
README.TXT

Adaptec ASC-1405/1045 SAS/SATA Controller

as of March 20, 2009

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 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 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

1.3. Drivers

Windows:

On the CD \diskette\SAS_SATA\adpinv_<osversion>.img

- 32-bit

adpinv.CAT - Security Catalog file
adpinv.inf - Setup Information file
adpinv.sys - 32-bit Windows driver file
HIGHPERF.REG - Registration Entries file
sasdisk1 - tagfile
txtsetup.oem - OEM file
WHQL.REG - Registration Entries file
readme.txt

- 64-bit

\amd64 - subdirectory
\amd64\adpinv.CAT - Security Catalog file
\amd64\adpinv.inf - Setup Information file
\amd64\adpinv.sys - System file
HIGHPERF.REG - Registration Entries file
sasdisk1 - tagfile
txtsetup.oem - OEM file
WHQL.REG - Registration Entries file
readme.txt

Linux:

- 32-bit

adpinv.rhel4.i686.img	- Red Hat Enterprise Linux 4 IMG file
adpinv.rhel4.i686.rpm	- Red Hat Enterprise Linux 4 RPM file
adpinv.rhel4qu6.i686.img	- Red Hat Enterprise Linux 4.0 QU6 IMG file
adpinv.rhel4qu6.i686.rpm	- Red Hat Enterprise Linux 4.0 QU6 RPM file
adpinv.rhel5.i686.img	- Red Hat Enterprise Linux 5 IMG file
adpinv.rhel5.i686.rpm	- Red Hat Enterprise Linux 5 RPM file
adpinv.rhel5qu2.i686.img	- Red Hat Enterprise Linux 5.0 QU2 IMG file
adpinv.rhel5qu2.i686.rpm	- Red Hat Enterprise Linux 5.0 QU2 RPM file

adpinv.sles9.i586.img	- SuSE LINUX Enterprise Server 9 IMG file
adpinv.sles9.i586.rpm	- SuSE LINUX Enterprise Server 9 RPM file
adpinv.sles9sp4.i586.img	- SuSE LINUX Enterprise Server 9 SP4 IMG file
adpinv.sles9sp4.i586.rpm	- SuSE LINUX Enterprise Server 9 SP4 RPM file
adpinv.sles10.i586.img	- SuSE LINUX Enterprise Server 10 IMG file
adpinv.sles10.i586.rpm	- SuSE LINUX Enterprise Server 10 RPM file
adpinv.sles10sp2.i586.img	- SuSE LINUX Enterprise Server 10 SP2 IMG file
adpinv.sles10sp2.i586.rpm	- SuSE LINUX Enterprise Server 10 SP2 RPM file

- 64-bit

adpinv.rhel4.x86_64.img	- Red Hat Enterprise Linux 4 IMG file
adpinv.rhel4.x86_64.rpm	- Red Hat Enterprise Linux 4 RPM file
adpinv.rhel4qu6.x86_64.img	- Red Hat Enterprise Linux 4.0 QU6 IMG file
adpinv.rhel4qu6.x86_64.rpm	- Red Hat Enterprise Linux 4.0 QU6 RPM file
adpinv.rhel5.x86_64.img	- Red Hat Enterprise Linux 5 IMG file
adpinv.rhel5.x86_64.rpm	- Red Hat Enterprise Linux 5 RPM file
adpinv.rhel5qu2.x86_64.img	- Red Hat Enterprise Linux 5.0 QU2 IMG file
adpinv.rhel5qu2.x86_64.rpm	- Red Hat Enterprise Linux 5.0 QU2 RPM file
adpinv.sles9.x86_64.img	- SuSE LINUX Enterprise Server 9 IMG file
adpinv.sles9.x86_64.rpm	- SuSE LINUX Enterprise Server 9 RPM file
adpinv.sles9sp4.x86_64.img	- SuSE LINUX Enterprise Server 9 SP4 IMG file
adpinv.sles9sp4.x86_64.rpm	- SuSE LINUX Enterprise Server 9 SP4 RPM file
adpinv.sles10.x86_64.img	- SuSE LINUX Enterprise Server 10 IMG file
adpinv.sles10.x86_64.rpm	- SuSE LINUX Enterprise Server 10 RPM file
adpinv.sles10sp2.x86_64.img	- SuSE LINUX Enterprise Server 10 SP2 IMG file
adpinv.sles10sp2.x86_64.rpm	- SuSE LINUX Enterprise Server 10 SP2 RPM file

1.4. Documentation on this CD

- Adaptec SAS/SATA Controller
- Installation and User's Guide, Quick Start Guide (on the CD \books\)

2. Installation Instructions

2.1 Software

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

2.2 Hardware

- Hardware installation instructions are also detailed in the

product documentation.

3. Known Limitations

- 3.1 BIOS supports maximum up to 8 devices, which includes all types i.e. SES, SAS/SATA drives, Tapes and CD/DVD Roms.
- 3.2 The disk that you wish to make as a bootable device should be one of the first 8 devices that is connected to the controller.
- 3.3 The BIOS does not remap/rebuild the failed sectors during verification.
- 3.4 BIOS does not support SMART 6 implementation.
- 3.5 BIOS does not detect absence or presence of Tape media in a Tape drive.
- 3.6 The failed drives that are still detected, BIOS displays 0 MB as capacity during POST as well as in CTRL + A utility.
- 3.7 BIOS is unable to detect the removable media devices of ATA8 implementation.
- 3.8 Driver does not support IT Nexus time-out. For example, when any device is unplugged during system operation, it removes the device entry.
- 3.9 Adding more Adaptec S50 Enclosure drives drastically slows down the booting time in Windows 2003. For example, when there are 4 Adaptec S50 Enclosure (SAS/SATA drives) attached to the system, booting the splash screen to the logon prompt takes approximately 4 minutes. Similarly, when there are 9 Adaptec S50 Enclosure attached to the system, the login prompt appears after 15 mins. Hence, according to the number of Adaptec S50 Enclosure attached to the system, the booting of the OS drastically slows down to load the login prompt.
- 3.10 % symbol for formatting operation is not displayed for SATA drives. SATA drives do not support background formatting, and it is a busy-wait process. Once you quit the process, the formatting stops, hence % display is not applicable for SATA drives.
- 3.11 BIOS user interface does not confirm any of the user changes.
- 3.12 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. If the user is currently using SLES9 and has plans to upgrade to the latest kernel, then it is recommended to upgrade the kernel first and use the RPM for the upgrade kernel.
- 3.13 BIOS and Driver does not support SC933EL2 Enclosures, when connected with SATA drives.
- 3.14 A delay of two minutes is introduced in BIOS to discover slower devices such as Seagate Hard Disk, Hitachi Hard Disk, Tape Drives etc.
- 3.15 The following are the combination of SAS and/or SATA drives with maximum and minimum drive support for I/O performance.
 - 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
- 3.16 The user is recommended to add only single enclosure in the SAS/SATA ecosystem.
 - 3.17 When Physical Address Extension (PAE) is set to "Force enable" mode in 32 bit systems, the system does not work as expected. Hence, disable the option and also 32 bit systems support maximum up to 4 GB System memory only.
 - 3.18 The 64 Bit Driver will support maximum up to 16 GB System memory under 64 bit Operating Systems.
 - 3.19 Enabling 'overload management' option in Xyratex RBOD will slow down the system.
 - 3.20 BIOS Format, Verify and Blink-LED operation from Ctrl-A utility may not work with target devices which support Multi-LUN (ex. RBOD devices).

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