adaptec®

Adaptec® SATA & SAS RAID
3405, 3805, 3085, 31205, 31605
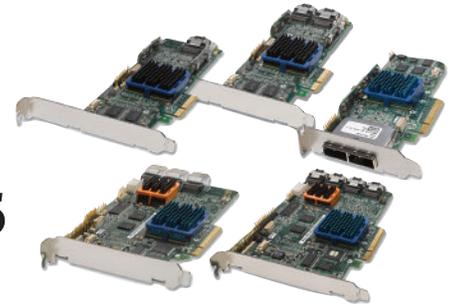
Unified Serial™ controllers deliver scalability and flexibility for high-capacity SATA drives or high-performance SAS drives

Adaptec Unified Serial controllers deliver the ultimate in flexibility and performance for customers who need either high-capacity Serial ATA (SATA) drives or high-performance Serial Attached SCSI (SAS) drives, or the ability to integrate both in a single system. Leveraging SAS technology, these controllers deliver the richest feature set in the market.

Adaptec Unified Serial RAID

This Adaptec RAID controller family is a full line of Unified Serial RAID controllers designed for entry to mid-range servers and workstations.

Hardware features

These controllers support a PCI Express host interface and up to 256MB ECC-protected data cache. An efficient Intel processor delivers excellent performance with low thermal output. The family includes 4- and 8-port models as well as industry-first 12- and 16-port designs. The new Adaptec RAID 3085 with two x4 connectors also offers the industry's first path failover for external data path redundancy.

Advanced data protection

Adaptec RAID Code (ARC) delivers the industry's most advanced feature set. The Adaptec Advanced Data Protection Suite delivers improved hot spare performance (RAID 5EE) and a patented RAID 6/60 technology allowing for up to two simultaneous drive failures.

Optimized Disk Utilization
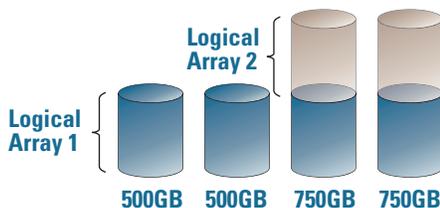
Excess capacity used to create another array.

ARC supports array sizes up to 512TB — allowing full usage of new, higher capacity SATA drives. Optimized Disk Utilization offers the ability to create arrays and utilize all available capacity on dissimilar drive sizes. As disk drive capacities grow, replacing a failed drive no longer results in wasted space on new larger drives, increasing the value of existing investments.

Easy-to-use storage management

This Adaptec Unified Serial RAID family operates under Adaptec Storage Manager™, a one-view tool that centralizes management of all Adaptec RAID products. The software enables remote configuration and monitoring of RAID arrays through secure, encrypted communications. The intuitive management tool simplifes RAID array creation and mangment pop-up tips and online help.
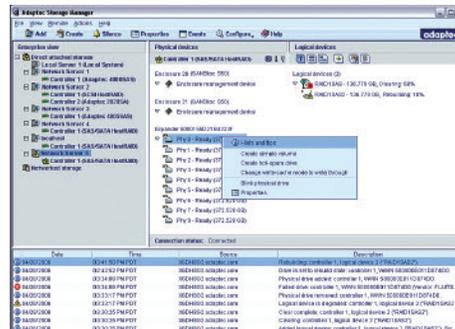
Compatibility, reliability, and support

Adaptec has been delivering storage and I/O solutions for more than 24 years. In fact, Adaptec is the undisputed RAID leader; no other vendor's technology is more proven. The Adaptec RAID Unified Serial family has been extensively tested with third-party components to deliver the utmost in compatibility. The cards are backed by a 3-year warranty and legendary Adaptec technical support.

