# Adaptec ASR-5405 Datasheet



Adaptec ASR-5405 2258200-R 3Gb/s 8-port Internal SAS/SATA RAID Controller with 256MB Cache ASR-5405

Adaptec ASR-5405 2258200-R 3Gb/s 8-port Internal SAS/SATA RAID Controller with 256MB Cache

4 internal port, low profile, PCI-Express (PCIe) Unified Serial RAID controller with Intelligent Power Management delivers exceptional performance, advanced data protection, and maximum scalability for enterprise-class, high-density server applications

**Supported Operating Systems** 

- Microsoft Windows
- Red Hat Linux
- SUSE Linux
- SCO OpenServer
- UnixWare
- Sun Solaris
- FreeBSD
- VMware ESX

#### **Benefits**

• Performance Unified Serial RAID controllers support both SATA and SAS devices. Ideal for bandwidth intensive storage applications; NAS, OLTP servers, web servers, and digital surveillance.

## **Key Differentiators**

• Intelligent Power Management

#### **Customer Needs**

• High I/O transaction and high bandwidth processing.

#### Form Factor

• MD2 Low-Profile

## **Cache Memory**

• 256MB of DDR2 memory

#### **RAID Levels**

• RAID levels 0, 1, 1E, 5, 5EE, 6, 10, 50\*, 60\*, JBOD (\* Expander is necessary)

### **Key RAID Features**

- Supports 4 direct-attached or up to 256 SATA or SAS disk drives using SAS expanders
- RAID levels 0, 1, 1E, 5, 5EE, 6, 10, 50\* and 60\*
- Quick initialization
- Online Capacity Expansion
- Copyback Hot Spare
- Dynamic caching algorithm
- Native Command Queuing (NCQ)
- Background initialization
- Hot-plug drive support
- RAID Level Migration
- Hot spares global, dedicated, and pooled
- Automatic/manual rebuild of hot spares
- SAF-TE enclosure management
- Configurable stripe size

- S.M.A.R.T. support
- Up to 512TB array sizes
- Multiple arrays per disk drive
- Bad stripe table
- Dynamic sector repair
- Staggered drive spin-up
- Bootable array support
- Optimized Disk Utilization

Bus System Interface Type

• 8-lane PCIe

**Internal Connectors** 

• 1 internal (SFF-8087) Mini SAS

Data Transfer Rate

• 3 Gb/s per port

**Package Contents** 

- Adaptec RAID 5405 Controller
- Additional low profile vented bracket
- Software and documentation CDs
- Quick Installation Guide
- (English/French/German/Italian/Spanish)
- Cable: one Mini SAS x4 to (4x) SATA fanout cable w/ sideband, 0.5 meter
- \*Singles do not contain cable

**Management Utilities** 

• Adaptec Storage Manager™ (ASM)

- Java-based GUI Management Utility
- Remote configuration, monitoring & notification
- ASM OS Support: Windows, Linux, SCO, Solaris, FreeBSD
- Microsoft VDS Support
- SNMP, SMTP
- Remote firmware updates

#### **ARCCONF**

- Command Line Interface
- SMI-S support for VMware

Adaptec BIOS Utility (ACU)

- BIOS level configuration utility
- Flashable BIOS support

**Physical Size** 

• 2.5" H x 6.6" L (64mm x 167mm)

#### **Operating Temperature**

- 0°C to 55°C\* (with 200 LFM airflow; without battery)
- 0°C to 40°C\* (with 200 LFM airflow; with battery)

Note: This Adaptec card contains a powerful RAID processor which requires adequate airflow to operate reliably. Please install this card only into server or PC chassis with recommended airflow (200 LFM).

\* Ambient temperature measured 1" away from the RAID processor

## **Operating Voltage**

- 0.45 amp @ 3.3V
- 1 amp @ 12V

Regulatory Certification

• CE, FCC, UL, C-tick, VCCI

Mean Time Before Failure (MTBF)

• 873,402 hours at 40 degree C.

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