
Smart Array 5300A Controller Option Kit

Read Me First

IMPORTANT: Please check the Smart Array 5300A World Wide Web site for updated documentation and software components before installing the controller into your Alpha system.

View the Smart Array 5300A controller home at this URL:

<http://www.compaq.com/alphaserver/products/storage/sa5300a.html>

Congratulations on your purchase of one of the following Smart Array 5300A controller products:

Model	Part Number
SA5302A/128: 2-channel 128 MB Cache	3X-KZPDC-BE
SA5304A/256: 4-channel 256 MB Cache	3X-KZPDC-DF

The 3X-KZPDC-xx option kit includes the following items:

- SA5302A/128 or SA5304A/256 controller hardware
- ISA Extension Bracket
- Smart Array 5300A QuickStart CD-ROM media containing soft copy documentation and SA5300A software components for Tru64 UNIX and OpenVMS.
- Alpha Drive Firmware Update Utility bootable CD-ROM media.
- Smart Array 5300A Backplane RAID Controller Installation and Configuration Guide
- *Smart Array 5300 User's Guide* (a component of the included Proliant media kit)
- Smart Array 5300A Release Notes
- *Smart Array 5300A Option Kit Read Me First* (this document)

Installation of the Smart Array 5300A RAID controller consists of the following steps:

1. Review the Smart Array 5300A Release Notes for important information updates not included in the *Smart Array 5300A Installation and Configuration Guide*. Note: Procedures in most of the following steps are documented in the *Smart Array 5300A Backplane RAID Controller Installation and Configuration Guide*.
2. Check the Smart Array 5300A home page for availability of updated documentation and/or software components.
3. Install the ISA extension bracket onto the controller module. This step is required when the controller is installed into DS and GS class Alpha systems. Do not install the bracket if the controller is to be installed into an ES series Alpha system.
4. Install the controller module in your Alpha system. Example instruction for this task is detailed in the *Smart Array 5300A 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 and BOOTBIOS if the SA5300A controller will be configured as a boot controller.
8. Create at least one logical volume via the ORCA offline configuration utility if the SA5300A is configured as the boot controller. ORCA provides basic functions for creating and deleting SA5300A logical volumes. Non-boot logical volumes may be created later using the online ACU-XE utility after Step 11) has been completed.
9. Install the SA5300A driver components for your Tru64 UNIX or OpenVMS operating system.

For Tru64 UNIX V5.1A this involves the following sequence:

- a. Install the Tru64 UNIX New Hardware Delivery kit (NHD5) in conjunction with a base installation of Tru64 UNIX V5.1A.
- b. Apply the Tru64 UNIX V5.1A Patch Kit 3 (PK3) or later to the installation resulting from the previous step.

Consult the Tru64 UNIX documentation accompanying the NHD5 and PK3 patch kits for more information on the installation of these V5.1A components.

For OpenVMS, the process involves performing a V7.3-1 operating system installation. Both OpenVMS INITIALIZE and PRESERVE installation types are supported.

Consult the OpenVMS Alpha V7.3-1 Upgrade and Installation Manual for more information.

10. Install the SA5300A controller monitoring agent. This is done by installing the Compaq Management Agent kit for your operating system. The Smart Array 5300A monitoring agent provides detailed information on the status of your SA5300A controller and attached storage subsystem. User access to the agent is done via a web browser accessing the system's Compaq Management Agent home page.

Tru64 UNIX and OpenVMS Management Agent kits containing the inaugural release of Smart Array 5300A enabled storage agents are available on the SA5300A QuickStart CD-ROM. Users are advised to consult the SA5300A Web site for availability of updates to the provided kits.

The Management Agents for AlphaServers for Tru64 UNIX Reference Guide and Release Notes for Compaq Management Agents for OpenVMS provide detailed information on the installation and usage of the respective Compaq Management Agent kits.

11. Install the Smart Array ACU-XE online configuration utility for your operating system. 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 via a web browser accessing the system's Compaq Management Agent home page.

