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README.TXT

Adaptec ASC-1405/1045 SATA/SAS Controller

as of November 04, 2008  
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Please review this file for important information about issues and errata's that were discovered after completion of the standard product documentation. In case of conflict between various parts of the documentation set, this readme file contains the most current information.

NOTE: The latest BIOS, driver and documentation can be downloaded from [www.adaptec.com](http://www.adaptec.com) when they become available.

The following information is available in this file:

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1. Software and Documentation

#### 1.1. Controller & Utility Software

Note: The latest versions of BIOS and driver software can be downloaded from [www.adaptec.com](http://www.adaptec.com) when they become available.

- BIOS
- Operating System Drivers

#### 1.2 Operating System Support

Windows:

- 32-BIT WINDOWS OPERATING SYSTEMS SUPPORT
  - Microsoft Windows Server 2003 Service Pack 2
  - Microsoft Windows XP Professional Service Pack 3
  - Microsoft Windows Vista Service Pack 1

- Microsoft Windows Server 2008 Service Pack 1
  
- 64-BIT WINDOWS OPERATING SYSTEMS SUPPORT
  - Microsoft Windows Server 2003 Service Pack 2
  - Microsoft Windows XP Professional Service Pack 2
  - Microsoft Windows Vista Service Pack 1
  - Microsoft Windows Server 2008 Service Pack 1

Linux:

- 32-BIT LINUX OPERATING SYSTEMS SUPPORT
  - Red Hat Enterprise Linux 4.0
  - Red Hat Enterprise Linux 4.0 QU6
  - Red Hat Enterprise Linux 5.0
  - Red Hat Enterprise Linux 5.0 QU2
  - SuSE Linux Enterprise Server 9
  - SuSE Linux Enterprise Server 9 SP4
  - SuSE Linux Enterprise Server 10
  - SuSE Linux Enterprise Server 10 SP2
  
- 64-BIT LINUX OPERATING SYSTEMS SUPPORT
  - Red Hat Enterprise Linux 4.0
  - Red Hat Enterprise Linux 4.0 QU6
  - Red Hat Enterprise Linux 5.0
  - Red Hat Enterprise Linux 5.0 QU2
  - SuSE Linux Enterprise Server 9
  - SuSE Linux Enterprise Server 9 SP4
  - SuSE Linux Enterprise Server 10
  - SuSE Linux Enterprise Server 10 SP2

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## 2. Installation Instructions

### 2.1 Software

- For installation instructions, refer to the SATA/SAS Adaptec Controller Installation and User's Guide.

### 2.2 Hardware

- Hardware installation instructions are also detailed in the product documentation.

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## 3. Known Limitations

- 3.1 The controller BIOS detects a maximum of eight devices. The Operating System driver recognizes a maximum of 128 devices.

- 3.2 If a disk drive is considered as a bootable device, it needs to be one of the first eight devices connected to the controller.
- 3.3 The controller BIOS does not perform bad block reassignment during disk verification. Disk verification stops if a bad block is encountered.
- 3.4 The controller BIOS does not support SMART reporting for SATA drives, but supports SMART MRIE (Method of Reporting Interval Exceptions) of 4 for SAS drives.
- 3.5 Disk Utilities in CTRL+A detects tape drives, but does not detect the absence or presence of tape media in a tape drive.
- 3.6 Boot time will extend in direct relation to the number of enclosures/devices attached. Please allow ample boot time for large quantity device configurations.
- 3.7 When a change is entered in Ctrl+A, there will not be a confirmation box displayed confirming the change. Changes are automatically saved when Ctrl+A is exited in a normal manner.
- 3.8 The product is shipped with the RPM for out-of-the-box kernel and upgraded kernel. For instance, SLES 9 RPM's are shipped for SLES 9 OOB and SLES 9 SP4. SLES 9 is currently used and a kernel update is planned, then it is recommended to upgrade the kernel first and use the RPM for the upgrade kernel.
- 3.9 Supermicro SC933EL2 enclosure is supported when populated with SAS drives, but not SATA drives.
- 3.10 The controller BIOS may take up to two minutes to discover some type of devices, please allow ample time.
- 3.11 Tested device support configurations included the following:
- 24 SATA drives through two enclosures - 26 devices
  - 60 SAS drives through five enclosures - 65 devices
  - 16 SATA drives and 48 SAS drives through six enclosures - 70 devices
  - 12 SATA drives and 60 SAS drives through six enclosures - 78 devices
- 3.12 It is recommended to add only one enclosure at a time when scaling devices in the SATA/SAS ecosystem.
- 3.13 When Physical Address Extension (PAE) is set to "Force enable" mode in a 32-bit systems, the system does not work as expected. Hence, the option needs to be disabled. Note that the 32-bit systems support maximum up to 4 GB System memory (RAM) only.
- 3.14 The 64-bit Driver will support a maximum of up to 16 GB System memory (RAM) under 64-bit Operating Systems.

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