

NAME

aac - Adaptec AdvancedRAID Controller driver

SYNOPSIS

To compile this driver into the kernel, place the following lines in your kernel configuration file:

```
device pci  
device aac  
device aacp
```

To compile in debugging code:

```
options AAC_DEBUG=N
```

Alternatively, to load the driver as a module at boot time, place the following line in loader.conf(5):

```
aac_load="YES"
```

DESCRIPTION

The **aac** driver provides support for the Adaptec AAC family of SCSI Ultra2, Ultra160, and Ultra320, SATA and SAS RAID controllers.

Access to RAID containers is available via the */dev/aacd?* device nodes. The **aacp** device enables the SCSI pass-thru interface and allows devices connected to the card such as CD-ROMs to be available via the CAM scsi(4) subsystem. Note that not all cards allow this interface to be enabled.

The */dev/aac?* device nodes provide access to the management interface of the controller. One node exists per installed card. The aliases */dev/afa?* and */dev/hpn?* exist for compatibility with the Dell and HP versions of management tools, respectively. If the *aac_linux.ko* and *linux.ko* modules are loaded, the Linux-compatible ioctl(2) interface for the management device will be enabled and will allow Linux-based management applications to control the card.

HARDWARE

Controllers supported by the **aac** driver include:

- ⊕ Adaptec AAC-364
- ⊕ Adaptec RAID 2045
- ⊕ Adaptec RAID 2405
- ⊕ Adaptec RAID 2445
- ⊕ Adaptec RAID 2805
- ⊕ Adaptec RAID 3085

- ⊕ Adaptec RAID 31205
- ⊕ Adaptec RAID 31605
- ⊕ Adaptec RAID 5085
- ⊕ Adaptec RAID 51205
- ⊕ Adaptec RAID 51245
- ⊕ Adaptec RAID 51605
- ⊕ Adaptec RAID 51645
- ⊕ Adaptec RAID 52445
- ⊕ Adaptec RAID 5405
- ⊕ Adaptec RAID 5445
- ⊕ Adaptec RAID 5805
- ⊕ Adaptec SAS RAID 3405
- ⊕ Adaptec SAS RAID 3805
- ⊕ Adaptec SAS RAID 4000SAS
- ⊕ Adaptec SAS RAID 4005SAS
- ⊕ Adaptec SAS RAID 4800SAS
- ⊕ Adaptec SAS RAID 4805SAS
- ⊕ Adaptec SATA RAID 2020SA ZCR
- ⊕ Adaptec SATA RAID 2025SA ZCR
- ⊕ Adaptec SATA RAID 2026ZCR
- ⊕ Adaptec SATA RAID 2410SA
- ⊕ Adaptec SATA RAID 2420SA
- ⊕ Adaptec SATA RAID 2610SA
- ⊕ Adaptec SATA RAID 2620SA
- ⊕ Adaptec SATA RAID 2810SA
- ⊕ Adaptec SATA RAID 2820SA
- ⊕ Adaptec SATA RAID 21610SA
- ⊕ Adaptec SCSI RAID 2020ZCR
- ⊕ Adaptec SCSI RAID 2025ZCR
- ⊕ Adaptec SCSI RAID 2120S
- ⊕ Adaptec SCSI RAID 2130S
- ⊕ Adaptec SCSI RAID 2130SLP
- ⊕ Adaptec SCSI RAID 2230SLP
- ⊕ Adaptec SCSI RAID 2200S
- ⊕ Adaptec SCSI RAID 2240S
- ⊕ Adaptec SCSI RAID 3230S
- ⊕ Adaptec SCSI RAID 3240S
- ⊕ Adaptec SCSI RAID 5400S
- ⊕ Dell CERC SATA RAID 2
- ⊕ Dell PERC 2/Si

- ⊕ Dell PERC 2/QC
- ⊕ Dell PERC 3/Si
- ⊕ Dell PERC 3/Di
- ⊕ Dell PERC 320/DC
- ⊕ HP ML110 G2 (Adaptec SATA RAID 2610SA)
- ⊕ HP NetRAID 4M
- ⊕ IBM ServeRAID 8i
- ⊕ IBM ServeRAID 8k
- ⊕ IBM ServeRAID 8s
- ⊕ ICP RAID ICP5045BL
- ⊕ ICP RAID ICP5085BL
- ⊕ ICP RAID ICP5085SL
- ⊕ ICP RAID ICP5125BR
- ⊕ ICP RAID ICP5125SL
- ⊕ ICP RAID ICP5165BR
- ⊕ ICP RAID ICP5165SL
- ⊕ ICP RAID ICP5445SL
- ⊕ ICP RAID ICP5805BL
- ⊕ ICP RAID ICP5805SL
- ⊕ ICP ICP5085BR SAS RAID
- ⊕ ICP ICP9085LI SAS RAID
- ⊕ ICP ICP9047MA SATA RAID
- ⊕ ICP ICP9067MA SATA RAID
- ⊕ ICP ICP9087MA SATA RAID
- ⊕ ICP ICP9014RO SCSI RAID
- ⊕ ICP ICP9024RO SCSI RAID
- ⊕ Legend S220
- ⊕ Legend S230
- ⊕ Sun STK RAID REM
- ⊕ Sun STK RAID EM
- ⊕ SG-XPCIESAS-R-IN
- ⊕ SG-XPCIESAS-R-EX
- ⊕ AOC-USAS-S4i
- ⊕ AOC-USAS-S8i
- ⊕ AOC-USAS-S4iR
- ⊕ AOC-USAS-S8iR
- ⊕ AOC-USAS-S8i-LP
- ⊕ AOC-USAS-S8iR-LP

FILES

/dev/aac? aac management interface
/dev/aacd? disk/container interface

DIAGNOSTICS

Compiling with AAC_DEBUG set to a number between 0 and 3 will enable increasingly verbose debug messages.

The adapter can send status and alert messages asynchronously to the driver. These messages are printed on the system console, and are also queued for retrieval by a management application.

SEE ALSO

kld(4), linux(4), scsi(4), kldload(8)

HISTORY

The **aac** driver first appeared in FreeBSD 4.3.

AUTHORS

Mike Smith <msmith@FreeBSD.org>
Scott Long <scottl@FreeBSD.org>

BUGS

This driver is not compatible with Dell controllers that have version 1.x firmware. The firmware version is the same as the kernel version printed in the BIOS POST and driver attach messages.

The controller is not actually paused on suspend/resume.