Tru64 UNIX and OpenVMS ACU-XE kits containing the inaugural release of the Smart Array 5300A online configuration utility are available on the SA5300A QuickStart CD-ROM. Users are advised to consult the SA5300A Web site for availability of updates to the provided kits.

Installation of the ACU-XE utility is documented in the SA5300A *Installation and Configuration Guide*. Usage information for the utility is detailed in the *Array Configuration Utility XE User's Guide* provided on the SA5300A QuickStart CD-ROM.

Smart Array 5300A QuickStart CD-ROM Information

The Smart Array 5300A QuickStart CD-ROM included in the SA5300A kit provides a convenient distribution source for the online utility software kits and documentation supporting the SA5300A controller.

The CD-ROM may be mounted as an ISO9660 file system under Tru64 UNIX and OpenVMS as in the following examples:

```
Tru64 UNIX: mount -r /dev/disk/cdrom0c /mnt
```

In the above example 'cdrom0' is the user's CD-ROM drive and '/mnt' is the specified mount point.

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

In the OpenVMS example, 'DQA0' is the user's CD-ROM drive.

Most directories on the QuickStart CD-ROM have a file entitled '00README.TXT' providing information about the contents and usage of the contents of the directory.

To load a kit, it should be copied from the QuickStart CD-ROM to a scratch area where the kit can be expanded. Tru64 UNIX kits are generally setld(8) kits packaged as tar(1) archives. OpenVMS kits are installable via the PolyCenter Software Installation Utility PRODUCT INSTALL command. The OpenVMS kits are packaged as self-extracting ZIP format archives.

Note on Access to Most Current Software and Documentation

The software and documentation found on the QuickStart CD-ROM represent the initial product components available for the Smart Array 5300A controller. These components are not necessarily the latest available. Users are strongly encouraged to visit the Smart Array 5300A home page mentioned elsewhere in this document for access to the most up-to-date software and documentation for the Smart Array 5300A controller.

Contents of the Smart Array 5300A QuickStart CD-ROM

All kit and document locations are relative to the CD-ROM mount point. Document titles may be abbreviated in this listing. Consult the 00README.TXT files for last minute updates.

```
| 00README.TXT
|
+---DOCS
| 00README.TXT
| EK_SA530_IN.pdf      Smart Array 5300A Installation & Configuration
Guide
| AV_RT16A_TE.pdf      Smart Array 5300A Release Notes
| AV_RT17A_TE.pdf      Smart Array 5300A Read Me First (this document)
| 135606e4.pdf         Smart Array 5300 Controller User Guide
| 239449e3.pdf         Array Configuration Utility XE User Guide
| 0291799A.pdf         White Paper: RAID 5 Configuration Recommendations
| 0292799A.pdf         White Paper: Online Spare Recommendations
| 13JE000A.pdf         White Paper: Advanced Data Guarding
| 155A001A.pdf         White Paper: RAID ADG vs. RAID 5 vs. RAID 1+0
| 187196e1.pdf         Two to Four-Channel Adapter Board Installation
| 188270e1.pdf         ADG Reference Guide
| HotPlug.pdf          SCSI Hard Drive Compatibility List
| tc020604tb.pdf       Tech Brief: Advanced Data Guarding
|
+---OPENVMS
| |
| +---ACU-XE
| | 00README.TXT
| | ACUXE0105.EXE      ACU-XE Configuration Utility for OpenVMS, v1.05
| |
| \---MNGTAGTS
| 00README.TXT
| V73_MGMTAGENTKIT.EXE Compaq Management Agent Kit for OpenVMS, v2.x
|
\---TRU64
|
| +---ACU-XE
| | 00README.TXT
| | CPQACUXE13070.TAR ACU-XE Configuration Utility for Tru64 UNIX, v1.30.7
| |
| \---MNGTAGTS
| 00README.TXT
| CPQIM300.TAR        Compaq Management Agent Kit for Tru64 UNIX, v3.0
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