README.TXT

Adaptec ASC-1405/1045 SAS/SATA Controller

as of January 08, 2010

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:

     1. Software and Documentation
         1.1 Controller & Utility Software
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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 (Standard, Enterprise,& Web Editions) Service Pack 2
              - Microsoft Windows XP Professional Service Pack 3
              - Microsoft Windows Vista Service Pack 2
              - Microsoft Windows Server 2008 Service Pack 2
              - Microsoft Windows 7, All versions
              - Microsoft Windows Server 2008R2, Enterprise, Standard, Datacenter

          - 64-BIT WINDOWS OPERATING SYSTEMS SUPPORT

              - Microsoft Windows Server 2003 (Standard, Enterprise Editions) Service Pack 2
              - Microsoft Windows XP Professional Service Pack 2
              - Microsoft Windows Vista Service Pack 2
              - Microsoft Windows Server 2008 Service Pack 2
              - Microsoft Windows 7, All versions
              - Microsoft Windows Server 2008R2, Enterprise, Standard, Datacenter

        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
- Red Hat Enterprise Linux 5.0 QU3
- 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
  - Red Hat Enterprise Linux 5.0 QU3
  - 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 SAS/SATA
     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 BIOS supports maximum up to 128 devices, which includes all types i.e. SES,
           SAS/SATA drives, Tapes and CD/DVD Roms.
       3.2 The BIOS does not remap/rebuild the failed sectors during verification.
       3.3 BIOS does not support SMART 6 implementation.
       3.4 The failed drives that are still detected, BIOS displays "disk error"
           during POST and "0 MB" in CTRL + A utility.
       3.5 BIOS is unable to detect the removable media devices of
           ATA8 implementation.
       3.6 Driver does not support IT Nexus time-out. For example, when any device
           is unplugged during system operation, it removes the device entry.
       3.7 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.
       3.8 % 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.
       3.9 BIOS user interface does not confirm any of the user changes.
       3.10 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.
       3.11 BIOS and Driver does not support SC933EL2 Enclosures, when connected
            with SATA drives.
       3.12 A delay of two minutes is introduced in BIOS to discover slower devices
            such as Seagate Hard Disk, Hitachi Hard Disk, Tape Drives etc.
       3.13 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

3.14 The user is recommended to add only single enclosure in the SAS/SATA ecosystem.

3.15 The 64 Bit Driver will support maximum up to 16 GB System memory under 64 bit Operating Systems.

3.16 BIOS Format, Verify and Blink-LED operation from Ctrl-A utility may not work with target devices which support Multi-LUN (ex. RBOD devices).

3.17 Installation on 128th LUN will fail as driver supports only 127 LUNs.

3.18 Linux OS installation will not work on LUNS greater than 8 due to OS limitation.

3.19 If there is no LUN 0 in Multi LUN device(RBOD), Windows XP 32 bit OS will not detect other LUNS created in the device

3.20 On Windows operating systems, the format operation on a LUN could fail on the the InfoTrend RBOD, after the LUN is re-created after deletion. The workaround for this issue is to reboot the operating system, after which this issue will disappear.

3.21 On Windows operating systems, the format operation on a LUN could fail on the the InfoTrend RBOD, after the LUN is re-enabled after disable operation. The workaround for this issue is to reboot the operating system, after which this issue will disappear.

3.22 When the Quick Boot option is enabled in the CTRL-A BIOS, the default discovery time per device is 4 seconds (configurable), any devices not discovered in that time will not be displayed on the console. A message will be displayed during the POST that this option is enabled.