Product Highlights

- SATA and SAS compliant
- PCI Express host interface
- 3Gb/s per port
- RAID levels 0, 1, 1E, 10, 5, 50, 5EE, 6, 60
- LED header for drive activity and failure indication
- SES2 and SGPIO enclosure management
- Up to 256MB DDR2 fixed data cache
- Operating system support for Windows, Linux, NetWare, SCO Unix, Sun Solaris x86, and FreeBSD
- RoHS compliant

Adaptec® SATA & SAS RAID

Adaptec Unified Serial Controller Family	
Why to buy?	Affordable Unified Serial RAID controllers support both SATA and SAS devices. Ideal for workstations, and entry to mid-range servers.
Customer Needs	Affordability and performance with an advanced feature set for customers needing storage flexibility and capacity growth.
System Environment	Intel IA32, EM64T, and AMD64

RAID Features	• Supports up to 128 SAS or SATA devices (depending on server design)
	• RAID Levels 0, 1, 10, 5, 50*, JBOD
	• Advanced Data Protection Suite
	  • RAID Levels 1E (Striped Mirror), 5EE (Hot Space), 6 and 60* (Dual Drive Failure Protection)
	  • Copyback Hot Spare
	  • Snapshot Backup (optional)
	• Dynamic caching algorithm
	• Online Capacity Expansion
	• RAID Level Migration
	• Optimized Disk Utilization
	• Quick Initialization
	• Native Command Queuing (NCQ)
	
	• Hot spares – global, dedicated, and pooled
	• Background initialization
	• Automatic/manual rebuild of hot spares
	• SAF-TE enclosure management support
	• Configurable stripe size
	• S.M.A.R.T. support
	• Up to 512TB array sizes
	• Multiple arrays and types per disk drive
	• Bad stripe table
	• Dynamic sector repair
	• Staggered drive spin-up
	• Bootable array support
	• Hot-plug drive support
	• Redundant path failover

Management Utilities	Adaptec Storage Manager™ (ASM) • Java-based GUI Management Utility • Remote configuration, monitoring & notification • ASM OS Support: Windows, Linux, SCO, Solaris, NetWare • Microsoft VDS Support • SNMP, SMTP • Simultaneous remote firmware updates ARCCONF • Command Line Interface Adaptec BIOS Configuration Utility (ACU) • BIOS level configuration utility • Flashable BIOS support
Operating System	• Windows 2000, XP, Server 2003, Vista, Red Hat Enterprise Linux (RHEL), SUSE Linux Enterprise Server (SLES), Novell NetWare 6.5, SCO OpenServer, UnixWare, Sun Solaris 10 x86, FreeBSD
Physical Dimensions	3405/3805/3085 2.5"H x 6.6"L (167mm x 64 mm) 31205/31605 4.6"H x 6.6"L (167mm x 116 mm)
Operating Temperature (incl. battery)	0°C to 45°C (without airflow) 0°C to 55°C (with airflow)
Operating Voltage	1 amp @ 3.3V
Regulatory Certification	FCC, C-tick, CE, VCCI
Warranty	3 years
Accessories	Snapshot Backup Key (2228200)　　　　　Adaptec Battery Module 800 (2248000-R)

* Expander is necessary for Adaptec 3405

Adaptec RAID	3405	3805	3085	31205	31605
Ordering Part Number	2251800-R (Kit)	2252100-R (Kit)	2251600-R (Kit)	2252600-R (Sgl)	2252900-R (Sgl)
Form Factor	MD2 - Low Profile	MD2 - Low Profile	MD2 - Low Profile	Half Length / Full Height	Half Length / Full Height
Ports	4	8	8	12	16
Connectors	1 internal SFF-8087	2 internal SFF-8087	2 external SFF-8088	3 internal SFF-8087	4 internal SFF-8087
Bus Interface	4-lane PCIe	4-Lane PCIe	8-Lane PCIe	8-Lane PCIe	8-Lane PCIe
Processor	Intel 80333 500MHz	Intel 80333 500MHz	Intel 80333 800MHz	Intel 80333 800MHz	Intel 80333 800MHz
Cache	128MB	128MB or 256MB	256MB	256MB	256MB

PCI EXPRESS®　　**SERIAL ATA 3Gb/s**　　**Serial Attached SCSI**　　**UNIFIED SERIAL ARCHITECTURE**

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