



i n v e n t

Smart Array 6400A Backplane RAID Controller Read Me First

February 2006

AV-RX49A-TE

Congratulations on your purchase of one of the following Smart Array 6400A controller products:

| Model | Part Number |
|--------------------------------|--------------------|
| SA6402A: 2-channel 128MB Cache | 3X-KZPEC-BF |
| SA6404A: 4-channel 256MB cache | 3X-KZPEC-DG |

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The Smart Array option kits include the following items:

- SA6400A controller hardware
- ISA Extension Bracket
- Smart Array 5300A/6400A QuickStart CD-ROM media containing soft copy documentation and SA5300A/6400A software components for Tru64 UNIX and OpenVMS.
- Alpha Drive Firmware Update Utility bootable CD-ROM media.
- *Smart Array 5300A/6400A Backplane RAID Controller Installation and Configuration Guide*
- *Smart Array 6400 Controller User Guide* (a component of the included Proliant media kit)
- *Smart Array 6400A Release Notes*

Installing the Smart Array 6400A RAID controller consists of the following steps:

1. Review the *Smart Array 6400A Release Notes* for important information updates not included in the *Smart Array 5300A/6400A Installation and Configuration Guide*.

Note: Procedures in most of the following steps are documented in the *Smart Array 5300A/6400A Backplane RAID Controller Installation and Configuration Guide*.

2. Check the Smart Array 6400A web site for updated documentation and software components before installing the controller:
<http://h18002.www1.hp.com/alphaserver/products/storage/sa6400a/>
3. Install the ISA extension bracket onto the controller module. This step is required when the controller is installed into DS and GS class AlphaServer systems. Do not install the bracket if the controller is to be installed into an ES series AlphaServer system.
4. Install the controller module in your AlphaServer system. An example instruction for this task is detailed in the *Smart Array 5300A/6400A Backplane RAID Controller Installation and Configuration Guide*.

5. Attach storage enclosures and disk drives to the controller. Consult the documentation accompanying your StorageWorks enclosure for additional usage information.
6. Run the BIOS on each controller after power up to determine whether disk drive firmware updates are required. The BIOS on the controller is executed from the SRM console prompt. If necessary, use the Alpha Drive Firmware Update utility to update your drive firmware.
7. Initialize the SRM console environment variables `heap_expand` (except for GS1280, ES47, and ES80 AlphaServers) and `bootbios` if the Smart Array 6400A controller will be configured as a boot controller.
8. Create at least one logical volume via the ORCA offline configuration utility if the Smart Array 6400A is configured as the boot controller. ORCA provides basic functions for creating and deleting Smart Array 6400A logical volumes. You can create non-boot logical volumes later using the online ACU-XE utility after Step 11 has been completed.
9. Install the Smart Array 6400A driver components for your OpenVMS operating system. (Smart Array 6400A is not supported on Tru64 UNIX.)

Smart Array 6400A controllers can be configured only on OpenVMS Version 7.3-2 or Version 8.2. Both OpenVMS INITIALIZE and PRESERVE installation types are supported. The following TIMA kits are required:

- OpenVMS V7.3-2:
 - DEC-AXPVMS-VMS732_FIBRE_SCSI-V0700
 - DEC-AXPVMS-VMS732_CPU27F-V0100
- OpenVMS V8.2:
 - DEC-AXPVMS-VMS82A_FIBRE_SCSI-V0100

See the OpenVMS Systems web page for more information:

<http://h71000.www7.hp.com/>

10. Install the Smart Array 6400A controller monitoring agent. This is done by installing the HP Management Agent kit for your operating system. The Smart Array 6400A monitoring agent provides detailed information on the status of your Smart Array 6400A controller and attached storage subsystem. User access to the agent is done via a web browser accessing the system's HP Management Agent web page.

OpenVMS Management Agent kits containing Smart Array 6400A enabled storage agents are available on the Smart Array 5300A/6400A QuickStart CD-ROM. Consult the Smart Array 6400A web site for availability of updates to the provided kits.

The *Release Notes for HP Management Agents for OpenVMS* provide detailed information on the installation and usage of the HP Management Agent kits.

11. Install the Smart Array ACU-XE online configuration utility. The ACU-XE utility provides access to the advanced configuration and maintenance features of the controller. The ACU-XE utility consists of a daemon process running on the host system. User access to the utility is done using a web browser to access the system's HP Management Agent web page.

OpenVMS ACU-XE kits containing the Smart Array 6400A online configuration utility are available on the Smart Array 5300A/6400A QuickStart CD-ROM. Consult the Smart Array 6400A web site for availability of updates to the provided kits.

Installation of the ACU-XE utility is documented in the *Smart Array 5300A/6400A Installation and Configuration Guide*. Information on using the utility is detailed in the *Smart Array Configuration Utility XE User's Guide* provided on the Smart Array 5300A/6400A QuickStart CD-ROM.

Smart Array 5300A/6400A QuickStart CD-ROM Information

The Smart Array 5300A/6400A QuickStart CD-ROM included in the Smart Array 6400A kit provides a convenient distribution source for the online utility software kits and documentation supporting the Smart Array 6400A controller.

The CD-ROM can be mounted as an ISO9660 file system under OpenVMS as in the following example (in which *DQA0* is the CD-ROM drive):

```
mount /override=id /MEDIA=cdrom DQA0
```

Most directories on the QuickStart CD-ROM have a file named *00README.TXT* that provides information about the contents and usage of the contents of the directory.

To load a kit, copy it from the QuickStart CD-ROM to a scratch area where the kit can be expanded. OpenVMS kits are installed using the PolyCenter Software Installation Utility's `PRODUCT INSTALL` command. The OpenVMS kits are packaged as self-extracting ZIP format archives.

Accessing to Most Current Software and Documentation

The software and documentation found on the QuickStart CD-ROM represent current version as of the release of this kit. These components are not necessarily the latest available. Users are strongly encouraged to visit the Smart Array 6400A web page for access to the most up-to-date software and documentation for the Smart Array 6400A controller.