or more SAS JBODs. The powerful Intel processors and 8-port Adaptec SAS I/O controller deliver high performance for servers and workstations. They each include 128MB of ECC-protected DDR2 DRAM with optional battery unit.

The industry's most widely deployed RAID code

Adaptec RAID Code (ARC) includes the industry's most advanced feature set, supporting RAID 0, 1, 5, 10, 50, optional upgrades, RAID Level Migration, and Online Capacity Expansion without downtime. ARC supports arrays up to 512TB, enabling the creation of large arrays with today's high capacity disk drives. Only Adaptec offers Optimized Disk Utilization, the ability to create multiple LUNs per disk and use all the space on dissimilar drive sizes.

Adaptec Advanced Data Protection Suite

The Adaptec Advanced Data Protection Suite includes a feature set that offers the industry's most complete data protection right out of the box. New data protection includes Dual Drive Failure Protection (RAID 6 and 60), survival of two drive failures; Striped Mirror (RAID 1E), mirroring over an odd number of drives; and Hot Space (RAID 5EE) which allows a hot spare while using all drives for data. Additionally, Copyback Hot Spare lets administrators designate a drive location as a hot spare. After a drive replacement, the controller migrates back to the original configuration. Optional Snapshot Backup creates point-in-time copies of an array for better data backup.

Why Adaptec Serial Attached SCSI RAID?

Adaptec makes it easy to cost-effectively deploy, manage, scale, and protect storage. Our products and technology are based on a proven RAID core; advanced ASIC designs; tested compatibility with operating systems, motherboards, applications, and drives; RAID education; and global support.

Easy-to-use storage management

The intuitive Adaptec Storage Manager™ (ASM) tool centralizes management of all Adaptec RAID products. ASM enables remote RAID management, monitoring, and configuration through secure, encrypted communication. Pop-up tips and online help simplify RAID array creation and management.

Compatibility, reliability, and support

Adaptec has been delivering storage and I/O solutions for over 24 years, and is the undisputed RAID leader – no technology is more proven. These cards are tested thoroughly for third-party compatibility, and backed by a 3-year warranty and legendary Adaptec technical support.

Product Highlights

- Scalable to 128 SAS or SATA devices
- Configuration flexibility: up to eight internal ports or four internal and four external ports for simple expansion
- PCI-X 64-bit/133 MHz host interface (Adaptec 4800SAS)
- 8-lane PCIe host interface (Adaptec 4805SAS)
- SAS, SATA and SATA II compliant
- Native command queuing (NCQ)
- 3Gb/s per port
- SES2 enclosure management
- Standard RAID levels 0, 1, 5, 10, 50
- Adaptec Advanced Data Protection Suite offers RAID 6, 60, 1E, 5EE, Copyback Hot Spare and optional Snapshot Backup
- 128MB ECC DDR2 fixed cache (optional 256MB)
- Optional battery backup module
- Online applications extend feature set: Online Capacity Expansion, RAID Level Migration, Optimized Disk Utilization
- Operating system support for both 32 and 64-bit Windows, Linux, Netware, and FreeBSD

Adaptec® Serial Attached SCSI RAID

Adaptec Serial Attached SCSI RAID 4800SAS/4805SAS Ordering Part Number: 2183100/2183300

Why to buy	High-performance and cost-effective RAID controllers offer advanced features and flexibility to connect both performance SAS disk drives and cost-optimized SATA II disk drives.
Customer needs	Ideal for supporting server and workgroup applications where high levels of sustained read and write operations are required, such as video streaming, web content, video-on-demand, security and surveillance, fixed content, and reference data storage
Environment	Departmental and workgroup servers and workstations
Device support	Eight SAS ports support both SAS and SATA devices. Configuration flexibility for up to eight internal devices and external expansion to storage JBODs
Data transfer rates	Up to 3Gb/s with SAS or SATA II interface.
Standard features	RAID 0, 1, 5, 10, 50, hot swap, hot spares, RAID Level Migration, Online Capacity Expansion, Optimized Disk Utilization, and the following Adaptec Advanced Data Protection Suite features: Dual Drive Failure Protection (RAID 6, 60), Striped Mirror (RAID 1E), Hot Space (RAID 5EE) and Copyback Hot Spare
Optional features	Snapshot Backup
Cache memory	128MB of ECC-protected DDR2 memory (optional 256MB) Optional battery unit sold separately: Adaptec Battery Module 600 (order number 2218300-R)
Bus type	PCI-X 64-bit/133 MHz host interface (Adaptec 4800SAS) 8-way PCIe host interface (Adaptec 4805SAS)
Internal connectors	Two x4 SAS connectors
External connectors	One x4 SAS connector
System requirements	Intel or AMD architecture with available PCI-X or 8-lane PCIe slot Supports EM64T and AMD64 architectures
Operating system support	Windows 2000, Windows XP, Windows Server 2003, and Red Hat and SuSE Linux, Netware, Free BSD (for most current Linux drivers go to www.adaptec.com) Linux driver source code available for compiling into other distributions
Software in kit	Adaptec Storage Manager™, BIOS configuration utility (ACU), Command line interface (ARCCONF)
Cables in kit	Two 1 meter SAS fanout cables with integrated power adapters
Physical dimensions	3/4 Size PCI form factor Full Height 4.53 in H x 9.44 in L 11.5 cm H x 24 cm L
Operating temperature	0 to 55 degrees C
Warranty	3 years

○ **4800SAS**



4805SAS



adaptec®

Adaptec, Inc.
691 South Milpitas Boulevard
Milpitas, California 95035
Tel: (408) 945-8600
Fax: (408) 262-2533

Literature Requests:

US and Canada: 1 (800) 442-7274 or (408) 957-7274
World Wide Web: www.adaptec.com

Pre-Sales Support: US and Canada: 1 (800) 442-7274 or (408) 957-7274

Pre-Sales Support: Europe: Tel: (44) 1276-854-500 or Fax: (44) 1276-854-505

Copyright 2006 Adaptec, Inc. All rights reserved. Adaptec, the Adaptec logo, Storage Manager, and Storage Manager Pro are trademarks of Adaptec, Inc., which may be registered in some jurisdictions. Microsoft, Windows, Windows NT, and Windows 2000, are registered trademarks of Microsoft Corporation, used under license. All other trademarks used are owned by their respective owners.

Information supplied by Adaptec Inc., is believed to be accurate and reliable at the time of printing, but Adaptec Inc., assumes no responsibility for any errors that may appear in this document. Adaptec, Inc., reserves the right, without notice, to make changes in product design or specifications. Information is subject to change without notice.